

Office for  
**Budget  
Responsibility**

## **Economic and fiscal outlook**

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November 2011





# Office for Budget Responsibility: Economic and fiscal outlook

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

November 2011

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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 2016–17. 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, the Home 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 with the preparation by OBR staff of a revised economic forecast, drawing on economic data released since the last published forecast in March and with our preliminary judgements on the outlook for the economy. This forecast incorporated the partial set of Office for National Statistics (ONS) revisions to economic data since 1997 that were published in the *Quarterly National Accounts* on 5th October.
- 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.

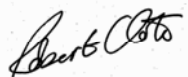
- We sent our first economic forecast to the Chancellor on 19 October and our first fiscal forecast, including a provisional judgement on progress toward meeting the fiscal mandate, on 28 October. We provided the Chancellor with these early forecasts in order to inform preparations for his Autumn Statement, specifically so that he could decide whether he wished to announce any new fiscal policy measures in his 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. We also incorporated the further set of ONS historical data revisions that were published on 25 October.
- 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 this second round economic forecast to the Chancellor on 4 November and the fiscal forecast on 11 November.
- Meanwhile, we also began to scrutinise the costing of tax and spending measures that were being considered for announcement at the Autumn Statement, and those that had already been announced by the Government since the March Budget. The OBR requested a number of changes to the draft costings prepared by HMRC and DWP. We have certified the final published costings as reasonable central estimates. In the Treasury's Autumn Statement 2011 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. At this point we also included the effect on the public finances of the new policy costings which we had scrutinised. We sent this forecast to the Chancellor on 18 November, and we met with him and Treasury officials to discuss it on 21 November.



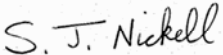
- During the week before publication we produced our final forecast. This allowed us to take account of the third quarter GDP release on 24 November and to incorporate the effects of the final package of new policy announcements. To this end we were provided with details of all major policy decisions with a potential impact on the economy forecast on 21 November. We provided the Treasury with our final economic and fiscal forecast on 26 November. Our final fiscal forecast included the direct fiscal effects of the full set of final policy decisions, which was provided to us on 25 November.
- At the Treasury's written request, and in line with pre-release access arrangements for data releases from the ONS, we provided the Chancellor with a full draft of the *EFO* on 24 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 over fifty 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 very pleased receive feedback on any aspect of our analysis or the presentation of the analysis. This can be sent to [OBRfeedback@obr.gsi.gov.uk](mailto:OBRfeedback@obr.gsi.gov.uk)



Robert Chote



Steve Nickell



Graham Parker

The Budget Responsibility Committee



# 1 Executive summary

## Overview

- 1.1 The economy has grown less strongly this year than we forecast in March, primarily because higher-than-expected inflation has squeezed household incomes and consumer spending. Business and consumer surveys point to further weakness in the fourth quarter. On the assumption that the euro area struggles through its current difficulties, we expect the underlying momentum of the economy to pick up through next year, but with the headline measure of GDP broadly flat until the second half. Our central forecast is for 0.7 per cent growth in GDP in 2012, compared to the average external forecast of 1.2 per cent.
- 1.2 Business and consumer surveys suggest that in the third quarter of 2011 activity in the economy was running about 2.5 per cent below the potential level consistent with sustaining stable inflation in the long term. This is a smaller 'output gap' than there appears to have been a year ago despite weak economic growth in the interim. Potential output appears to have grown by only 1 per cent a year since the end of the recession. We now assume that potential output will take until the start of 2014 to return to its long-term average growth rate of around 2.3 per cent a year, as the financial sector and credit conditions take time to normalise.
- 1.3 These developments result in our estimate of the potential output of the economy in 2016 falling by around 3.5 per cent compared to our March forecast. This still leaves it at or above the estimates of other leading forecasters. As a consequence, we believe that there is less scope for the economy to grow at above-average rates over the next few years as spare capacity is used up. Our central forecast is for GDP to grow by 2.1 per cent in 2013, 2.7 per cent in 2014 and 3 per cent in 2015 and 2016. (The growth forecasts for the final two years would have been 2.8 per cent, but for recent methodological changes to the National Accounts).
- 1.4 Public sector net borrowing (PSNB) is expected to total £127 billion or 8.4 per cent of GDP this year, slightly higher than we predicted in March. The downward revisions to our growth forecasts mean that the deficit will also shrink less quickly over the coming five years. By 2015-16, we expect PSNB to have fallen to £53 billion or 2.9 per cent of GDP, compared to the £29 billion or 1.5 per cent of GDP that we forecast in March. The extra borrowing is primarily structural rather than cyclical, in other words it will not disappear as the economy recovers.

- 1.5 The Government's fiscal mandate requires it to balance the structural or cyclically-adjusted current budget (CACB) at the end of the five year forecasting horizon, which in this *EFO* has now rolled forward to 2016-17.
- 1.6 In the absence of additional policy measures in the 2011 Autumn Statement, we believe that the Government would have had a less than 50 per cent chance of achieving the mandate. Our central forecast would have shown a deficit on the CACB of £6 billion or 0.3 per cent of GDP in 2016-17.
- 1.7 The Government has put itself back on course to meet its targets by announcing specific policy measures that reduce the CACB by £8 billion or 0.5 per cent of GDP in 2015-16 and £15 billion or 0.8 per cent of GDP in 2016-17. The 'unchanged policy' baseline against which they are measured extends the real freeze in total spending that the Government had previously announced for 2015-16 into 2016-17. This reduces structural non-investment spending and the CACB in 2016-17 by a further £15 billion or 0.8 per cent of GDP. This gives a total discretionary cut in non-investment spending and in the CACB of £30 billion or 1.5 per cent of GDP in 2016-17, compared to a counterfactual in which structural spending grows in line with GDP.
- 1.8 The Government's supplementary fiscal target requires public sector net debt (PSND) to fall as a share of GDP between 2014-15 and 2015-16. In March we forecast a fall of 1.4 percent of GDP, but in the absence of policy measures we would now be forecasting an increase of 0.2 per cent of GDP. Taking the Autumn Statement policy decisions into account PSND is now forecast to fall by 0.3 per cent of GDP, meeting the target.
- 1.9 There is considerable uncertainty around these forecasts, as around all fiscal forecasts. Assuming that they are as accurate as past official forecasts, there is a roughly 60 per cent chance of the Government meeting the mandate in 2016-17. At the time of the March Budget, we judged that Government had set policy consistent with meeting the mandate at the then five year horizon of 2015-16. But as a result of the downward revisions to potential output we now believe that there is only a 40 per cent chance of the CACB being in surplus in that year.
- 1.10 We stress-test our fiscal forecasts and judgements using sensitivity and scenario analysis. The central economic and fiscal forecasts assume that the euro area finds a way through its current crisis, but a more disorderly outcome is clearly a significant downside risk. This risk cannot be quantified in a meaningful way, as there are numerous different ways in which such an outcome could unfold. Suffice to say, the probability of an outcome much worse than our central forecast is greater than the probability of an outcome much better than our central forecast.

## Developments since the March 2011 forecast

- 1.11 Since our last forecast in March, the Office for National Statistics (ONS) has implemented methodological changes and data revisions to the National Accounts that partially rewrite recent economic history and which have an impact on our forecasts looking forward:
- the methodological changes suggest that for a given growth rate of nominal GDP – total cash spending in the economy – the official estimate of real GDP growth in any given year is now likely to be around 0.2 percentage points higher while whole economy inflation will be around 0.2 percentage points lower, other things being equal. This does not imply any actual improvement in the underlying growth performance of the economy; and
  - the data revisions suggest that the economy was growing more strongly in the run-up to the financial crisis, that the recession was deeper (but slightly shorter), and that the recovery at the end of 2009 was stronger than previous figures suggested. GDP has since flattened out from the second half of 2010.
- 1.12 Economic growth this year has been much weaker than we expected at the time of our March forecast. Forward-looking business and consumer surveys have also weakened significantly. The intensification of the euro area sovereign debt crisis has led to significant market volatility and has doubtless helped reduce confidence. CPI inflation has been higher than forecast, largely due to rises in utility prices. The labour market has performed broadly in line with our March forecast, although it has shown signs of greater weakness recently.
- 1.13 These developments have prompted external forecasters to downgrade their predictions for growth in 2011 and 2012. The average forecast for CPI inflation in the final quarter of 2011 has been revised up significantly.
- 1.14 Our forecast in this *EFO* includes the impact of the policy announcements set out by the Chancellor in his 2011 Autumn Statement. These have little net impact on public sector net borrowing (PSNB) up to 2014-15, and then reduce it in 2015-16 and 2016-17. We have not made any material adjustments to our economy forecast on the basis of these policy announcements.

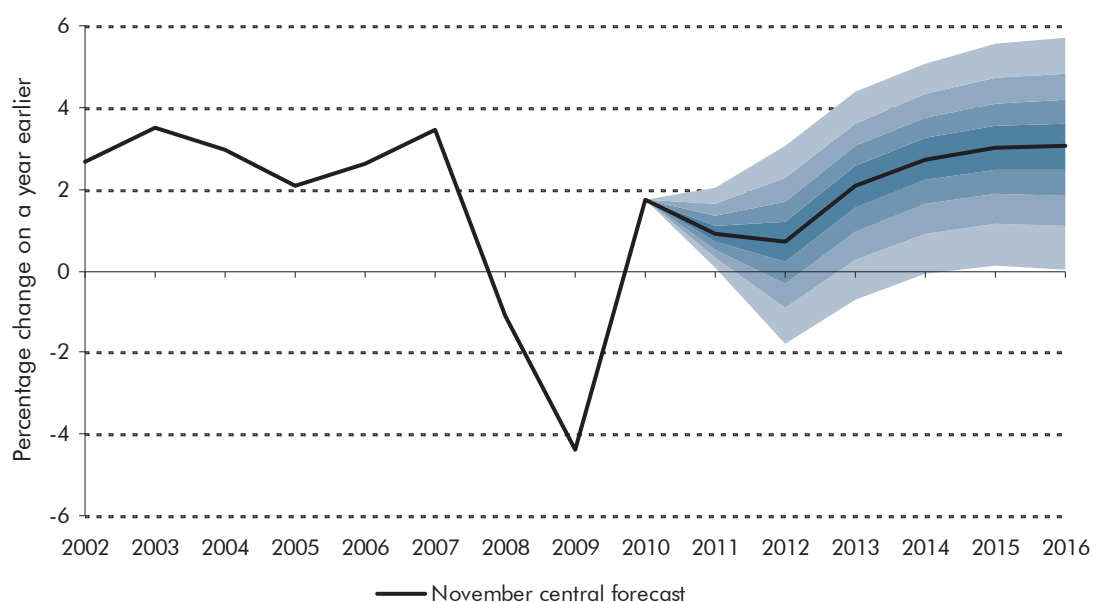
## The economic outlook

- 1.15 Recent data suggest that the UK economy has lost momentum since the summer. Business and consumer surveys point to continued weakness in coming months and the situation in the euro area is likely to further undermine confidence and lead to tighter credit conditions for households and firms. In the near term, utility price increases are keeping inflation higher than we expected in our last forecast, reducing real household disposable income and consumption.
- 1.16 On the assumption that the euro area struggles through its current difficulties, we expect the economy to gain momentum gradually through next year. But the headline measure of GDP is likely to be broadly flat until the second half, partly due to various one-off factors. Consistent with this profile, we have revised down our central forecast for year-on-year GDP growth to 0.7 per cent in 2012, compared to the 1.2 per cent average forecast among external analysts.
- 1.17 Business and consumer surveys, and other cyclical indicators, suggest that in the third quarter of 2011 activity in the economy was running about 2.5 per cent below the potential level consistent with sustaining stable inflation in the long term. This implies that there is less spare capacity in the economy than at the end of last year, despite the weakness of economic growth in the interim.
- 1.18 The cyclical indicators also suggest that the potential output of the economy has been growing by only around 1 per cent a year since the recession ended. To date, this appears to reflect weak underlying productivity growth rather than rising structural unemployment. Rather than assuming that the growth of potential output snaps straight back to 2.3 per cent, our estimate of its long-run average, we now assume that it picks up gradually over the next two years as the financial sector and credit conditions normalise.
- 1.19 Reassessing the size of the output gap and the outlook for growth in productive potential has led us to revise down our estimate of the level of potential output in 2016 by about 3.5 per cent since March. Despite this revision, our estimate of potential output at the end of the forecast period remains in line with or above those of the European Commission, the International Monetary Fund and the Organisation for Economic Cooperation and Development.
- 1.20 The downward revision to productive potential reduces the scope for above-average rates of economic growth as spare capacity is taken up. We now expect the economy to grow by 2.1 per cent in 2013, 2.7 per cent in 2014, and 3.0 per cent in 2015 and 2016. The growth rates in the last two years of the forecast are higher than in March, but only because of a methodological change to the National Accounts.

- 1.21 Our central forecast assumes that the euro area finds a way through the current crisis and that policymakers eventually find a solution that delivers sovereign debt sustainability. A more disorderly outcome is clearly possible. This poses a significant downside risk to the central forecast, but one that cannot be quantified in a meaningful way given the numerous ways in which it might unfold. Suffice to say, even though we believe there is an equal chance that growth will come in above or below our central forecast, the probability of a much worse outcome than the central forecast is greater than the probability of a much better one.
- 1.22 As in our last forecast, we expect the recovery to be supported primarily by growth in business investment and net trade – although our forecasts for both have been revised down since March. Recent data revisions suggest that exports have already increased more in response to the depreciation of sterling than previously thought, suggesting that there is less of a boost still to come. We are more pessimistic about the outlook for investment partly because non-financial companies may have less cash available to invest than official statistics suggest.
- 1.23 Real household disposable income is forecast to have fallen by 2.3 per cent this year, a post-war record. Earnings growth is not expected to overtake inflation again until 2013 and not by a significant margin until 2014. As a result, we expect consumer spending to remain broadly flat in real terms next year before picking up as real household disposable income starts growing again.
- 1.24 We expect the labour market to continue weakening over the coming year, reflecting the weaker outlook for economic growth. Unemployment is expected to rise from its current 8.3 per cent of the workforce to 8.7 per cent in the final quarter of 2012, before falling back again to 6.2 per cent by 2016.
- 1.25 We expect market sector employment to rise by around 1.7 million between the start of 2011 and the start of 2017, partly offset by a fall of around 710,000 in general government employment. General government employment is expected to fall further than we predicted in March, primarily because of the additional spending cuts pencilled in for 2015-16 and 2016-17 in the Autumn Statement. There is some evidence that public sector employers are front-loading expected job reductions.
- 1.26 Utility price increases have been larger than we forecast in March, which will keep inflation elevated over the near term. However, inflation is still expected to fall sharply during 2012 as past VAT rises and the upward pressure from higher energy and commodity prices fall out of the annual comparison, and as spare capacity in the economy subdues inflationary pressures. We expect CPI inflation to fall back to the Bank of England's target rate of 2 per cent in the medium term.

1.27 There is always considerable uncertainty around any central economic forecast. Chart 1.1 presents our central growth forecast with a fan chart showing the probability of 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 10 per cent probability bands. It suggests that there is a roughly one-in-three chance that the economy will shrink between 2011 and 2012, judging from past forecasting errors.

Chart 1.1: GDP fan chart



Source: ONS, OBR



Table 1.1: Summary of central forecast and changes since March<sup>1</sup>

	Percentage change on a year earlier, unless otherwise stated						
	Outturn		Forecast				
	2010	2011	2012	2013	2014	2015	2016
<b>Output at constant market prices</b>							
Gross domestic product (GDP)	1.8	0.9	0.7	2.1	2.7	3.0	3.0
GDP Levels (2010 = 100)	100	100.9	101.6	103.7	106.6	109.8	113.1
<b>Expenditure components of GDP at constant market prices</b>							
Household consumption <sup>2</sup>	1.1	-1.1	0.2	1.2	2.2	2.7	2.9
Business investment	0.8	-0.8	7.7	8.9	9.4	12.6	12.4
General government consumption	1.5	2.2	-0.1	-1.6	-2.3	-3.2	-3.5
General government investment	2.8	-6.8	-9.4	-4.2	-0.1	-1.1	-2.3
Net trade <sup>3</sup>	-0.8	1.2	0.3	0.6	0.3	0.2	0.1
<b>Inflation</b>							
CPI	3.3	4.5	2.7	2.1	2.0	2.0	2.0
<b>Labour market</b>							
Employment (millions)	29.0	29.2	29.1	29.2	29.4	29.7	30.0
Average earnings <sup>4</sup>	2.1	0.9	2.0	3.1	4.3	4.5	4.5
ILO unemployment (% rate)	7.9	8.1	8.7	8.6	8.0	7.2	6.2
Claimant count (millions)	1.50	1.54	1.75	1.77	1.67	1.45	1.23
Output gap	-3.0	-2.7	-3.1	-2.9	-2.4	-1.7	-0.9
<b>Changes since March forecast</b>							
<b>Output at constant market prices</b>							
Gross domestic product (GDP)	0.5	-0.8	-1.8	-0.8	-0.1	0.2	
GDP Levels (2010 = 100)	0.0	-0.8	-2.6	-3.5	-3.6	-3.4	
<b>Expenditure components of GDP at constant market prices</b>							
Household consumption <sup>2</sup>	0.3	-1.7	-1.1	-0.6	0.2	0.5	
Business investment	-1.7	-7.5	-1.2	-1.6	-0.9	4.8	
General government consumption	0.5	1.5	1.0	0.2	0.2	-1.3	
General government investment	-1.6	5.2	0.5	1.4	1.3	-3.5	
Net trade <sup>3</sup>	0.1	0.5	-0.6	-0.1	-0.2	-0.2	
<b>Inflation</b>							
CPI	0.0	0.3	0.2	0.1	0.0	0.0	
<b>Labour market</b>							
Employment (millions)	0.0	0.1	-0.1	-0.3	-0.3	-0.3	
Average earnings <sup>4</sup>	0.4	-1.1	-0.2	-0.7	0.0	0.0	
ILO unemployment (% rate)	0.0	-0.1	0.6	1.0	1.0	0.7	
Claimant count (thousands)	-1	-2	222	346	357	270	
Output gap	0.5	1.2	0.5	0.1	-0.2	-0.2	

<sup>1</sup> The forecast is consistent with the second estimate of GDP data for the third quarter of 2011, released by the Office for National Statistics on 24th November 2011.

<sup>2</sup> Includes households and non-profit institutions serving households.

<sup>3</sup> Contribution to GDP growth, percentage points.

<sup>4</sup> Wages and salaries divided by employees.

## The fiscal outlook

- 1.28 Our central forecast is that public sector net borrowing (PSNB) will drop steadily as a share of GDP over the next five years from its post war peak in 2009-10. But we now expect it to be substantially higher across all years of the forecast than in March, largely reflecting the weaker outlook for the economy. As a result public sector net debt (PSND) is also forecast to be higher than we expected in March, but we still expect it to start falling toward the end of the forecast period.
- 1.29 This forecast takes into account the policy measures announced by the Chancellor in his Autumn Statement. The impact of policy measures included in the Treasury's scorecard on PSNB is broadly neutral up to 2014-15 and then reduces borrowing by £8.3 billion in 2015-16 and £15.1 billion in 2016-17.
- 1.30 The key elements of our fiscal forecast, including the impact of these policy measures, are presented in Table 1.2:
- PSNB falls from 11.2 per cent of GDP in 2009-10 to 1.2 per cent in 2016-17. In 2015-16, we estimate PSNB will be around £24 billion or 1.4 per cent of GDP higher than we thought in the March *EFO*;
  - the cyclically-adjusted current budget (CACB) is expected to move from a deficit of 4.5 per cent of GDP in 2010-11 to a surplus of 0.5 per cent in 2016-17;
  - in March we forecast that the CACB would be in surplus by 0.8 per cent of GDP or £15 billion in 2015-16, but we now expect it to be in deficit by 0.6 per cent of GDP or £11 billion; and
  - public sector net debt (PSND) is forecast to peak at 78 per cent of GDP in 2014-15 before falling to 77.7 per cent in 2015-16 and 75.8 per cent in 2016-17. The peak in 2014-15 is 7.5 per cent of GDP higher than we expected in March, reflecting higher borrowing and a lower forecast for nominal GDP.

Table 1.2: Fiscal forecast overview

	Per cent of GDP							
	Outturn				Forecast			
	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Public sector net borrowing	11.2	9.3	8.4	7.6	6.0	4.5	2.9	1.2
Cyclically-adjusted net borrowing	9.0	7.1	6.4	5.5	4.0	2.8	1.7	0.6
Surplus on current budget	-7.7	-6.7	-6.5	-6.0	-4.7	-3.3	-1.8	-0.1
<b>Fiscal mandate and supplementary target</b>								
Cyclically-adjusted surplus on current budget	-5.5	-4.5	-4.6	-3.9	-2.7	-1.6	-0.6	0.5
Public sector net debt <sup>1</sup>	52.9	60.5	67.5	73.3	76.6	78.0	77.7	75.8
	Changes since March forecast							
Public sector net borrowing	0.0	-0.6	0.5	1.4	1.9	2.0	1.4	
Cyclically-adjusted net borrowing	0.1	-0.3	1.2	1.8	2.0	1.9	1.2	
Surplus on current budget	-0.1	0.4	-0.7	-1.5	-2.0	-2.1	-1.5	
Cyclically-adjusted surplus on current budget	-0.2	0.1	-1.4	-1.9	-2.1	-2.0	-1.4	
Public sector net debt <sup>1</sup>	0.2	0.2	1.4	3.6	5.7	7.5	8.6	

<sup>1</sup> Debt at end March; GDP centred on end March.

**1.31** The deterioration in the public finances in this forecast reflects lower government receipts and higher spending as a share of national income, as shown in Table 1.3. The downward revision to public sector receipts worsens the PSNB by 0.7 per cent of GDP compared with March. The main factors are:

- lower forecast growth in the key economic drivers of tax receipts – labour income, household consumption and company profits – which feed through to lower forecasts for income tax, VAT and corporation tax;
- falls in oil prices, equity prices and interest rates compared to March, leading to lower North Sea taxes, stamp duties, and interest receipts; and
- the sharp fall in financial sector corporation tax receipts seen so far this year, which we assume not to be recovered over the forecast period.

**1.32** The upward revision to total managed expenditure (TME) as a share of GDP worsens the PSNB by 0.7 per cent of GDP by 2015-16. The most significant changes here are:

- departmental spending over the spending review period is generally fixed in cash terms. Our forecast of lower nominal GDP means this is higher as a share of GDP;

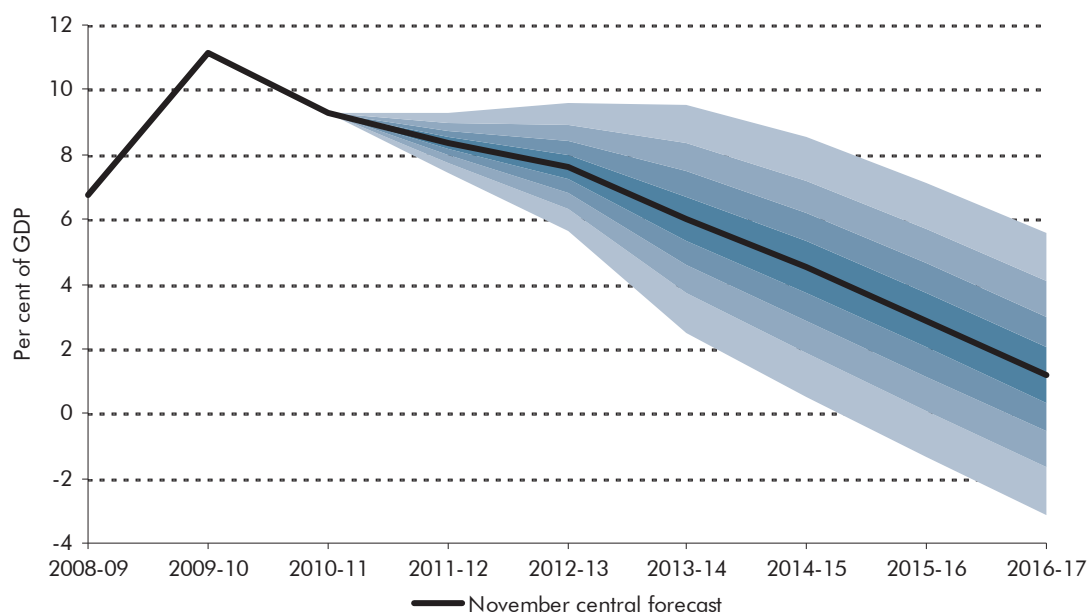
- our forecast of social security benefits and public sector pension payments has increased partly due to higher CPI and claimant count unemployment forecasts;
- this is partly offset by reduced government debt interest payments due to lower expected interest rates and lower RPI inflation; and
- in 2015-16, the Government's additional discretionary fiscal tightening reduces total expenditure as a share of GDP by 0.5 per cent.

Table 1.3: Changes to public sector net borrowing since March forecast

	Per cent of GDP				
	Outturn 2011-12	2012-13	Forecast 2013-14	2014-15	2015-16
PSNB March	7.9	6.2	4.1	2.5	1.5
PSNB November	8.4	7.6	6.0	4.5	2.9
Change	0.5	1.4	1.9	2.0	1.4
<i>of which:</i>					
Tax	-0.3	-0.5	-0.8	-0.7	-0.7
<i>of which: policy</i>	0.0	0.0	0.0	0.0	0.0
Spending	0.2	1.0	1.2	1.2	0.7
<i>of which: policy</i>	0.0	0.0	0.0	0.0	-0.5

1.33 All fiscal forecasts are subject to significant uncertainties. Chart 1.2 shows our central forecast for PSNB with the probability of different outcomes, based purely on our and the Treasury's past forecasting performance, shown in a fan chart. The solid black line shows our central (median) forecast and each shaded area represents a 10 per cent probability band.

Chart 1.2: Public sector net borrowing fan chart



Source: ONS, OBR

## Performance against the Government's fiscal targets

1.34 On taking office in 2010 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 2016-17; and
- to see public sector net debt (PSND) falling in 2015-16.

1.35 In the absence of additional policy measures in the 2011 Autumn Statement, we believe that the Government would have had a less than 50 per cent chance of achieving these targets. Our central forecast would have shown a deficit on the CACB of £6 billion or 0.3 per cent of GDP in 2016-17 and an increase in PSND of 0.2 per cent of GDP between 2014-15 and 2015-16.

1.36 The Government has put itself back on course to meet its targets by announcing specific new policy measures that reduce the CACB by £8 billion or 0.5 per cent of GDP in 2015-16 and £15 billion or 0.8 per cent of GDP in 2016-17. The 'unchanged policy' baseline against which these policies are measured extends the real freeze in total spending that the Government had previously announced for 2015-16 into 2016-17. This reduces structural non-investment spending and

the CACB in that year by a further £15 billion or 0.8 per cent of GDP. This gives a total discretionary cut in non-investment spending and in the CACB of £30 billion or 1.5 per cent of GDP in 2016-17, compared to a counterfactual assuming structural spending growing in line with GDP.

- 1.37 Taking the policy measures and the baseline tightening into account, our central forecast now shows a surplus on the CACB of over £9 billion or 0.5 per cent in 2016-17 and a fall in PSND of 0.3 per cent of GDP in 2015-16. This implies that the Government has a better than 50 per cent chance of hitting its targets. It has slightly less margin for error than it did in March, when we were forecasting the CACB would be in surplus by £15 billion or 0.8 per cent of GDP at the then five year horizon of 2015-16 and that PSND would fall by 1.4 per cent of GDP in 2015-16.
- 1.38 In March we estimated not only that the Government was on course to meet the mandate at the then five-year horizon of 2015-16, but that the CACB would also be in surplus a year earlier in 2014-15. In this forecast the CACB is no longer in surplus in these years, primarily because we have revised down the expected level of output by around 3.5 per cent from 2014-15 onwards, and the revision is structural rather than cyclical. This worsens the CACB by just over 2 per cent of GDP in each year thereafter. The Autumn Statement measures and baseline tightening offset about 5 per cent of this structural deterioration in 2014-15, 30 per cent in 2015-16 and 80 per cent in 2016-17. This is sufficient to keep the CACB in surplus in 2016-17, but not in the previous two years.
- 1.39 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 60 per cent probability that the CACB will be in balance or surplus in 2016-17 (as the mandate requires) and a roughly 40 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  $\frac{3}{4}$  per cent of potential GDP narrower, or rather the level of potential output  $\frac{3}{4}$  per cent lower, then in our central forecast the Government would no longer be on course to balance the cyclically-adjusted current budget in 2016-17; and

- third, by looking at alternative economic scenarios. We examine three illustrative scenarios: first, one in which banks' funding costs remain elevated and these are passed on to the wider economy; second, one in which the financial crisis had no effect on the level of potential output; and third, a scenario where structural unemployment is higher, but the productive potential of the economy remains unchanged. The first reduces the Government's chances of meeting the mandate, the second significantly increases the chances, and the third has little net impact.





## 2 Developments since the March 2011 forecast

### Summary

- 2.1 Since our last forecast in March, the Office for National Statistics (ONS) has implemented methodological changes and data revisions to the National Accounts that partially rewrite recent economic history and which have an impact on our forecasts looking forward:
- the methodological changes suggest that for a given growth rate of nominal GDP – total cash spending in the economy – the official estimate of real GDP growth in any given year is now likely to be around 0.2 percentage points higher while whole economy inflation will be around 0.2 percentage points lower, other things being equal. This does not imply any actual improvement in the underlying growth performance of the economy; and
  - the data revisions suggest that the economy was growing more strongly in the run-up to the financial crisis, that the recession was deeper (but slightly shorter), and that the recovery at the end of 2009 was stronger than previous figures suggested. GDP has since flattened out from the second half of 2010.
- 2.2 Economic growth this year has been much weaker than we expected at the time of our March forecast. Forward-looking business and consumer surveys have also weakened significantly. The intensification of the euro area sovereign debt crisis has led to significant market volatility and has doubtless helped reduce confidence. CPI inflation has been higher than forecast, largely due to rises in utility prices. The labour market has performed broadly in line with our March forecast, although it has shown signs of greater weakness recently.
- 2.3 These developments have prompted external forecasters to downgrade their predictions for growth in 2011 and 2012. The average forecast for CPI inflation in the final quarter of 2011 has been revised up significantly.
- 2.4 Our forecast in this *EFO* includes the impact of the policy announcements set out by the Chancellor in his 2011 Autumn Statement. These have little net impact on public sector net borrowing (PSNB) up to 2014-15, and then reduce it in 2015-

16 and 2016-17. We have not made any material adjustments to our economy forecast on the basis of these policy announcements.

## Introduction

2.5 This chapter summarises:

- the main economic and fiscal data developments since our last forecast in March 2011 (from Paragraph 2.6);
- recent external forecasts for the UK economy (from Paragraph 2.29) and how these have responded to data developments (from Paragraph 2.41); and
- the policy measures that have been announced since March and the impact we expect these to have on our forecasts (from Paragraph 2.45).

## Data developments since the March 2011 forecast

2.6 This section examines the key developments in official economic data since our last forecast in March 2011. We first consider how recent methodological changes and wider data revisions by the ONS have partially rewritten the history of the UK economy over the last 14 years – and how this will affect the measurement of economic activity looking forward. These changes are a reminder that the monthly and quarterly flow of official statistics is only the first draft of economic history and that the evolution of the economy can look significantly different with a few years' hindsight. We then consider developments in the UK and global economy since our March 2011 forecast.

### Methodological changes in *Blue Book 2011*

2.7 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 a number of relatively significant changes<sup>1</sup>, including:

- a revised Standard Industrial Classification (SIC) system, to reflect changes in the structure of the economy. For example, the National Accounts now contain more disaggregated information on the service sector;
- a revised product classification system, which is used when collecting and calculating statistics on goods and services; and

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<sup>1</sup> See: Everett G, 2011, *Content of Blue Book, 2011 Edition*, ONS.

- changes to the way in which nominal GDP (the total amount of cash spending in the economy) is deflated to calculate real GDP (the volume of goods and services produced and consumed).

These changes have only been applied to data since 1997. This means that there is a break in the real GDP series from the first quarter of 1997, which complicates the task of assessing the long-term evolution of the economy. The ONS intends to address this issue in due course.

- 2.8 In this section we focus on the third of the methodological changes listed above, which has important implications for the construction of our forecast.
- 2.9 The ONS calculates real GDP by estimating nominal GDP and then adjusting for price changes. This is known as 'deflation'. The *2011 Blue Book* brings greater consistency to the price deflators used to convert the nominal measures into real ones.<sup>2</sup> In addition, where components of the Retail Prices Index (RPI) have been used as the price indices in the deflation process in the past, the ONS has now replaced these with components of the Consumer Prices Index (CPI).<sup>3</sup>
- 2.10 The overall effect of these deflator changes is to increase real GDP growth rates in most years since 1997, while GDP deflator inflation is reduced in an offsetting way so that nominal GDP is unchanged. The ONS note that it is difficult to quantify the impact precisely as there are a number of changes affecting both the current price and real measures in the National Accounts.<sup>4</sup> However, Chart 2.1 shows that over the period from 1997 to the start of 2011, average real GDP growth rates are now around 0.2 percentage points higher and average GDP deflator inflation about 0.2 percentage points lower than before the change.
- 2.11 Chart 2.2 shows that these changes have been far from uniform over the period covered by the revisions. Up to 2007, changes to real GDP growth and GDP deflator inflation largely offset each other in each year and there was little

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<sup>2</sup> For more details see: ONS, September 2011, *Methods Changes in the 2011 Blue Book*.

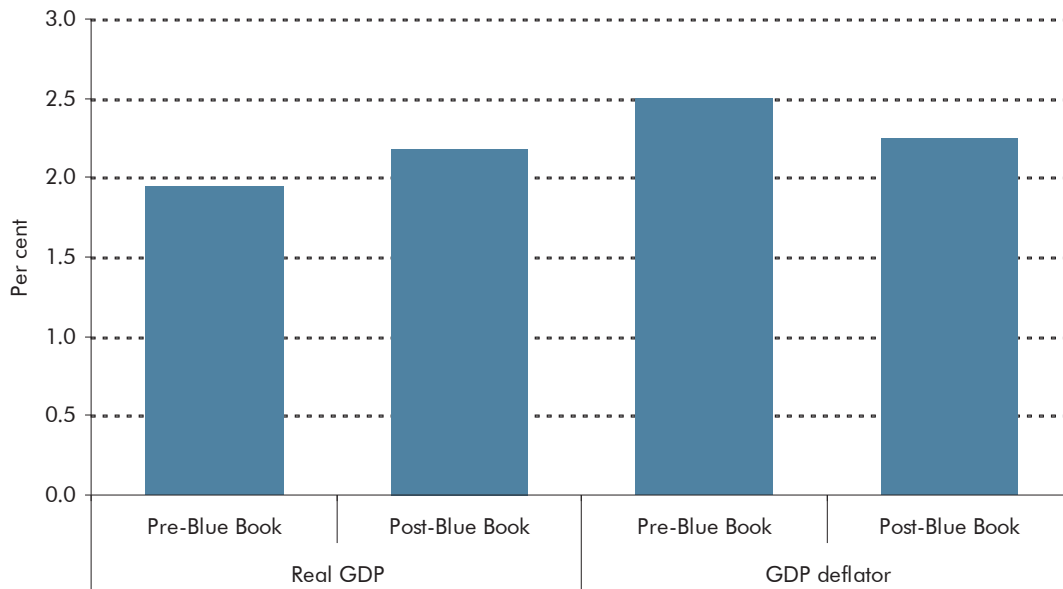
<sup>3</sup> One area where these changes have not yet been implemented is in the deflation process for investment. However, the use of CPI rather than RPI is not likely to have a significant impact on investment, as the RPI series are only used for deflation for around 2 per cent of investment, as there are also other price indices that are used in the deflation process in the National Accounts. The ONS have stated that additional quality assurance is needed before they can use the new approach for investment.

<sup>4</sup> For example, consumption has also been affected by revisions as a result of Supply and Use balancing adjustments caused through the re-classifications in SIC 2007 as well as the introduction of a new seasonal adjustment model. In addition, there are changes to the deflation process, which use less detailed categories of price indices. As such, an exact comparison of the change from CPI deflation compared to RPI deflation is difficult to assess as the process of deflation using the CPI is now being carried out at a less disaggregated level of goods and services. For more details see: ONS, October 2011, *Blue Book 2011: Improvements to Household Expenditure estimates*.

change to nominal GDP growth. After 2007 nominal GDP has itself been revised quite significantly, so it becomes more difficult to disentangle the effects of the methodological changes from the wider ONS data revisions that we discuss below.

- 2.12 Since the methodological changes introduced in the *2011 Blue Book* will continue to be applied to new data, we expect this to have a permanent impact on measured growth rates in the future. We assume that the effect going forward will be similar to the average effect from 1997 to the start of 2011. In other words, that measured real output growth will be 0.2 percentage points higher (and GDP deflator inflation 0.2 percentage points lower) for any given rate of nominal output growth than we assumed in March. As we discuss in Chapter 3, this means that the long-term trend growth rate to which we assume that the economy will eventually return is 0.2 percentage points higher than we have assumed in previous forecasts, at 2.3 per cent.
- 2.13 It is important to emphasise that these changes do not mean that we are fundamentally more optimistic about the medium and long-term growth prospects for the economy than we were in March. It is purely a methodological change that means we expect measured real growth rates to be modestly higher in the future than they otherwise would have been. It is also important to emphasise that this change has no significant impact on the outlook for the public finances. Nominal GDP growth is the principal determinant of tax revenues and this is unaffected by the adjustment. Growth rates of actual and potential real GDP will be higher by exactly the same amount, so the output gap closes at roughly the same speed as in previous forecasts. More details of our forecasts are set out in Chapter 3.

Chart 2.1: Average growth rates between 1997 and the start of 2011



Source: ONS

Chart 2.2: Nominal GDP, real GDP and the GDP deflator



Source: ONS

## Revisions to historical data in *Blue Book 2011*

2.14 The ONS *Blue Book 2011* and the *Quarterly National Accounts* for the second quarter of 2011 also included wider revisions to economic data series back to 1997. This has led to some important changes to the path of GDP through the 2008-09 recession and subsequent recovery, as shown in Chart 2.3:

- GDP growth is estimated to have been stronger in the run up to the financial crisis than previously thought, with GDP growth in 2007 revised up from 2.7 per cent to 3.5 per cent;
- the peak-to-trough fall in output over the recession is now estimated to have been greater than previously thought at 7.1 per cent rather than 6.4 per cent. The recession is also estimated to have ended earlier, with the last quarter of negative quarterly growth in the second quarter of 2009; and
- the post recession recovery is now thought to have been slightly stronger at the end of 2009. GDP has since flattened out from the second half of 2010.

Chart 2.3: Level of GDP

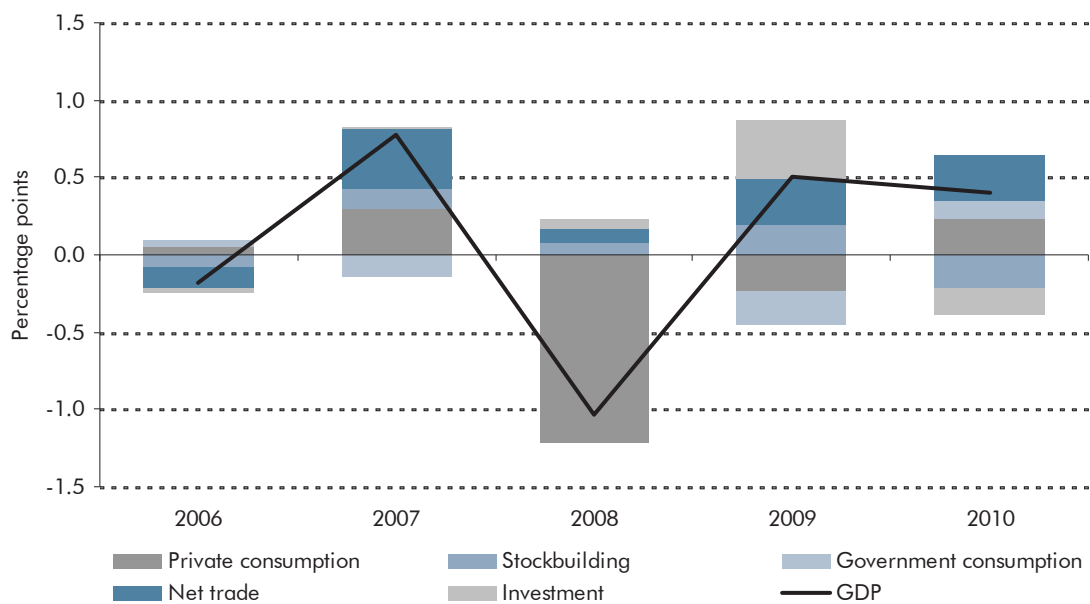


Source: ONS

2.15 The *Blue Book* has also revised the composition of GDP growth. The large downward revision to GDP growth in 2008 primarily reflects the incorporation of new HMRC data showing that corporate profits were lower than previously thought. On the expenditure side of the National Accounts, shown in Chart 2.4, this has translated into a much weaker contribution to growth from consumption

in 2008. As we discuss in Chapter 3, this revision has resolved something of a puzzle in the previous vintage of the data. The revision in consumption was not matched by a similar revision to household income, which has led to an upward revision to the household saving ratio. This larger rise in the saving ratio during the recession now looks more in keeping with the experience of previous recessions.

Chart 2.4: Revisions to the contribution of expenditure components to GDP growth



Source: ONS

2.16 The revisions to net trade shown in Chart 2.4 have also resolved another puzzle in the data. We had previously been surprised by the failure of net trade to respond as much to the depreciation in sterling as had been the case following previous large exchange rate changes. The upward revisions to net trade across each of the years from 2007 to 2010 eliminate much of that unexpected weakness, and the improvement in the trade balance since 2007 now more closely matches those earlier episodes.

### Box 2.1: Rewriting history: the 1990s recession and recovery

Revisions to National Accounts data are a normal part of the *Blue Book* process, which reconciles the different measures of GDP and incorporates information from annual data sources, such as the Annual Business Survey and HMRC tax data. However, even after all data sources have been incorporated, methodological changes can mean further (and sometimes even larger) revisions years later.

Looking at revisions to estimates of GDP in the early 1990s is instructive. Chart A shows the profile of the 1990s recession and recovery as recorded in the 1991 *Blue Book*, the two subsequent *Blue Books*, and in the 2011 *Blue Book*. The 1992 *Blue Book* suggested that the economy shrank by 4.3 per cent from peak to trough and that there was a pronounced ‘double dip’ recession after a brief recovery at the end of 1991. In contrast, the latest vintage of data shows a much smaller peak-to-trough decline of 2.5 per cent and no apparent double dip.

Chart A: The changing profile of the 1990s recession and recovery



Source: ONS, Bank of England



## Economic developments between March and November

- 2.17 We now turn to data showing how the economy has evolved since our last forecast.
- 2.18 In the first two quarters of 2011 growth was weaker than we expected in March, at 0.4 per cent in the first quarter and 0.1 in the second quarter. The second quarter was affected by the additional bank holiday and the disruption to international supply chains arising from the earthquake in Japan, which temporarily reduced economic activity. The ONS estimate that GDP growth for the third quarter of 2011 was 0.5 per cent, part of which is likely to have been a bounce-back from the temporary factors in the second quarter. GDP grew at an average rate of only 0.3 per cent over the second and third quarters of 2011 together.
- 2.19 Most survey evidence suggest a weakening of economic activity in the coming months. The CIPS Purchasing Managers' Index data indicated a slowdown in output growth in October with manufacturing output declining. Similarly, the CBI's November *Industrial Trends Survey* reported weakening in orders books in manufacturing and a sharp decline in export orders. The BCC third quarter *Quarterly Economic Survey* also painted a bleak picture, recording a fall in domestic manufacturing and services orders and a weakening of domestic sales growth. The Bank of England's November *Agents' Summary of Business Conditions* signalled subdued output growth but, on the positive side, suggested continued growth in private sector employment over the coming year. According to both Gfk NOP and Nationwide, consumer confidence fell in October in line with weaker output.
- 2.20 Since the summer the intensification of the euro area sovereign debt crisis is likely to have contributed to weaker UK growth and business and consumer confidence. Euro area policy makers have not yet found a resolution to the crisis that has eased market pressures. UK banks have not been immune to these developments and have seen their cost of funding rise. However, growth momentum in the UK had weakened before the crisis intensified. Box 2.2 suggests that the main reason that GDP has grown less quickly over the past 18 months than the interim OBR expected in its June 2010 forecast is higher-than-expected inflation squeezing household incomes and consumption.

### Box 2.2: Lower-than-expected growth in 2010-11

In this box we consider why UK GDP has grown less quickly since the beginning of last year than the interim OBR forecast in June 2010. The analysis suggests that most of the weakness can be explained by an external inflation shock constraining real household consumption in the year so far.

Although provisional GDP data for the third quarter of 2011 is available, we concentrate here on the latest National Statistics data to June 2011. Compared to our June 2010 forecast, the increase in GDP between the first quarter of 2010 and the second quarter of 2011 was 1.2 percentage points lower than expected. This is more than explained by the fact that we overestimated the contribution that private consumption would make to GDP growth by 1.4 percentage points, as shown in Table A.

Table A: Expenditure contributions to GDP growth 2010Q1-2011Q2<sup>1</sup>

	Percentage points, unless otherwise stated		
	Forecast	Outturn	Error
<b>GDP growth, per cent</b>	<b>2.8</b>	<b>1.7</b>	<b>-1.2</b>
Main contributions:			
Private consumption	0.9	-0.5	-1.4
Government consumption	-0.2	0.5	0.7
Total investment <sup>2</sup>	0.6	-0.4	-1.0
Change in inventories	0.8	0.7	-0.1
Net trade	0.9	1.1	0.2

<sup>1</sup>Components may not sum to total due to rounding and statistical discrepancy

<sup>2</sup>The sum of business investment, general government investment and public corporations and private investment in dwellings

The contribution of nominal consumption to money GDP was only 0.1 percentage points lower than forecast, suggesting that higher-than-expected inflation from the second half of 2010 was a key driver of the weakness in real consumption.

This was largely the result of unexpected rises in energy prices and global agricultural commodity prices. Oil prices rose to a peak of \$117 a barrel in the second quarter of 2011, against an assumption based on futures prices of just over \$80. The IMF commodity food price index rose by around 30 per cent between the first quarter of 2010 and the second quarter of 2011. Overall, CPI inflation was 2 per cent higher than forecast over this period compared to the June 2010 forecast. Crucially, higher inflation was not offset by higher earnings growth and instead squeezed consumer spending.

We slightly underestimated the contribution to growth from net trade. Both exports and imports were higher than forecast, with a larger error in exports, which can be explained by the much stronger-than-expected recovery in world trade flows. The effects of the euro area crisis had not started to bite over this period.

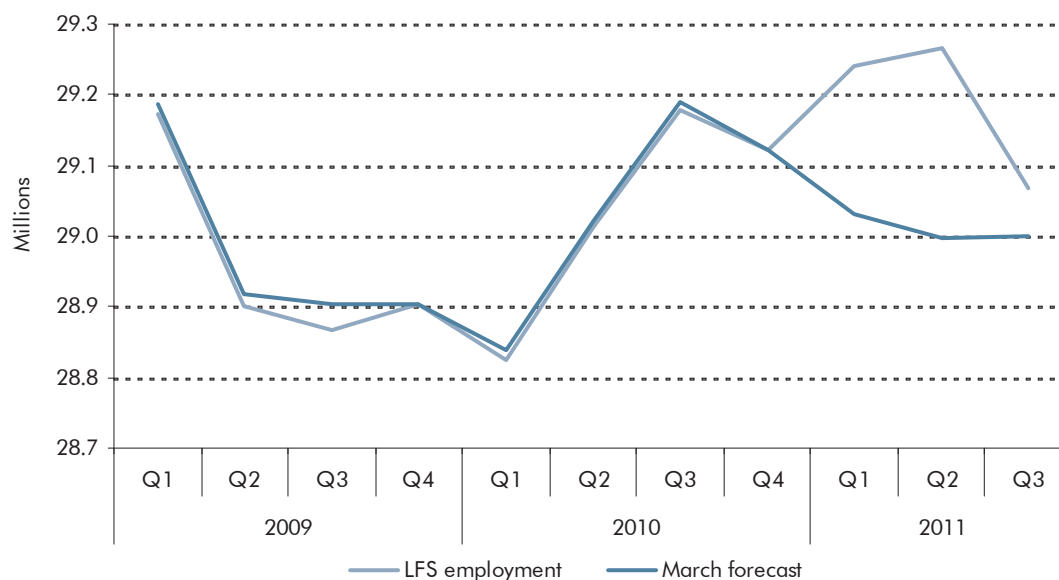
We overestimated the contribution that business investment would make to GDP growth by 1 percentage point. Although credit conditions began to deteriorate after the first quarter of 2011, corporate profits were higher than forecast in 2010. It therefore seems most likely that business investment was scaled back in reaction to the weaker demand outlook from lower private consumption.

We underestimated the contribution to growth from real government consumption. This was largely due to an overestimate of the government deflator, with the contributions of government spending in nominal terms only slightly lower than our forecast. The government deflator is often very volatile and can be subject to large revisions.

To summarise, current data suggest that up to the second quarter of 2011 the fact the economy grew less quickly than the interim OBR forecast in June last year can be explained by the external inflation shock. But this does not exclude the possibility that other factors may have had a role, especially as data on the overall level and the composition of growth over this period is subject to revision in the future.

- 2.21 Labour market data have provided a mixed picture since our March 2011 *EFO*. While employment was much more resilient than we expected over the first half of 2011, the increase in unemployment and inactivity in the third quarter has brought the employment level much closer to that which we forecast in March (Chart 2.5). The overall level of employment stood at just under 29.1 million in the three months to September compared to 29.0 million in our March forecast. The large quarterly decline in LFS employment in the third quarter of 2011 partly reflected a fall back in part-time and temporary employment, both of which boosted the earlier recovery in LFS employment since 2010.

Chart 2.5: LFS employment and March forecast

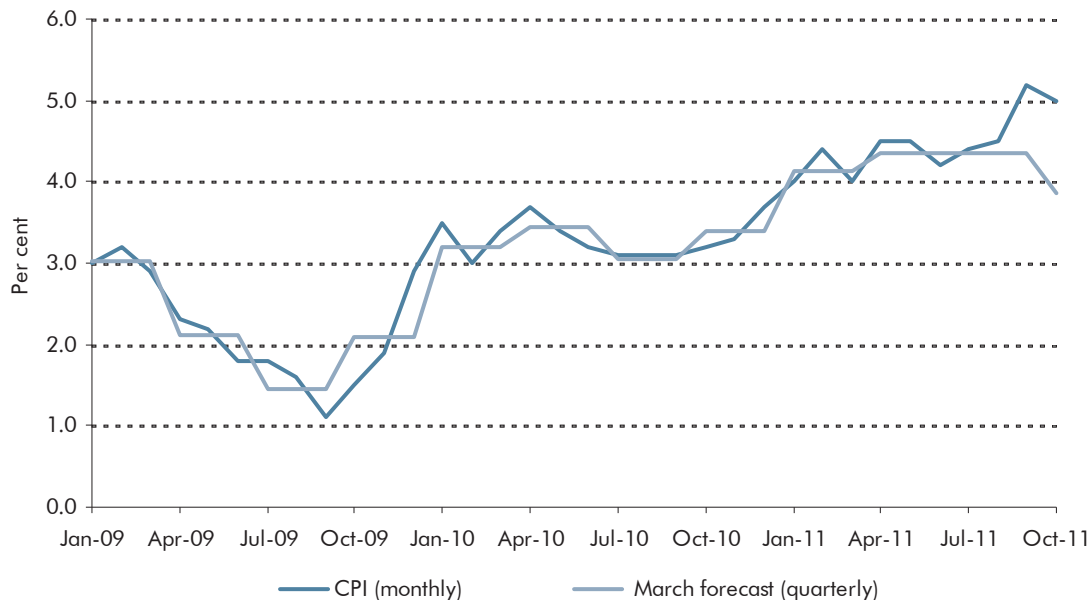


Source: ONS, OBR

**2.22** CPI inflation has remained at or above 4 per cent since March, reaching 5.2 per cent in September 2011. In October, CPI inflation fell slightly to 5.0 per cent, with some downward pressure since September due to widespread food price discounting by supermarkets. The elevated rate of inflation over 2011 continues to reflect the ongoing effect of the increase in VAT to 20 per cent in January 2011 and increases in energy prices.

**2.23** Chart 2.6 shows that CPI inflation was in line with our March forecast for the first half of 2011, but was then higher than expected in the third quarter. The contribution of gas and electricity prices to CPI inflation has increased sharply in the third quarter of 2011 and utility price increases have been larger than we forecast in March. All of the UK's major domestic energy suppliers have announced gas and electricity price rises over the past few months, with the last being implemented in November. As such, the majority of these announcements have now fed through to CPI inflation. In particular, the September CPI was boosted by increases in gas prices of 13 per cent and electricity prices of 7.5 per cent, compared to a month earlier.

Chart 2.6: CPI inflation and March forecast



Source: ONS, OBR

2.24 World activity has slowed since our March forecast, especially in advanced economies. This reflects: the deepening of the euro area sovereign debt crisis and related weakness in the financial sector; the supply chain effects from the Japanese earthquake; sluggish performance in the US labour and housing markets; and higher oil prices, partly related to unrest in the Middle East and North Africa (MENA) region. In line with these developments, world trade growth slowed towards the end of the year. The CPB Netherlands Bureau for Economic Policy Analysis reported that the volume of world trade fell by 1 per cent in September.

## Fiscal data developments since March

2.25 The joint ONS / HM Treasury *Public finances release* provides monthly data on central government receipts and expenditure and provisional estimates for the public sector fiscal aggregates. The pattern of public finance data through the year can be very volatile, making it difficult to compare against full year forecasts. This is particularly the case towards the end of the financial year, so developments since the last forecast should be treated with some care.

2.26 The latest estimated outturn for public sector net borrowing (PSNB) in 2010-11 is £137.1 billion, around £8.8 billion lower than we forecast in the March *EFO*. This reflects higher central government receipts of £2.7 billion, lower central government spending of £1.1 billion, lower net borrowing by local authorities of £1.8 billion and substantially lower net borrowing by public corporations of £3.3 billion, relative to our March forecast.

- 2.27 PSNB in the first seven months of 2011-12 was £10.4 billion lower than in the equivalent period last year, so borrowing would have to be £4.9 billion lower than last year in the last five months of the year to meet our March forecast for 2011-12 as a whole.
- 2.28 Central government receipts growth for the first seven months of 2011-12 has been 5.1 per cent, lower than the 6.9 per cent growth implied by our March forecast for 2011-12. There has been unexpected weakness in corporation tax payments from the financial and oil sectors, related to poor bank results and lower than expected offshore production. Central government current expenditure was only 2.4 per cent higher than last year in the first seven months of 2011-12, lower than the 3.6 per cent growth implied by our March forecast for 2011-12. However the monthly profile of departmental spending can change significantly from year-to-year and initial estimates are usually revised. These developments and the implications for our latest forecast are discussed in more detail in Chapter 4.

## Developments in external forecasts

- 2.29 Many organisations forecast the UK economy, using a wide array of techniques and data. A number of publications collate the views of subsets of these forecasters and average their predictions.<sup>5</sup> This section sets out some of the movements in the forecasts collected over the months since the March forecast.
- 2.30 When interpreting the average of independent forecasts, it is important to bear in mind that different analysts forecast different subsets of variables. This means that the average forecast is not constrained to paint an internally consistent picture, which makes it difficult to compare with our own forecasts.

## Growth

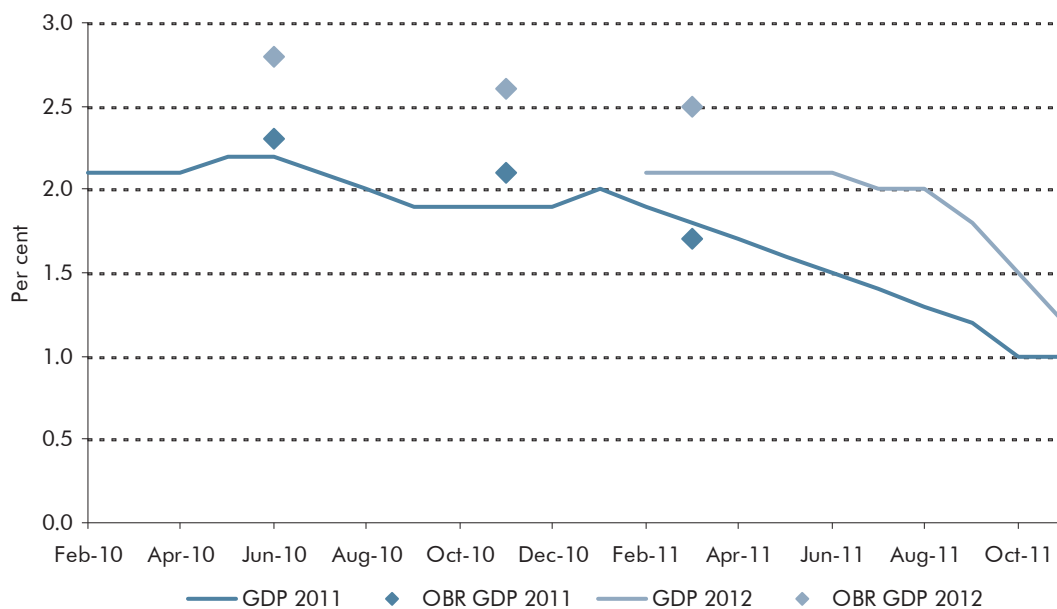
- 2.31 The average (mean) forecast for GDP growth in 2011, submitted in the three months to November, was 1.0 per cent, compared to 1.8 per cent in the three months to March (Chart 2.7). For 2012, the average forecast in November was 1.2 per cent, down 0.9 percentage points since March. Most forecasters have explained the downgrades by pointing to the weakness in recent GDP growth, weaker forward-looking survey indicators, and expectations that the euro area crisis will have significant spill over effects to the UK.

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<sup>5</sup> See HM Treasury, November 2011, *Forecasts for the UK economy: a comparison of independent forecasts*. 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.

2.32 Expectations for the composition of demand in 2011 have changed significantly between March and November. The average forecast for private consumption growth was -1.0 per cent in the three months to November, compared to 0.8 per cent in March. Those for government consumption were revised upwards by 1.9 percentage points and the average expectation for growth in fixed investment fell to -0.9 per cent from 3.8 per cent. The average forecast of the net trade contribution as a percentage of GDP has increased by 0.9 percentage points.

Chart 2.7: Average forecasts for GDP growth in 2011 and 2012



Source: HM Treasury, OBR

2.33 Compared to the smaller sample of medium-term forecasts, the average forecast for GDP growth is now lower in 2013 and 2014, but remains the same at 2.5 per cent in 2015 compared to the forecasts that were published at the time of our March *EFO*. This is mainly driven by a fall in expectations of the contribution of domestic demand in 2013 and 2014. Although the contribution of net exports has been revised upwards by 0.1 percentage points in 2013, the contribution of net exports in 2014 and 2015 remains unchanged.

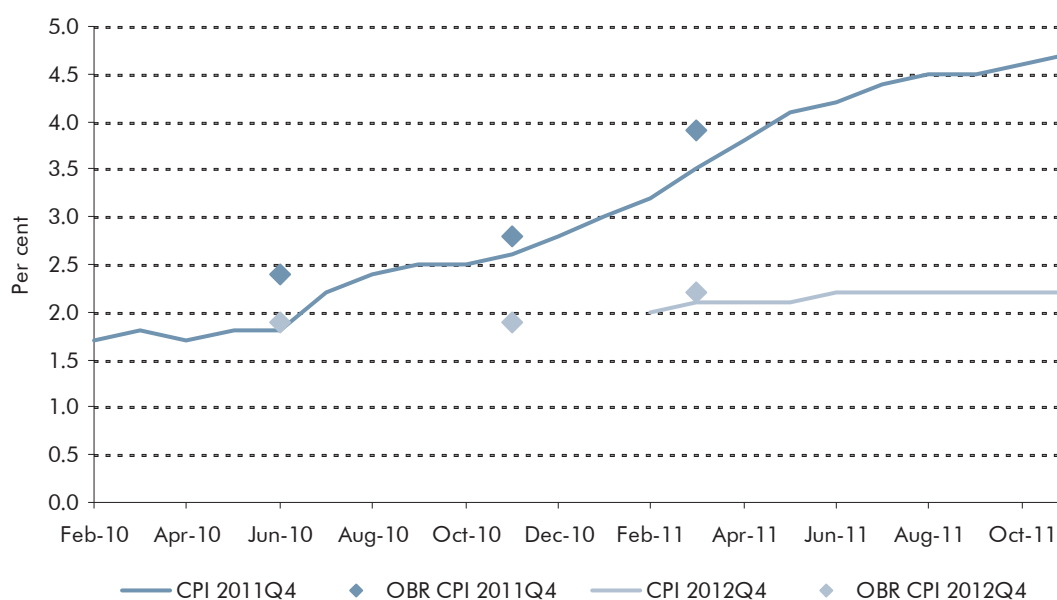
## Inflation

2.34 The average forecasts for CPI and RPI inflation in the fourth quarter of 2011 are 4.7 and 5.3 per cent, respectively. The average forecast for CPI has been revised up significantly by 1.2 percentage points since March (Chart 2.8) and similarly the average forecast for RPI has been revised up by 1.0 percentage point.

2.35 The average forecast for CPI inflation in the fourth quarter of 2012 is 2.2 per cent, which has remained broadly flat since March. On the other hand, the average forecast for RPI inflation in the fourth quarter of 2012 is 2.8 per cent, a fall of 0.4 percentage points since March.

2.36 The wide range of CPI forecasts for the fourth quarter of 2012 made in the three months to November, ranging from 0.7 per cent to 3.4 per cent, highlight the current uncertainties surrounding the inflation outlook in 2012.

Chart 2.8: Average forecasts for CPI inflation in the fourth quarter of 2011 and 2012



Source: HM Treasury, OBR

## Labour market

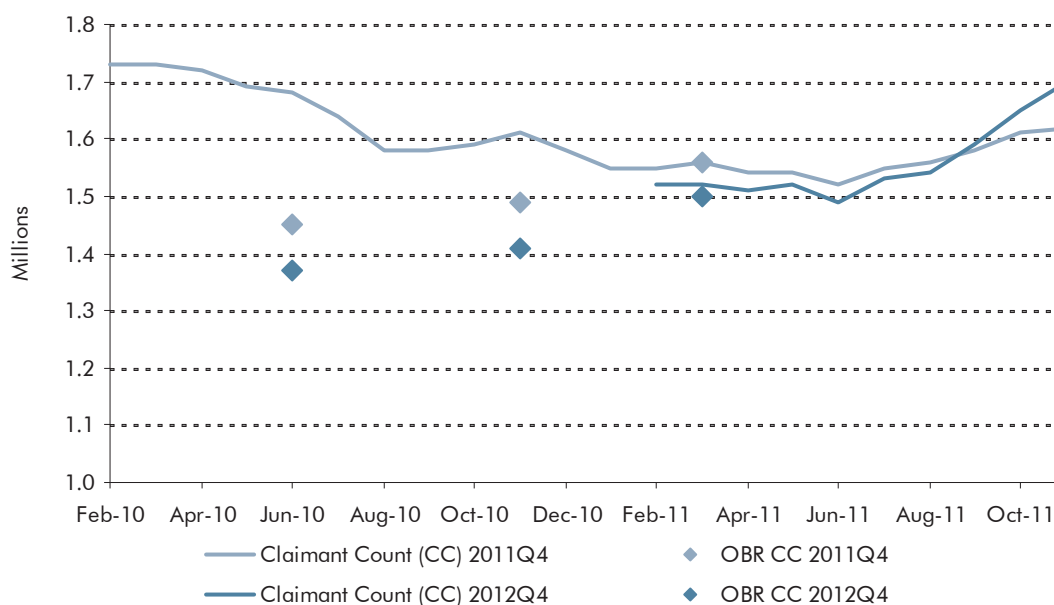
2.37 The average forecast for claimant count unemployment in the fourth quarter of 2011 has increased from 1.56 million in the three months to March to 1.62 million in the three months to November. The average forecast has risen every month since June, reflecting the rising rate of growth in the claimant count. The average forecast for the fourth quarter of 2012 has also been revised up by 180,000 since March to 1.7 million. The average forecast for employment growth in 2011 remained unchanged in the three months to November compared to the three months to March, at 0.2 per cent.

2.38 The average forecast for claimant count unemployment in the medium term is measured by the annual average rather than the fourth quarter. This is higher in



2013 to 2015 than the average of medium term forecasts available at the time of our March *EFO*.

Chart 2.9: Average forecast for claimant count in the fourth quarter of 2011

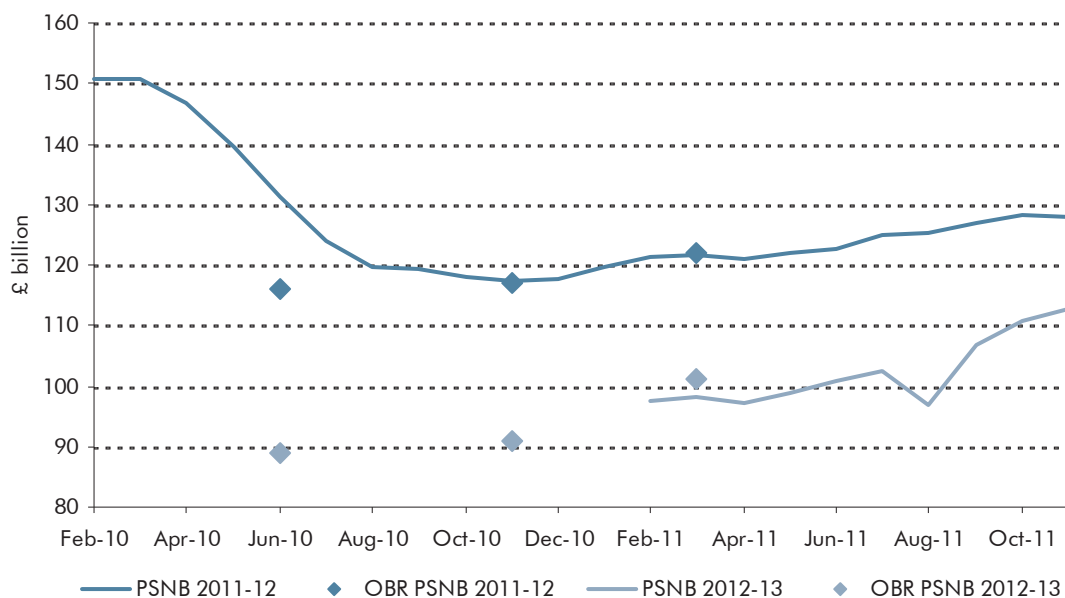


Source: HM Treasury, OBR

## Public finances

**2.39** The average external forecast for public sector net borrowing (PSNB) for 2011-12 has generally been rising since April 2011 and was £128 billion for 2011-12 in November 2011. The average forecast for PSNB for 2012-13 was £112.8 billion, £14.7 billion higher than in March (Chart 2.10).

Chart 2.10: Average forecast for PSNB in 2011-12 and 2012-13

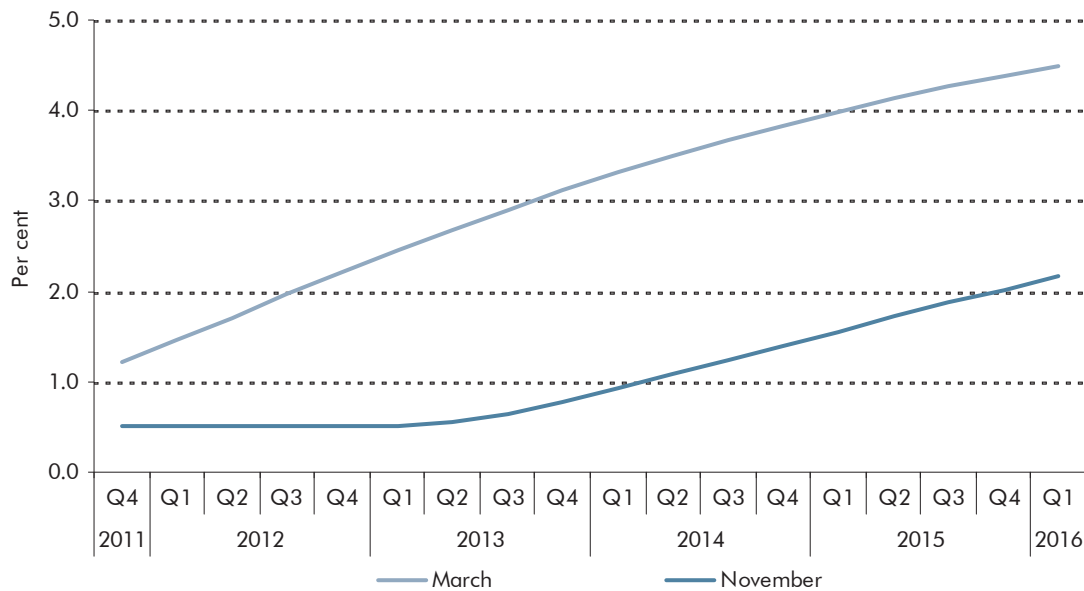


Source: HM Treasury, OBR

### Market expectations of interest rates

2.40 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. As Chart 2.11 demonstrates, expectations of three month gilt rates are now significantly lower than in March.

Chart 2.11: Market expectation of three month gilt rates

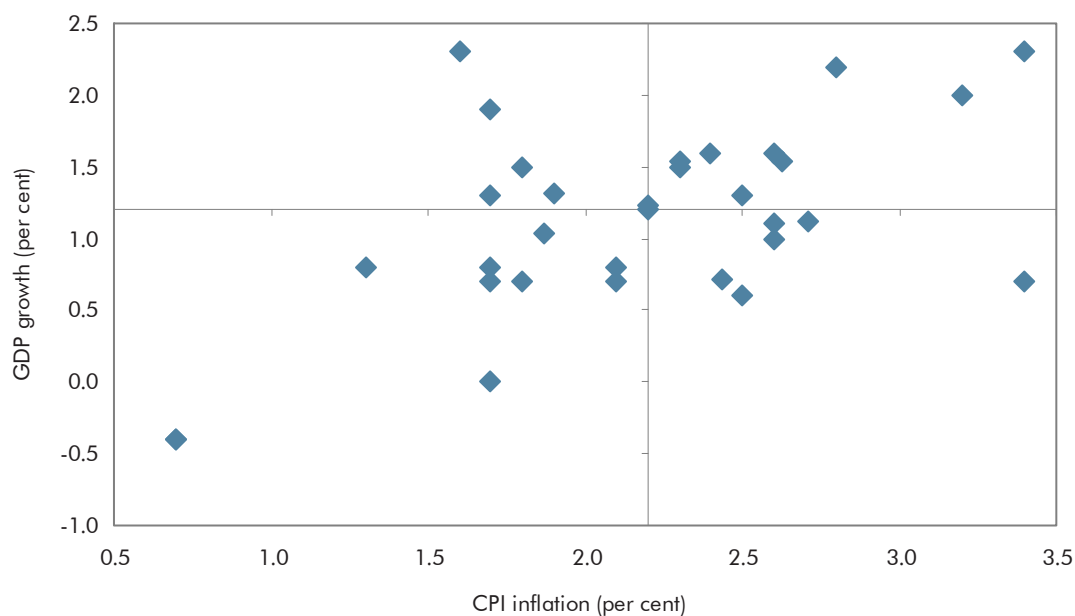


Source: Bank of England

## Forecast dispersion

- 2.41 Looking at an average of external forecasts facilitates easy comparison, but it does not capture how much consensus there is around those figures. It can therefore be informative also to look at the dispersion of forecasts. However, given that we do not always know what has informed each individual forecaster's view, it is still not possible to fully explain this dispersion.
- 2.42 Chart 2.12 illustrates the dispersion of short-term forecasts by plotting current external GDP growth and CPI inflation forecasts for 2012. We cannot see the clear negative relationship between the two variables that one might expect. One explanation could be different estimates of the current 'output gap', the difference between the economy's actual level of output and its estimated potential level.

Chart 2.12: Distribution of external forecasts for CPI inflation and GDP growth in 2012



Source: HM Treasury

2.43 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. Current topics of debate include:

- the euro area crisis: there is a high degree of uncertainty surrounding developments in the euro area, which could have a significant impact on the outlook for UK trade, credit conditions and confidence;
- the size of the current output gap and the productivity puzzle: views differ regarding the proportion of the fall in output during the crisis that is structural and the proportion that is cyclical. Related to this is a debate over whether the weak productivity growth seen since the recession is likely to persist and affect long-run potential productivity growth. Some believe that potential productivity growth will pick up quickly while others forecast a slower return to the pre-crisis trend; and
- structural unemployment: unemployment rose by less during the recession than many would have expected, given the size of the fall in output and evidence from previous recessions. One view is that firms have been hoarding labour - retaining employees, despite subdued demand, until economic prospects improve. Some fear that with stronger demand failing to materialise, firms may now shed excess workers leading to a rise in

structural unemployment that has the potential to weigh down on potential output growth of the economy.

- 2.44 We investigate the potential impact of some of these differences in view 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 ‘persistent tight credit conditions’ scenario, in which banks’ funding costs remain elevated, perhaps because of events in the euro area;
  - a ‘no structural impairment’ scenario, in which we assume that the financial crisis and recession had no effect on the level of potential output or its growth rate; and
  - a ‘higher structural unemployment’ scenario, in which the productive potential of the economy is unchanged relative to the central forecast but its composition is different.

## Policy announcements in November 2011

- 2.45 The economic and fiscal forecasts that we present in Chapters 3 and 4 reflect what we have learned from the recent economic and fiscal developments described in this chapter. But, unlike the external forecasts summarised in the previous section, we are also able to take into account the likely impact of policy measures announced in the Chancellor’s Autumn Statement.
- 2.46 Consistent with the *Charter for Budget Responsibility*, the OBR only includes an estimate of the impact of a policy in the forecast when a firm announcement has been made that provides sufficient detail to quantify its effect. Accordingly, this forecast incorporates the effects, where significant, of the following policies announced since the March forecast:
- the tax and expenditure measures announced since March and in the Autumn Statement, as set out in Annex A. We have certified the costings of these measures as reasonable central estimates, though we highlight what we see as the greatest uncertainties in the Treasury’s Autumn Statement policy costings document. The direct effect on public sector net borrowing (PSNB) of these measures is summarised in Table 4.5. The measures in the Treasury scorecard are broadly fiscally neutral to 2014-15 and then represent a fiscal tightening of £8.3 billion in 2015-16 and £15.1 billion in 2016-17; and
  - a number of measures also potentially have indirect or second round effects on our economy forecast. These include the additional fiscal tightening in

2015-16 and in 2016-17, the credit easing initiative, the new build indemnity scheme, changes to fuel duty, public sector pay restraint and the introduction of a 'Youth Contract'. We summarise our judgement on these potential indirect effects in Box 3.2 in Chapter 3. We have not made any material adjustments to our economy forecast on the basis of these announcements. We have made a small downward adjustment to inflation of 0.1 percentage points in 2012 as a result of the decision to delay the rise in fuel duty due in January 2012 to August 2012 and the cancellation of the rise in fuel duty in August 2012.

- 2.47 Consistent with the *Charter for Budget Responsibility* the projections do not include the impact of policies for which insufficient detail is available to allow the effects to be quantified. The possible risks to our fiscal forecast from such policies are explained in Chapter 4.

## 3 Economic outlook

### Summary

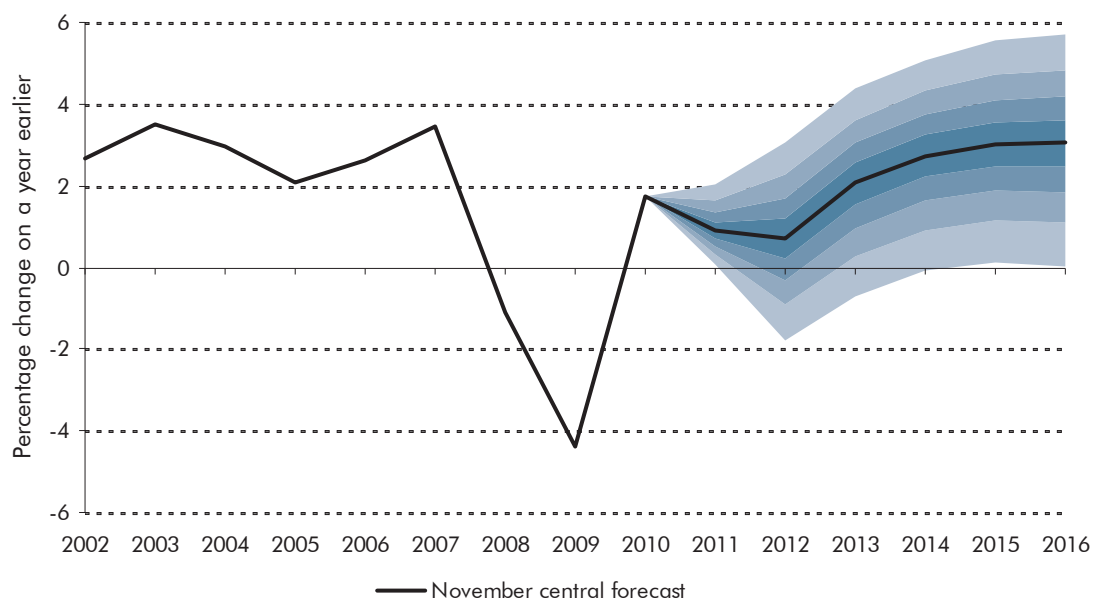
- 3.1 Recent data suggest that the UK economy has lost momentum since the summer. Business and consumer surveys point to continued weakness in coming months and the situation in the euro area is likely to further undermine confidence and lead to tighter credit conditions for households and firms. In the near term, utility price increases are keeping inflation higher than we expected in our last forecast, reducing real household disposable income and consumption.
- 3.2 On the assumption that the euro area struggles through its current difficulties, we expect the economy to gain momentum gradually through next year. But the headline measure of GDP is likely to be broadly flat until the second half, partly due to various one-off factors. Consistent with this profile, we have revised down our central forecast for year-on-year GDP growth to 0.7 per cent in 2012, compared to the 1.2 per cent average forecast among external analysts.
- 3.3 Business and consumer surveys, and other cyclical indicators, suggest that in the third quarter of 2011 activity in the economy was running about 2.5 per cent below the potential level consistent with sustaining stable inflation in the long term. This implies that there is less spare capacity in the economy than at the end of last year, despite the weakness of economic growth in the interim.
- 3.4 The cyclical indicators also suggest that the potential output of the economy has been growing by only around 1 per cent a year since the recession ended. To date, this appears to reflect weak underlying productivity growth rather than rising structural unemployment. Rather than assuming that the growth of potential output snaps straight back to 2.3 per cent, our estimate of its long-run average, we now assume that it picks up gradually over the next two years as the financial sector and credit conditions normalise.
- 3.5 Reassessing the size of the output gap and the outlook for growth in productive potential has led us to revise down our estimate of the level of potential output in 2016 by about 3.5 per cent since March. Despite this revision, our estimate of potential output at the end of the forecast period remains in line with or above those of the European Commission, the International Monetary Fund and the Organisation for Economic Cooperation and Development.

- 3.6 The downward revision to productive potential reduces the scope for above-average rates of economic growth as spare capacity is taken up. We now expect the economy to grow by 2.1 per cent in 2013, 2.7 per cent in 2014, and 3.0 per cent in 2015 and 2016. The growth rates in the last two years of the forecast are higher than in March, but only because of a methodological change to the National Accounts.
- 3.7 Our central forecast assumes that the euro area finds a way through the current crisis and that policymakers eventually find a solution that delivers sovereign debt sustainability. A more disorderly outcome is clearly possible. This poses a significant downside risk to the central forecast, but one that cannot be quantified in a meaningful way given the numerous ways in which it might unfold. Suffice to say, even though we believe there is an equal chance that growth will come in above or below our central forecast, the probability of a much worse outcome than the central forecast is greater than the probability of a much better one.
- 3.8 As in our last forecast, we expect the recovery to be supported primarily by growth in business investment and net trade – although our forecasts for both have been revised down since March. Recent data revisions suggest that exports have already increased more in response to the depreciation of sterling than previously thought, suggesting that there is less of a boost still to come. We are more pessimistic about the outlook for investment partly because non-financial companies may have less cash available to invest than official statistics suggest.
- 3.9 Real household disposable income is forecast to have fallen by 2.3 per cent this year, a post-war record. Earnings growth is not expected to overtake inflation again until 2013 and not by a significant margin until 2014. As a result, we expect consumer spending to remain broadly flat in real terms next year before picking up as real household disposable income starts growing again.
- 3.10 We expect the labour market to continue weakening over the coming year, reflecting the weaker outlook for economic growth. Unemployment is expected to rise from its current 8.3 per cent of the workforce to 8.7 per cent in the final quarter of 2012, before falling back again to 6.2 per cent by 2016.
- 3.11 We expect market sector employment to rise by around 1.7 million between the start of 2011 and the start of 2017, partly offset by a fall of around 710,000 in general government employment. General government employment is expected to fall further than we predicted in March, primarily because of the additional spending cuts pencilled in for 2015-16 and 2016-17 in the Autumn Statement. There is some evidence that public sector employers are front-loading expected job reductions.



- 3.12 Utility price increases have been larger than we forecast in March, which will keep inflation elevated over the near term. However, inflation is still expected to fall sharply during 2012 as past VAT rises and the upward pressure from higher energy and commodity prices fall out of the annual comparison, and as spare capacity in the economy subdues inflationary pressures. We expect CPI inflation to fall back to the Bank of England's target rate of 2 per cent in the medium term.
- 3.13 There is always considerable uncertainty around any central economic forecast. Chart 3.1 presents our central growth forecast with a fan chart showing the probability of 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 10 per cent probability bands. It suggests that there is a roughly one-in-three chance that the economy will shrink between 2011 and 2012, judging from past forecasting errors.

Chart 3.1: GDP fan chart



Source: ONS, OBR

Table 3.1: Summary of central forecast and changes since March<sup>1</sup>

	Percentage change on a year earlier, unless otherwise stated						
	Outturn		Forecast				
	2010	2011	2012	2013	2014	2015	2016
<b>Output at constant market prices</b>							
Gross domestic product (GDP)	1.8	0.9	0.7	2.1	2.7	3.0	3.0
GDP Levels (2010 = 100)	100	100.9	101.6	103.7	106.6	109.8	113.1
<b>Expenditure components of GDP at constant market prices</b>							
Household consumption <sup>2</sup>	1.1	-1.1	0.2	1.2	2.2	2.7	2.9
Business investment	0.8	-0.8	7.7	8.9	9.4	12.6	12.4
General government consumption	1.5	2.2	-0.1	-1.6	-2.3	-3.2	-3.5
General government investment	2.8	-6.8	-9.4	-4.2	-0.1	-1.1	-2.3
Net trade <sup>3</sup>	-0.8	1.2	0.3	0.6	0.3	0.2	0.1
<b>Inflation</b>							
CPI	3.3	4.5	2.7	2.1	2.0	2.0	2.0
<b>Labour market</b>							
Employment (millions)	29.0	29.2	29.1	29.2	29.4	29.7	30.0
Average earnings <sup>4</sup>	2.1	0.9	2.0	3.1	4.3	4.5	4.5
ILO unemployment (% rate)	7.9	8.1	8.7	8.6	8.0	7.2	6.2
Claimant count (millions)	1.50	1.54	1.75	1.77	1.67	1.45	1.23
Output gap	-3.0	-2.7	-3.1	-2.9	-2.4	-1.7	-0.9
<b>Changes since March forecast</b>							
<b>Output at constant market prices</b>							
Gross domestic product (GDP)	0.5	-0.8	-1.8	-0.8	-0.1	0.2	
GDP Levels (2010 = 100)	0.0	-0.8	-2.6	-3.5	-3.6	-3.4	
<b>Expenditure components of GDP at constant market prices</b>							
Household consumption <sup>2</sup>	0.3	-1.7	-1.1	-0.6	0.2	0.5	
Business investment	-1.7	-7.5	-1.2	-1.6	-0.9	4.8	
General government consumption	0.5	1.5	1.0	0.2	0.2	-1.3	
General government investment	-1.6	5.2	0.5	1.4	1.3	-3.5	
Net trade <sup>3</sup>	0.1	0.5	-0.6	-0.1	-0.2	-0.2	
<b>Inflation</b>							
CPI	0.0	0.3	0.2	0.1	0.0	0.0	
<b>Labour market</b>							
Employment (millions)	0.0	0.1	-0.1	-0.3	-0.3	-0.3	
Average earnings <sup>4</sup>	0.4	-1.1	-0.2	-0.7	0.0	0.0	
ILO unemployment (% rate)	0.0	-0.1	0.6	1.0	1.0	0.7	
Claimant count (thousands)	-1	-2	222	346	357	270	
Output gap	0.5	1.2	0.5	0.1	-0.2	-0.2	

<sup>1</sup> The forecast is consistent with the second estimate of GDP data for the third quarter of 2011, released by the Office for National Statistics on 24th November 2011.

<sup>2</sup> Includes households and non-profit institutions serving households.

<sup>3</sup> Contribution to GDP growth, percentage points.

<sup>4</sup> Wages and salaries divided by employees.

## Introduction

3.14 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 3.15);
- discusses how quickly the economy is likely to return to its full potential (from paragraph 3.36), the assumptions on monetary policy and credit conditions that frame our view on this, (from paragraph 3.53) and the likely composition of growth as it does so (from paragraph 3.67);
- assesses prospects for inflation (from paragraph 3.100) and the labour market (from paragraph 3.115); and
- compares our central forecast to selected external forecasts (from paragraph 3.127).

## Potential output and the output gap

3.15 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 the economy recovers and activity returns to a level consistent with sustaining 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 structural. In other words, how much will disappear automatically as the recovery boosts revenues and reduces spending, and how much will be left when the economy 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.

3.16 In this section we first consider how far below potential the economy is currently operating. We then discuss the evidence on potential output growth in the recent past and the implications this has for the future.

### Latest estimates of the output gap

3.17 Our first step is to assess how the current level of activity in the economy compares with the potential level consistent with sustaining stable inflation in the long term. We cannot estimate the supply potential of the economy directly, so we use a range of cyclical indicators to estimate the amount of spare capacity in the economy. In reaching a judgement on the size of the output gap, we

supplement our own analysis by examining estimates produced by a range of other forecasting organisations using different techniques.

- 3.18 To construct an estimate of the output gap from cyclical indicators, we use two approaches: 'aggregate composite' estimates, which weight together business survey indicators; and 'principal components analysis', a statistical approach used to combine a range of survey and non-survey based indicators. More details are set out in our Briefing Paper No.2: *Estimating the output gap*.
- 3.19 In EFOs to date, we have applied these techniques to estimate the size of the output gap from 2007 onwards. We have now applied these techniques to estimate a historical output gap series, which we present in Working Paper No.1: *Estimating the UK's historical output gap*, published on our website alongside this forecast.
- 3.20 This historical analysis has also led us to refine the approach we use in our principal components estimates. Our updated approach uses the same set of survey indicators as before, but reduces the set of non-survey indicators to three measures of real wage growth.<sup>1</sup> Chart 3.2 sets out estimates of the output gap derived from the 'aggregate composite' estimate and from both our previous and updated 'principal components' methodologies.
- 3.21 Taken together, these estimates point to little overall change in the size of the output gap since the second half of 2010, although there has been some divergence between different measures. The aggregate composite measure suggests that the output gap narrowed slightly from -2.5 per cent of potential output in the third quarter of 2010 to -2.3 per cent in the third quarter of this year. By contrast, our updated principal components approach suggests that it widened slightly, increasing by around 0.2 percentage points over the same period.<sup>2</sup> Similarly, the principal components estimates based on our previous

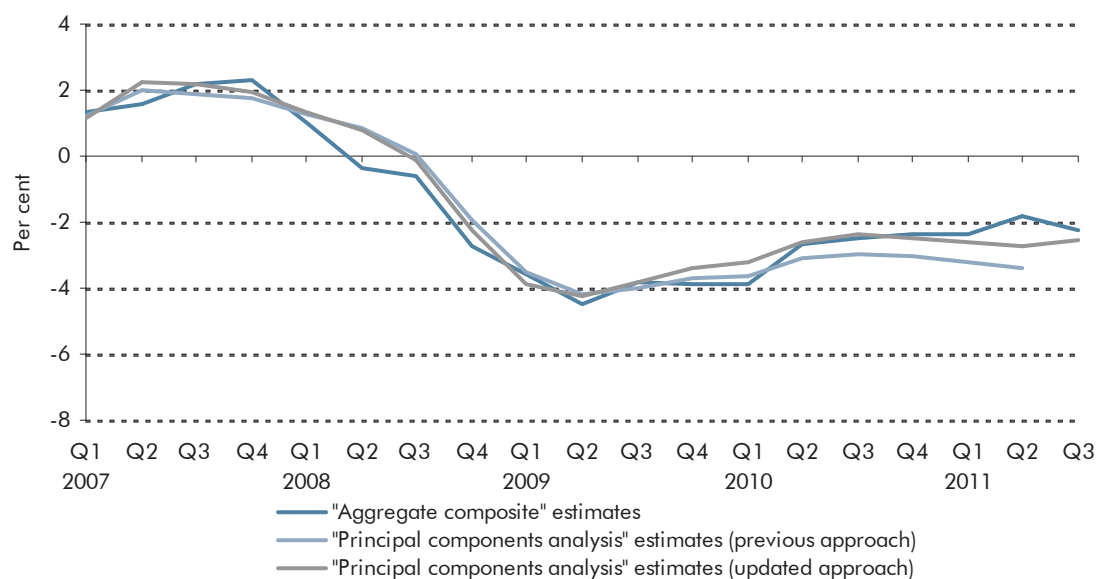
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<sup>1</sup> Our previous approach included survey indicators from the CBI *Industrial Trends Survey* and BCC *Quarterly Economic Survey*, as well as measures of the labour share of income, unit wage cost growth, the deviation of the unemployment rate from an estimate of the NAIRU, and average earnings growth in services, manufacturing and the private sector. As set out in our Working Paper No.1: *Estimating the UK's historical output gap*, a number of these can be difficult to interpret as indicators of the output gap and often have little weight in the principal component estimates. Our updated approach uses the same set of variables from the CBI and BCC surveys plus real wage growth in services, manufacturing and the private sector.

<sup>2</sup> The slight divergence between the two measures principally reflects differences in the set of indicators used to construct each estimate: for example, a number of indicators included in the principal components estimates but not in the aggregate composite measure – such as real earnings growth in the manufacturing sector – have fallen back slightly since the third quarter of 2010. As well as differences in the set of indicators used in each measure, differences in the weights attached by each method to different indicators may also mean that the aggregate composite and principal components estimates diverge between quarters.

approach point to a small widening of the output gap since the middle of last year.

Chart 3.2: Estimates of the output gap based on cyclical indicators



Source: OBR, ONS, CBI, BCC. The full set of indicators needed to estimate the output gap using the previous principal components approach for 2011Q3 is not yet available.

**3.22** For this forecast, our central judgement is that there was an output gap of -2.5 per cent of potential output in the third quarter of 2011. This is consistent with the estimate implied by our updated principal components approach. We have also narrowed our estimates of the output gap since the end of 2009 by around 0.5 percentage points.

**3.23** Our revised judgement means that we believe there is less spare capacity in the economy than we thought there would be in March. At that time, we judged that the output gap was around -3 per cent in the third quarter of 2010 and we expected it to widen to around -4 per cent in 2011. Most external estimates now point to an output gap smaller than -4 per cent this year, but slightly larger than our current estimate:

- the European Commission assumes an output gap of -3.3 per cent in 2011 for its Autumn 2011 economic forecast, revised from an estimate of -4.8 per cent in its Spring 2011 forecast;
- for its latest forecast the National Institute for Economic and Social Research estimated an output gap of around -4 per cent;

- for its latest *Economic Outlook*, the OECD assumes that output was 3.6 per cent below potential in the third quarter of 2011; and
- in its latest *World Economic Outlook*, published in September, the IMF estimated an output gap of -2.9 per cent in 2011.

3.24 There is a significant degree of uncertainty around the size of the output gap at any time, and particularly at the current time. In Chapter 5 we test the sensitivity of our central fiscal forecast to this key judgement, both through mechanical sensitivity analysis and by considering the fiscal implications of an alternative economic scenario in which the output gap is much wider than in our central forecast.

### Decomposing the output gap

3.25 We can decompose our output gap estimate into an output per worker gap (comprising an average hours gap and an output per hour gap), an employment rate gap and a population gap. Of the -2.5 per cent output gap in the third quarter of 2011, we estimate that:

- output per worker is around 0.5 per cent below its estimated trend. This comprises a negative average hours gap of around 0.4 percentage points and an output per hour gap of -0.1 per cent. The output per worker gap is forecast to widen to around -1 per cent by mid-2012;
- around 2.2 percentage points reflects the gap between the employment rate and its estimated potential level. This is consistent with both ONS and survey-based indicators, which continue to point to spare capacity in the labour market; and
- the gap between the level of the population aged 16+ and its estimated trend reduces the negative output gap by just over 0.3 percentage points.

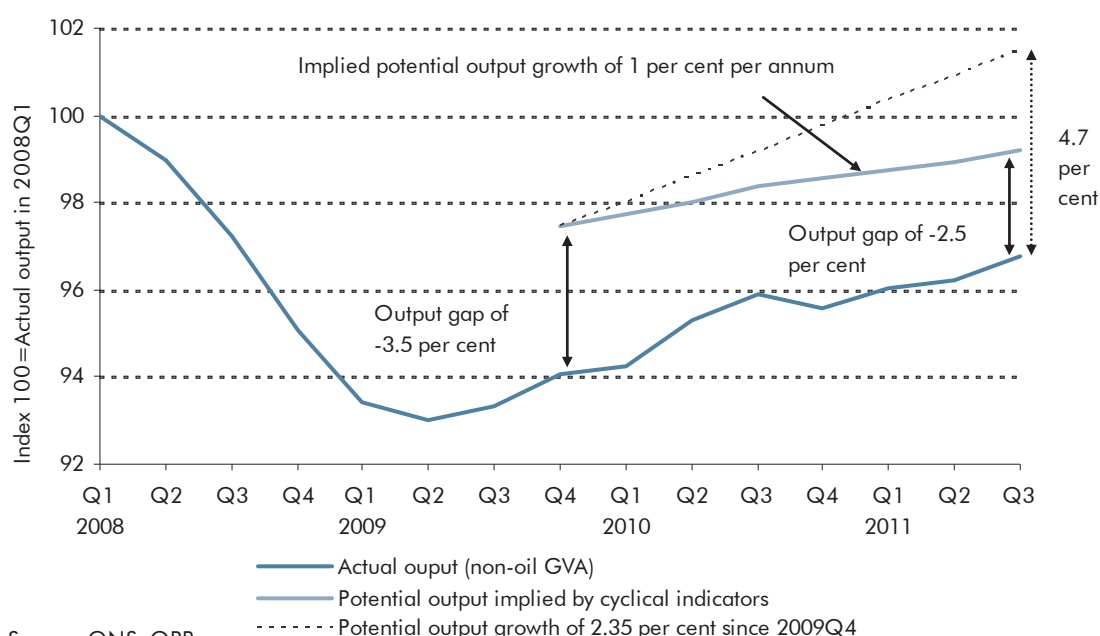
### The growth of potential output

3.26 In our previous forecasts we assumed that potential output would grow at 2.35 per cent in 2012 and 2013, before falling to 2.1 per cent a year from 2014 as the growth of the labour supply slowed, reflecting demographic changes. We therefore assumed that potential output growth in our forecast would immediately return to rates consistent with our estimate of its pre-financial crisis historical average.

3.27 However, our latest output gap estimate implies that potential output has grown by only around 1 per cent per annum since the end of 2009, as shown in Chart

3.3. If potential output had grown by 2.35 per cent a year over this period then we would have expected to see an output gap of 4.7 per cent in the third quarter of 2011 – almost twice that suggested by the cyclical indicators. Estimates produced by other organisations, using different methods, also point to a slowdown in potential growth during the recovery to date: the IMF and the European Commission both estimate that UK potential output growth averaged around 0.8 per cent per annum between 2009 and 2011.<sup>3</sup>

Chart 3.3: Recent output gap estimates and implied potential output growth

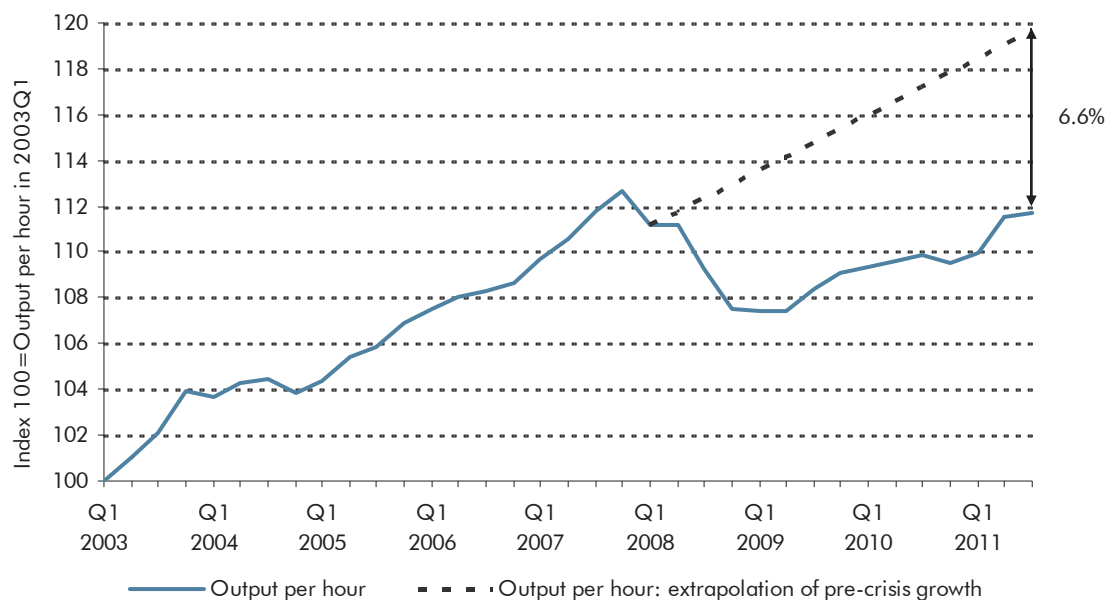


3.28 This period of weak potential output growth has coincided with low rates of measured productivity growth. The weakness in productivity growth since 2009 is notable given the significant fall in productivity that had already taken place over the recession: taken together, the fall in productivity between 2008 and 2009, and the sluggish growth thereafter, mean that output per hour remains more than 6 per cent below the level implied by its pre-recession trend (Chart 3.4).<sup>4</sup> Productivity is also significantly weaker than at similar stages of previous recoveries (Chart 3.5).

<sup>3</sup> European Commission, 2011, *European Economic Forecast*, November; IMF, 2011, *World Economic Outlook*, September.

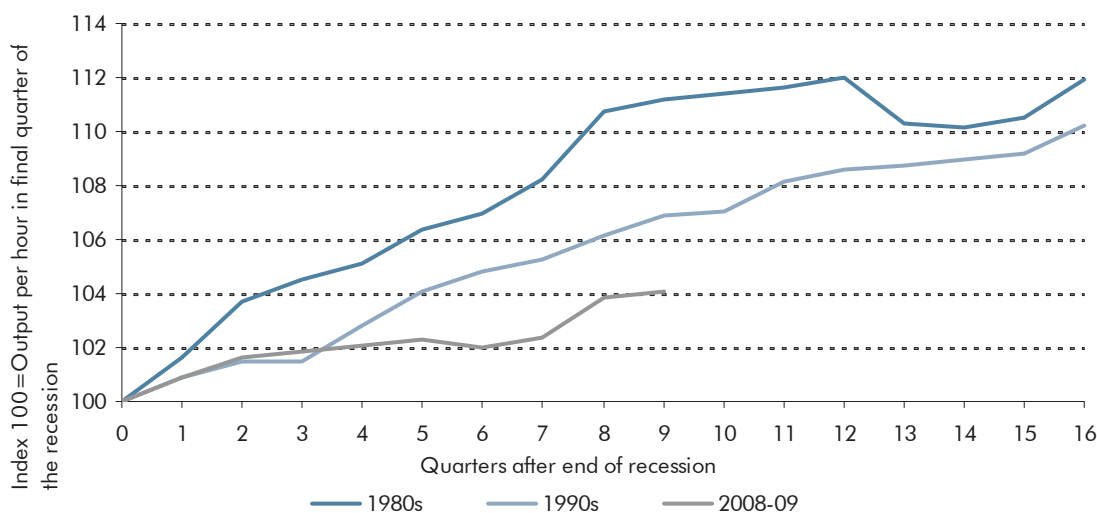
<sup>4</sup> Output per worker remains around 9 per cent below its pre-crisis trend, using the same approach used in Chart 3.4.

Chart 3.4: Output per hour



Source: ONS, OBR. Output defined on a non-oil GVA basis.

Chart 3.5: Productivity growth following UK recessions



Source: ONS, OBR. Output defined on a non-oil GVA basis. Note that output estimates for the 1980s recession and 1990s recession do not incorporate recent changes made by the ONS to the deflation of National Accounts data. Such changes would likely increase measured productivity growth following the 1980s and 1990s recessions, implying a larger gap in relative productivity performance between current and previous recoveries.

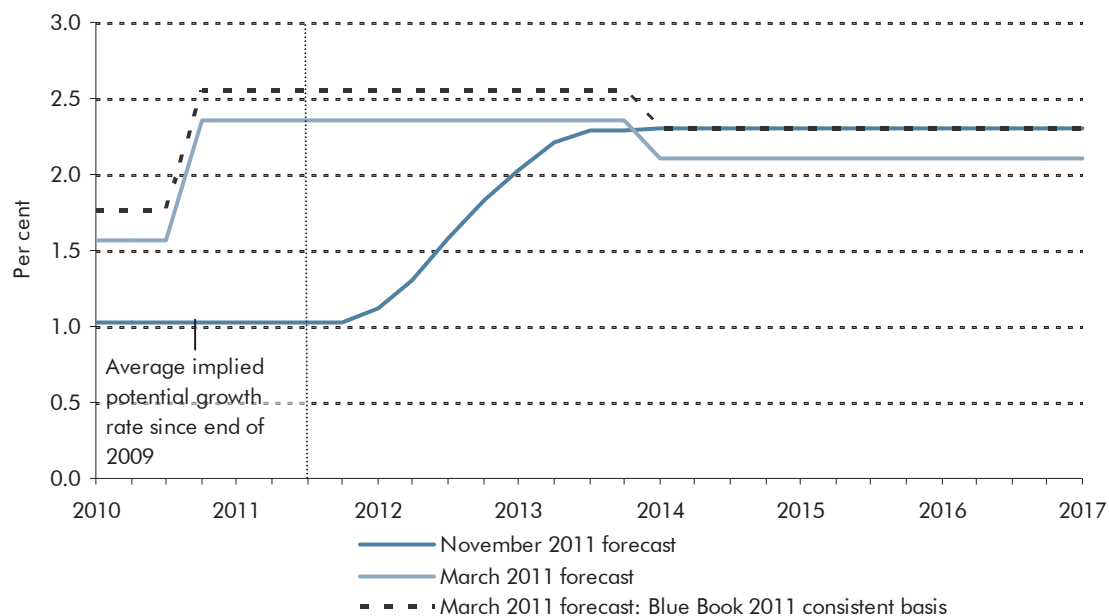
3.29 Quantifying changes in underlying productivity is difficult: growth in productivity is determined by a wide variety of factors, the impact of which cannot be measured with precision in real time. Box 3.1 discusses some of the ways in which the



financial crisis may have reduced potential growth. Many of the channels that can be quantified more easily – such as the impact of the recession on capital per worker or the sectoral composition of the economy – appear to explain only a small proportion of the shortfall in productivity relative to its pre-crisis trend. Nevertheless an extended period of subdued potential growth is consistent with evidence suggesting that financial crises are typically associated with large output losses that persist for many years after the event.

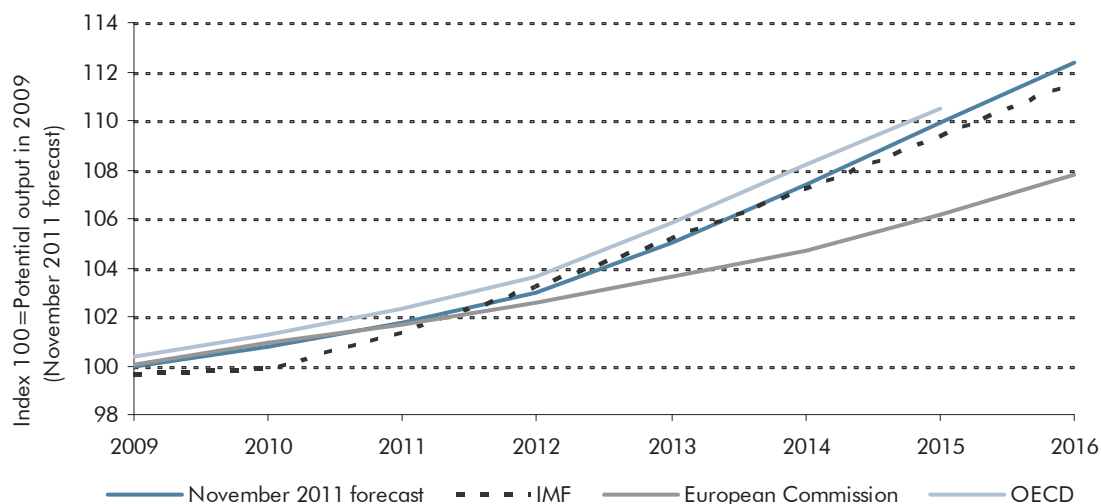
- 3.30 In light of the persistent and significant slowdown in potential output growth that we have seen so far during the recovery, we no longer assume that it will snap back immediately to its long-run rate. Instead, we now forecast a gradual return to the long-run average rate by the start of 2014. This is consistent with the assumption in this forecast that credit conditions start to improve over the course of 2012 and 2013, returning to a stable medium-term position by the start of 2014. As set out in Box 3.1, one possible explanation for lower potential output growth after financial crises is the constraint on credit availability faced by businesses. But we do not believe there is sufficient evidence at this point to suppose that the financial crisis has led to a permanent reduction in the long-term potential rate of growth of the economy in the UK.
- 3.31 The long-run average to which we assume potential growth eventually returns is higher than in our previous forecasts. This reflects the ONS's decision to deflate elements of the National Accounts using the Consumer Prices Index (CPI) rather than the Retail Prices Index (RPI), as discussed in Chapter 2. We estimate that measured real output growth will be 0.2 percentage points higher than in our previous forecasts for any given rate of nominal output growth, with the growth of the GDP deflator lower by the same amount. This change does not mean that we are more optimistic about the underlying medium and long-term growth prospects for the economy. Nominal GDP growth and the output gap are both unaffected by this adjustment.
- 3.32 On the basis of these new assumptions, potential output now grows at 1.2 per cent in 2012 and 2 per cent in 2013, before stabilising at 2.3 per cent a year from 2014 (shown in Chart 3.6 and Table 3.2). Overall, this weaker growth profile reduces the expected level of potential output in 2016 by around 1½ per cent. Taken together with the upward revision to our current output gap assumption, this implies a total downward adjustment to potential output of around 3.5 per cent by the start of 2016 relative to our March forecast. As Chart 3.7 shows, despite this downward revision, our new projections of potential output remain in line with those of the OECD and IMF and somewhat above those of the European Commission.

Chart 3.6: Potential output growth forecasts (quarter-on-quarter, annualised)



Source: OBR

Chart 3.7: Projections of potential output



Source: OBR, ONS, IMF World Economic Outlook, September 2011, European Commission European Economic Forecast, Autumn 2011, OECD Economic Outlook No.89 and OECD Economic Outlook No.90. OECD estimate constructed using the projections of potential output to 2012 set out in Economic Outlook No.90, and linearly interpolating to 2016 level implied by the long-term baseline scenario set out in Economic Outlook No 89.

Table 3.2: Potential output growth forecasts (annual growth rate, per cent)

	Potential productivity <sup>1</sup>	Potential average hours	Potential employment rate <sup>2</sup>	Potential population <sup>2</sup>	Potential output
<b>2012</b>	1.0	-0.2	-0.3	0.7	<b>1.2</b>
<b>2013</b>	1.6	-0.2	-0.2	0.7	<b>2.0</b>
<b>2014</b>	2.1	-0.2	-0.2	0.5	<b>2.3</b>
<b>2015</b>	2.2	-0.2	-0.2	0.5	<b>2.3</b>
<b>2016</b>	2.2	-0.2	-0.2	0.5	<b>2.3</b>

<sup>1</sup> Output per hour.

<sup>2</sup> Corresponding to those aged 16 and over.

**3.33** We have not changed our view on labour supply growth in this forecast. So the downward adjustment to potential output growth is driven by lower potential productivity growth rather than lower potential employment growth. In particular:

- our assumption for population growth is based on average net inward migration of 140,000 per annum over the forecast period, in line with our March forecast and with the long-term assumption underpinning the ONS's low migration variant population projection. Net inward migration has been much higher than this in recent years. Our assumption that it will decline reflects a judgement that the removal of restrictions on immigration from A8 countries by other EU countries will reduce the level of net inflows in forthcoming years, as will government restrictions on non-EU migration; and
- our judgement surrounding the long-term Non-Accelerating Inflation Rate of Unemployment (NAIRU) remains unchanged (see paragraphs 3.116 to 3.120).

**3.34** Data for the third quarter indicate a marked reduction in employment. In the event of a further deterioration in the labour market, relative to output, we would observe a pick up in measured productivity growth. But this would not necessarily lead us to revise our judgement that potential growth has slowed, which is largely determined by our estimates of the output gap and latest output data. It might instead suggest that more of the recent weakness in potential output growth reflects a slowdown in potential labour supply, rather than underlying productivity growth. In Chapter 5 we explore the fiscal implications of such a scenario.

**3.35** There are enormous uncertainties around any projection of potential output. Leaving aside the difficulty of measuring it in real time, considerable uncertainty surrounds the point at which wider financial market conditions might be assumed to normalise and potential growth return to its long-run rate. In Chapter 5 we examine a scenario in which banks' funding costs remain elevated and discuss the implications this may have for the economic outlook.

### Box 3.1: Why might potential output growth have slowed?

This box sets out some possible explanations for the slow potential output growth seen since the recession ended. Potential output growth can be decomposed into two elements: changes in the potential labour supply and in the underlying growth rate of productivity, which is affected by changes in capital per worker. These could have been affected in a number of ways.

The financial crisis may have reduced **potential labour supply** if increases in unemployment led to an increase in the structural rate of unemployment (the Non-Accelerating Inflation Rate of Unemployment, or NAIRU). While it is very difficult to measure the NAIRU in real time, available indicators do not yet point to a significant structural deterioration in the labour market (paragraphs 3.116 to 3.120). Indeed, the decline in employment has been smaller than might have been expected given the fall in output: while output remains just over 3 per cent below its pre-crisis peak, the level of employment has fallen by less than 1 per cent over the same period. As a consequence, measured productivity growth has fallen significantly since 2008: output per hour remains around more than 6 per cent below the pre-crisis trend, and lags well behind the recoveries following previous downturns (see Charts 3.4 and 3.5).

The significant fall in the level of investment during the downturn may have led to a reduction in the level of **capital per worker**, reducing the level of productivity. However, recent data suggest that the level of capital per worker continued to grow during the recession, even while output per worker fell (Chart A).

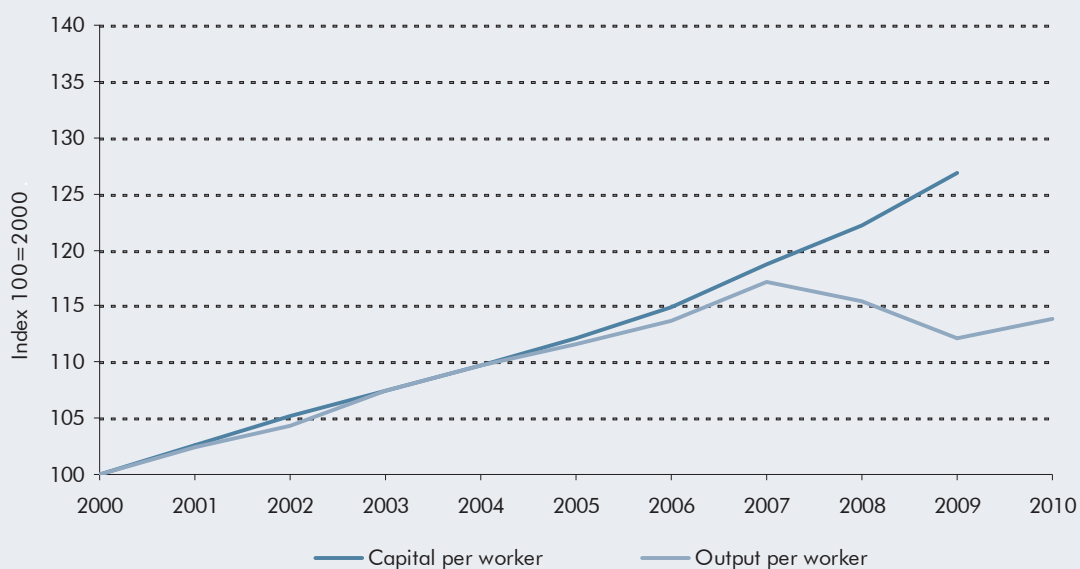
Output per worker growth may have slowed temporarily if changes in the **sector distribution** of employment had led to an increase in the employment share of low productivity sectors. However, the adjustment to productivity appears to have been reasonably broad-based, with most sectors still observing a shortfall in output per worker relative to the pre-crisis trend (Chart B). This suggests that the aggregate productivity slowdown has mainly reflected changes in productivity within sectors rather than shifts in employment between them.

Productivity growth may have been impaired by limited **credit availability**, arising from disruption in the financial sector. One possibility is that limited credit availability or forbearance on outstanding lending has prevented the reallocation of capital to more productive activities.<sup>a</sup> Low credit availability has been particularly acute for small and medium-sized enterprises. Analysis suggests that an impaired financial sector can lead to low productivity growth and that downturns associated with significant disruption to the financial sector are often characterised by large and persistent output losses.<sup>b,c</sup>

Credit constraints may also have reduced the scope for investment by firms in **research and development** and other efficiency improving measures, although such effects might be more likely to manifest themselves gradually over an extended period.

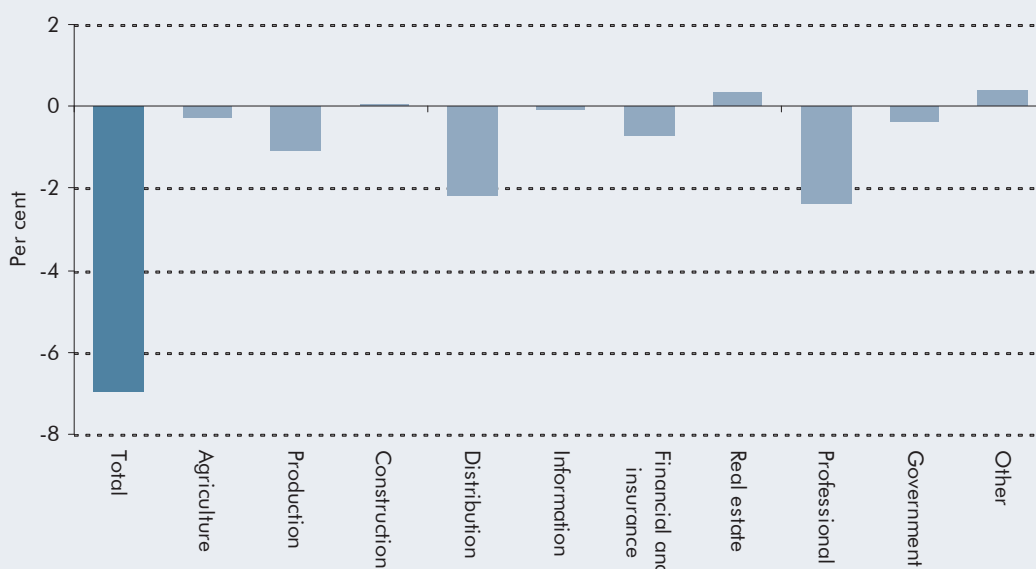
Changes in potential output growth are extremely difficult to identify and measure in real time, even with the benefit of hindsight and a longer run of data. But a lesson from studies of previous crises is that downturns associated with significant disruption to the financial sector are often characterised by large and persistent output losses.<sup>c</sup>

Chart A: Capital and output per worker



Source: OBR, ONS. Output defined on a non-oil GVA basis. Capital defined as net capital stock excluding dwellings.

Chart B: Productivity shortfall by sector



Source: OBR, ONS. Level of output per job (2011Q2) in each sector relative to continuation of pre-crisis growth rate, weighted by share of jobs.

<sup>a</sup> See Broadbent, B., 2011, *Rebalancing and the real exchange rate*, Bank of England, September.

<sup>b</sup> See 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.

<sup>c</sup> See IMF, 2009, *What's the Damage? Medium-term Output Dynamics After Banking Crises in World Economic Outlook*, October.

### Box 3.2: The economic effects of policy measures

This box considers the potential effects on the economy of policies announced in the Autumn Statement.

The Government has announced scorecard policy measures that deliver an **additional fiscal tightening** of £8.3 billion in 2015-16 and £15.1 billion in 2016-17, primarily lower implied non-investment spending on public services. Falling government consumption and investment will reduce GDP growth by 0.7 percentage points in 2015, 0.4 percentage points more than we forecast in March, and by a total of 0.7 percentage points in 2016. However, at this long time horizon, we would expect looser monetary policy to fully offset the effects of a pre-announced fiscal tightening of this size, leaving our forecast for overall GDP growth unchanged as a result of this measure.

In the period up to 2014-15, the Government has announced a number of measures that have a broadly neutral fiscal impact overall and, in aggregate, they have limited impact on our economy forecast. For example, the tax credit freeze and public sector pay restraint reduce household disposable income. But delaying the increase in fuel duty will offset this, to some degree, leaving disposable income broadly unchanged overall. The aggregate net effect will also depend on differences between the marginal propensities to consume of the winners and losers, but given the sums involved the impact is likely to be very small. The Government has also announced plans to reallocate some public spending in this period, including some shifts in timing and some from current into capital spending. While higher capital investment could boost the productive potential of the economy, the effect is likely to be small. Given the overall fiscal impact of policy in these years is neutral, we have not made any explicit adjustment to our economic forecast.

The Government's **credit easing** initiative is aimed at reducing the cost of borrowing for small and medium-sized enterprises (SMEs). The Government has announced two schemes: the National Loan Guarantee Scheme (NLGS) and the Business Finance Partnership (BFP). The latter is small in macroeconomic terms, so we focus on the potential effects of the NLGS.

The NLGS involves the Government guaranteeing debt issued by banks against default, as long as they pass the resulting reduction in their funding costs on to SMEs. The NLGS could reduce lending rates to SMEs by up to 100 basis points for the £20 billion of loans guaranteed. But how effective the pricing channel will be depends crucially on the robustness of the contractual obligation on banks to pass on the reduction in funding costs. The design of the contracts has not yet been determined, so it is impossible to assess this, but they are likely to operate in a similar way to those used by the European Investment Bank in its lending scheme.

A second channel through which the NLGS might affect the economy is by increasing

the aggregate volume of lending. It is uncertain how much the guarantee scheme will generate additional lending, rather than merely subsidise that which would have taken place in any event. Banks might also offset higher lending to SMEs by reducing lending to other businesses and households, which would limit the economic impact of the policy.

These credit easing policies have the potential to increase lending to SMEs and so boost investment in the economy and, as we set out in Box 3.1, the lack of credit availability to SMEs is one possible explanation of the low productivity growth since the recession. However, the final design and implementation of these schemes are critical to their effectiveness. The final details are also dependent on state aid discussions with the European Commission. So, given these uncertainties, we have not adjusted our forecast at this time to reflect the impact of these policies, but we will consider them again at the time of our spring forecast when they are clearer.

The **new build indemnity scheme** involves the Government contributing 5 per cent of the value of a new home to an indemnity fund to assist buyers in obtaining higher loan-to-value mortgages. The scheme is limited to 100,000 mortgages and we have assumed this will translate into around 30,000 more property transactions than would otherwise have taken place over the forecast period.

The decision to delay the rise in **fuel duty** due in January 2012 to August 2012 and the cancellation of the rise in fuel duty in August 2012 are estimated to reduce CPI inflation by around 0.1 percentage points in 2012.

The Government has also announced the introduction of a '**Youth Contract**'. This includes a number of measures aimed at reducing youth unemployment, including wage subsidies for those aged between 18 and 24 and an expansion of work experience places and advisor support. We do not forecast unemployment by age, but, if successful, such a measure could help to reduce unemployment amongst younger age groups. We have not assumed that the Youth Contract will have any effect on the overall level of employment.

## The pace of the recovery

- 3.36 In this section we set out the 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 the economy returns toward the potential level of output identified in the previous section.

## The short-term outlook

- 3.37 Over the past year, the squeeze on real incomes from elevated inflation has weighed heavily on the recovery. Between the third quarter of 2010 and the third quarter of 2011, nominal consumer spending grew by 3.2 per cent but prices rose by 4.7 per cent – so the real value of consumption fell. This served to hold back real GDP growth over this period by around 0.9 percentage points.<sup>5</sup> Recent utility price rises have meant that inflation has continued to restrict real household disposable income growth in the third and final quarters of 2011. But we expect the rate of inflation to stabilise in the near-term before declining in 2012, so its influence on real incomes and consumption should dissipate.
- 3.38 While the effect of price increases on growth should recede in the coming quarters, most forward-looking indicators suggest that the momentum of the economy is continuing to weaken. Uncertainty over events in the euro area, the policy response and the potential spill-over to the real economy are likely to have eroded confidence, curtailing spending and holding back investment. The associated increase in banks' funding costs is likely to feed into lending rates to the wider economy over the next few quarters, further dampening GDP growth.
- 3.39 The profile of monthly output in the third quarter, shown in Chart 3.8,<sup>6</sup> implies growth momentum in the economy has been slowing. Survey indicators point to a further slowdown in the final quarter, with the CIPS Purchasing Managers' Index data consistent with a small contraction of around 0.1 per cent. While retail sales held up in October, consumer confidence, as measured by Nationwide, fell sharply. As a result, we expect GDP to fall slightly in the final quarter of 2011.

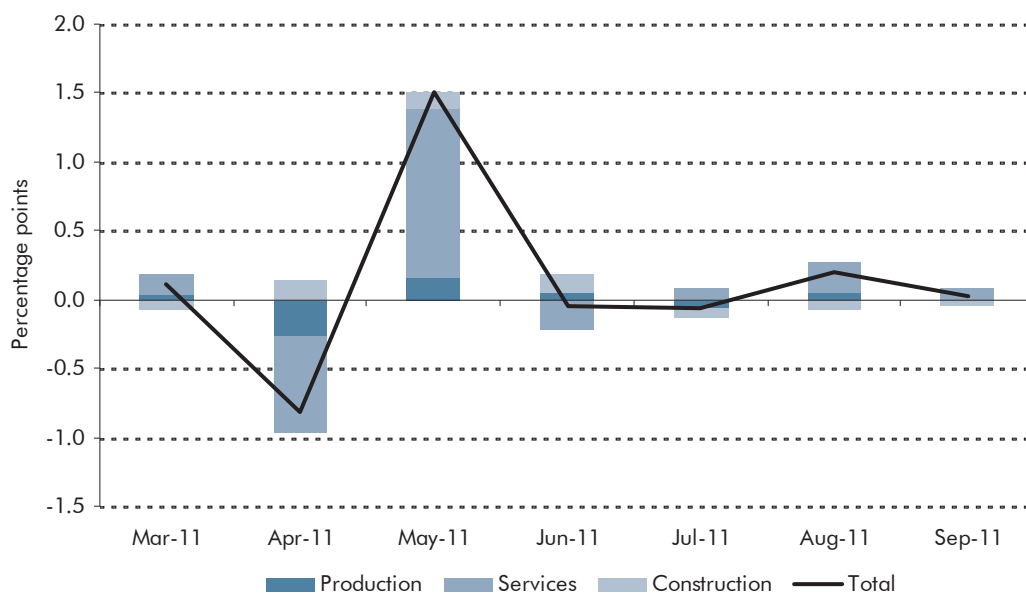
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<sup>5</sup> Box 2.2 explores our June Budget 2010 forecast errors in more detail. This suggests that lower-than-expected GDP growth between 2010 and the middle of 2011 can be largely explained by higher-than-expected inflation.

<sup>6</sup> To arrive at an estimate of seasonally-adjusted monthly construction output, the average quarterly seasonal adjustment parameter has been applied evenly to the three months of the quarter.



Chart 3.8: Monthly output growth

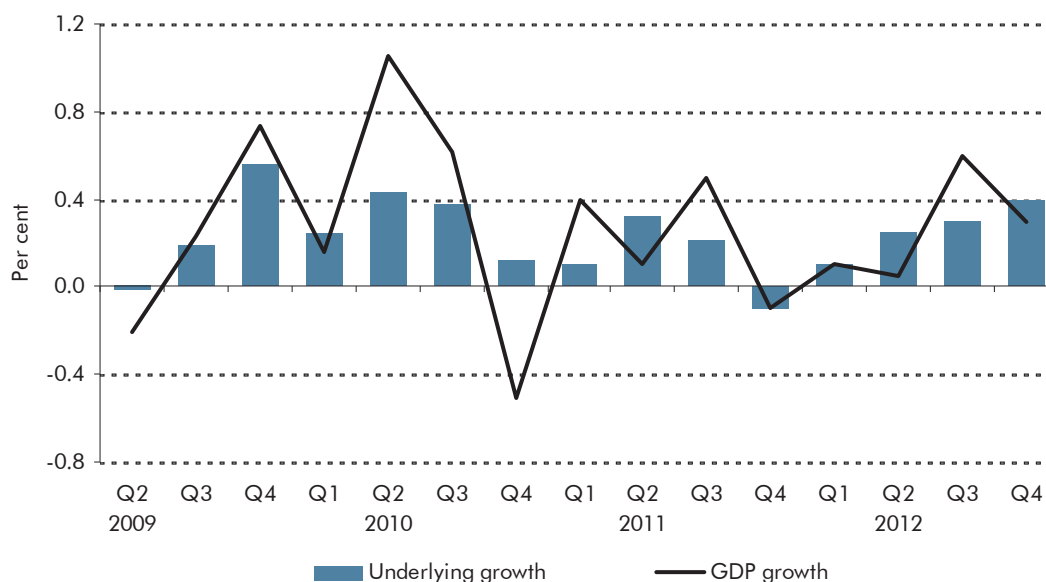


Source: ONS, OBR

**3.40** Chart 3.9 presents our backward and forward-looking assessment of underlying GDP growth, taking into account one-off influences on the quarterly profile arising from special factors. The second quarter of 2011 saw very little increase in GDP, as the additional bank holiday and the disruption to international supply chains from the earthquake in Japan temporarily reduced economic activity. Part of the growth seen in the third quarter is likely to have been a bounce-back from these temporary factors. This implies that the economy's underlying momentum going into the fourth quarter was weaker than implied by headline third-quarter growth.<sup>7</sup>

<sup>7</sup> The most recent ONS monthly construction survey suggests that recent estimates of activity in this industry in the National Accounts are too low. Other things being equal, they would imply an upward revision to GDP growth of 0.1 percentage point in the second quarter. However these data will not be incorporated into the GDP figures until the ONS publishes the Quarterly National Accounts on 22 December, which will contain revisions back to the first quarter of 2010.

Chart 3.9: Underlying and headline growth in GDP



Source: ONS, OBR

**3.41** After the weak fourth quarter, we expect the underlying growth momentum of the economy to turn positive again in the first quarter next year and then to strengthen gradually through the year. But, as in the last two years, the headline growth rate will also be affected by temporary factors. The additional bank holiday in June, marking the Queen’s Diamond Jubilee, may produce a similar distortion to the path of GDP as the royal wedding in 2011 – weakening headline growth in the second quarter and strengthening it somewhat in the third. This effect will be compounded by the way Olympic ticket sales are treated in the National Accounts<sup>8</sup>. These are worth approximately 0.1 per cent of nominal GDP and will temporarily boost growth in the third quarter. Taking our assessment of both underlying growth momentum and the various temporary influences on GDP into account, we expect to see little measured GDP growth in the first half of the year but a stronger performance in the second.

**3.42** Our forecast for headline GDP growth in the final quarter of 2011 and through 2012 is shown in Table 3.3. Our forecast that GDP will be broadly flat in each of the next three quarters suggests that the chances of a technical recession over that period – at least two successive quarters of negative growth – are probably around one in three.

<sup>8</sup> Although ticket sales took place in the second quarter of 2011, the ONS decided to delay their appearance in retail sales data until the Olympics take place in 2012, which is the point of consumption. A more detailed explanation is available on the ONS website.

**3.43** Our forecast of a pick-up in underlying growth rates is conditioned on the assumption that euro area policymakers find a solution that eases the current pressures in the financial system and that eventually delivers sovereign debt sustainability. Clearly a very significant downside risk to the central forecast is that such a resolution is not achieved. These risks are discussed in Box 3.3.

**Table 3.3: The quarterly GDP profile**

	Percentage change on previous quarter											
	2010				2011				2012			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>November forecast<sup>1</sup></b>	0.2	1.1	0.6	-0.5	0.4	0.1	0.5	-0.1	0.1	0.1	0.6	0.3
<b>March forecast<sup>2</sup></b>	0.3	1.0	0.7	-0.6	0.8	0.4	0.5	0.6	0.6	0.7	0.7	0.7
<i>Change</i>	-0.2	0.0	-0.1	0.1	-0.4	-0.3	0.0	-0.7	-0.5	-0.6	-0.1	-0.4

<sup>1</sup> Forecast from fourth quarter of 2011.

<sup>2</sup> Forecast from first quarter of 2011.

### Box 3.3: Risks to the forecast from the euro area crisis

Since our March 2011 forecast, the euro area sovereign debt crisis has rapidly intensified. Our forecast is conditioned on policy makers finding a way through the current crisis over the next two years. Consistent with this view, we expect the spread between the prices UK banks pay for funding and the rates at which the government can borrow to start narrowing in 2012 and to stabilise by 2014, as shown in Chart 3.13.

The possibility of a more disorderly outcome represents a significant downside risk to our forecast, but one that is impossible to quantify in a meaningful way given the range of potential outcomes. (The Bank of England took a similar view in its August and November 2011 *Inflation Reports*.) That said, the main channels through which an intensification of the crisis could affect the UK economy are:

- weaker trade - the euro area accounts for a significant share of UK exports, so additional weakness in euro area demand could lead to lower UK export growth. We explored some implications of this in the 'weak euro' scenario in our March 2011 *EFO*, which focused on the trade effects arising from sterling appreciation. Lower euro area growth and stronger sterling were shown to weaken UK output and employment. The impact depends on which euro area countries are most affected and whether monetary policy is able to offset the effects on domestic demand in the UK;
- tighter credit - recent developments have increased the funding costs faced by European and UK banks. This reflects a combination of direct exposure to stressed assets and indirect exposures arising from links between financial institutions. Table A shows that UK banks have relatively large direct exposures to euro area countries such as Spain, France and Germany. If the crisis is not resolved, then higher funding costs could bear down for longer on activity in the wider economy. We explore this possibility in our 'persistent tight credit conditions' scenario, presented in Chapter 5;
- government borrowing costs - UK gilt yields are currently at historically low levels, which is likely in part to reflect market perceptions that UK gilts are low risk relative to many euro area countries. It is not clear whether a further deepening of the euro area crisis would reduce gilt yields or increase them. In Chapter 5 we provide sensitivity analysis of the impact of higher and lower gilt rates on the public finances; and
- financial system impairment - a more serious escalation of the crisis, such as a disorderly default on sovereign debt, could put the global financial system under severe strain leading to tighter credit conditions, further depressing world output and trade. Negative feedback loops could emerge if weaker demand caused fiscal positions to deteriorate further. Given the

range of potential outcomes from such an extreme event, it is not possible to quantify this risk in any meaningful way.

Table A: European bank exposure to selected countries

	Exposure in Q2 2011 as a share of bank equity in 2010 - per cent								European Banks
	UK	Greece	Ireland	Portugal	Spain	Italy	France	Germany	
UK Banks		1.9	24	1	66	7	44	79	290
Greek Banks	30		2	24	3	9	132	50	285
Irish Banks	190	0.7		8	0	20	43	149	514
Portugese Banks	58	0.1	5		203	9	59	82	452
Spanish Banks	34	0.1	5	9		10	51	60	219
Italian Banks	26	0.2	4	1	14		144	56	325
French Banks	72	0.4	3	2	8	12		53	219
German Banks	47	0.5	15	1	15	67	68		328

Source: BIS, ECB

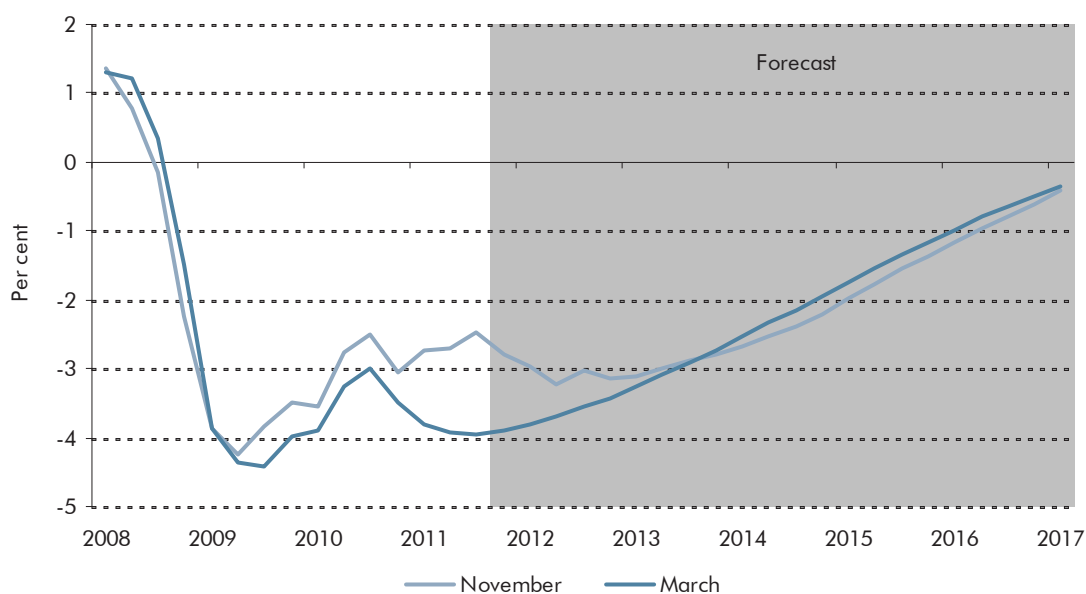
## The medium-term outlook

- 3.44 Our forecasts for medium-term growth are determined by our view of the amount of spare capacity in the economy, and the speed with which it seems likely to be absorbed.
- 3.45 Chart 3.10 shows that we expect the output gap to widen in 2012, as the headwinds from elevated inflation and the difficulties in the euro area lead to further cyclical weakness in the economy in the near term. Conditioned on our forecast that inflation falls back and that credit conditions continue to ease, the output gap then begins to narrow from 2013. But it is not until 2014 that earnings grow strongly enough to outstrip inflation by a significant margin and support household consumption. At this point the economy starts to grow above its potential growth rate.
- 3.46 On this basis we forecast that year-on-year GDP growth will weaken slightly in 2012 – reflecting our short-term quarterly profile – before picking up steadily to reach a peak of 3.0 per cent in 2015. The judgements surrounding the effect of monetary policy and credit conditions, which underpin this growth forecast, are set out in the next section.
- 3.47 Our growth forecasts are lower in both the short and medium term than they were in March. This reflects the depressing effect of cyclical factors, such as higher near-term inflation, the sentiment effects of the ongoing difficulties in the euro area and the associated tightening in credit conditions, as well as the

downward revisions to our forecast of potential output growth. Together, these adjustments leave the forecast level of real GDP in the first quarter of 2016 around 3.5 per cent lower than we expected in March. They also mean that GDP does not return to the pre-recession peak that it achieved in the first quarter of 2008 until six years later, in the first quarter of 2014.

3.48 The growth rates we expect right at the end of the forecast horizon are slightly higher than in March. This is entirely explained by methodological changes to the way in which nominal GDP is deflated by the ONS to calculate real GDP, explained in Chapter 2. Our forecast for medium-term growth in nominal GDP is unchanged from March, and the output gap therefore closes at roughly the same speed as in previous forecasts.

Chart 3.10: The output gap



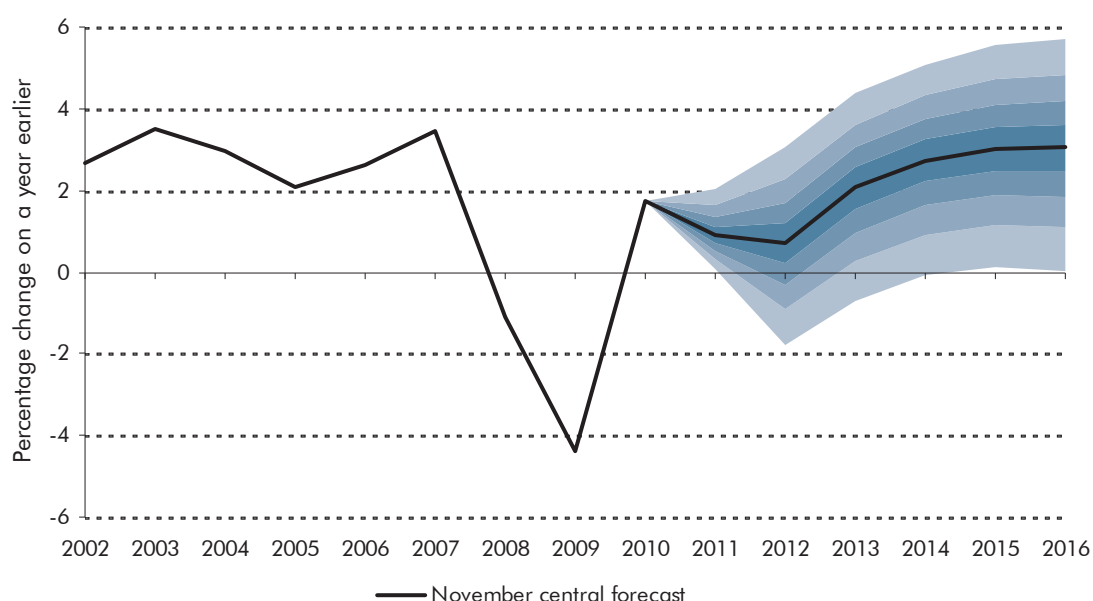
Source: ONS, OBR

3.49 Our central growth forecast is shown in Chart 3.11. 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 10 per cent probability bands. It suggests that there is a roughly one-in-three chance that the economy will shrink between 2011 and 2012, based on past forecasting errors.

3.50 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. As discussed earlier in this chapter, the risks to our

forecast from events in the euro area are significant. But given the multitude of ways in which they could materialise it is not possible to quantify them in this way. It suffices to say that although we believe the chances of growth being above or below our central forecast are broadly equal, the chances of a much weaker outcome are greater than the chances of a much stronger one.

Chart 3.11: GDP fan chart

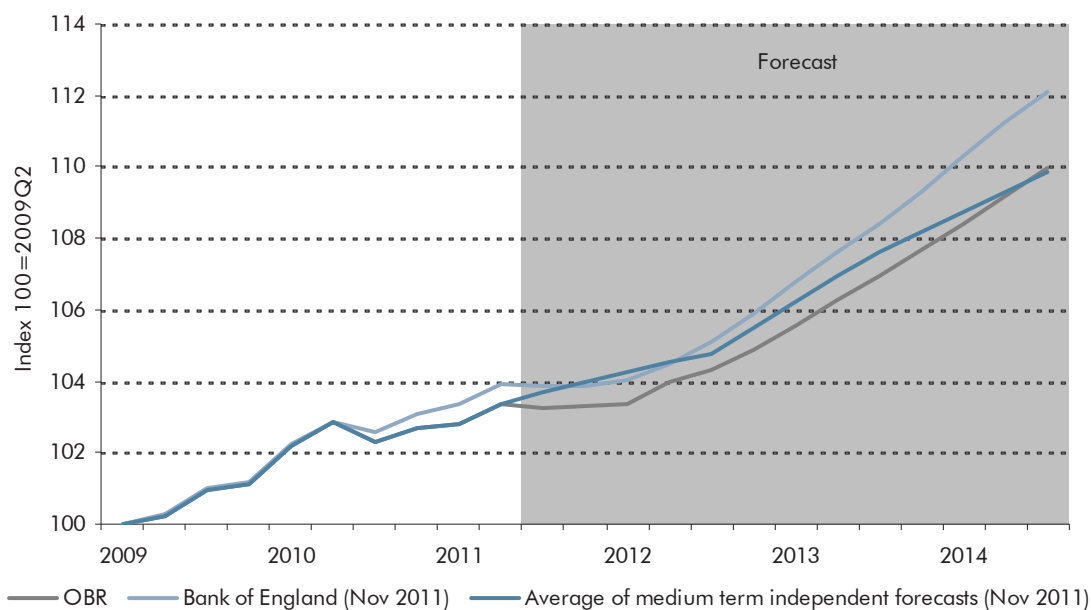


Source: ONS, OBR

- 3.51** As in March, our central forecast is for the recovery to be much weaker than those which followed the recessions of the 1980s and 1990s. This reflects the expected slow easing of tight credit conditions, relatively high rates of externally-driven inflation, ongoing efforts to reduce private sector leverage, the weak outlook for the euro area and the continued influence of the fiscal consolidation.
- 3.52** Chart 3.12 plots our central forecast for the next three years against the Bank of England's mean November *Inflation Report* forecast and the forecast implied by the average of independent forecasts. Our forecast for growth next year is broadly in line with the Bank of England's forecast and slightly weaker than the independent average. In later years our forecast converges with the independent average, while growth is assumed to pick up more strongly in the Bank of England's forecast. By the end of 2014, the Bank of England's mean forecast is around 2 per cent higher than our central forecast, although around a quarter of this difference is attributable to its 'backcast'. This reflects its expectation that the level of GDP over the recent past will be revised up, whereas we make no assumption about the likely scale of future revisions. It should be emphasised that the differences between these point forecasts are dwarfed by the uncertainties

around each of them – as the fan-charts in this report and in the Bank of England’s *Inflation Report* make clear.

Chart 3.12: Forecasts of the level of GDP



Source: ONS, OBR

## Monetary policy

- 3.53** An important anchoring assumption in our forecast is that monetary policy succeeds in bringing inflation back to target over the forecast horizon. When this is coupled with a view that, over the medium term, the most important driver of inflation is domestic price pressures, and that these are well-represented by the output gap, the implication is that monetary policy will act to close the output gap over time by acting to stimulate or soften aggregate demand.<sup>9</sup>
- 3.54** Since our March forecast, the interest rate expectations of market participants have fallen significantly and the Bank of England has engaged in a new round of asset purchases as part of its quantitative easing (QE) program. These purchases are intended to reduce the cost of credit to consumers and businesses in the wider economy.

<sup>9</sup> See OBR Briefing paper No.3: *Forecasting the economy* for more on how we incorporate the effects of monetary policy in our forecast, available on our website.



- 3.55 Market participants did not make much instant response to the latest announcement of QE, with yields on 5- and 30-year gilts rates falling around 7 and 13 basis points respectively on the day. This is a small change compared to the 150 basis point move at the five-year maturity since our March *EFO*. This suggests that the Bank of England's additional asset purchases were partly priced-in by market participants before they were announced. Chart 2.11 shows the significant movement in market participants' expectations of policy rates, which we use to produce our central forecast, since March.
- 3.56 In a recent *Quarterly Bulletin* article,<sup>10</sup> the Bank of England estimated the effect of the first round of quantitative easing. If the second round were to be equally effective, the £75bn of gilt purchases made over the coming months - which are priced in to the yield curve we used to construct this forecast - might reduce bond yields by around 35 basis points, have a maximum positive impact on the level of GDP of around 0.5 per cent and boost CPI inflation by 0.2 per cent. However, both the timing and the magnitude of the effects remain highly uncertain.

## Credit conditions

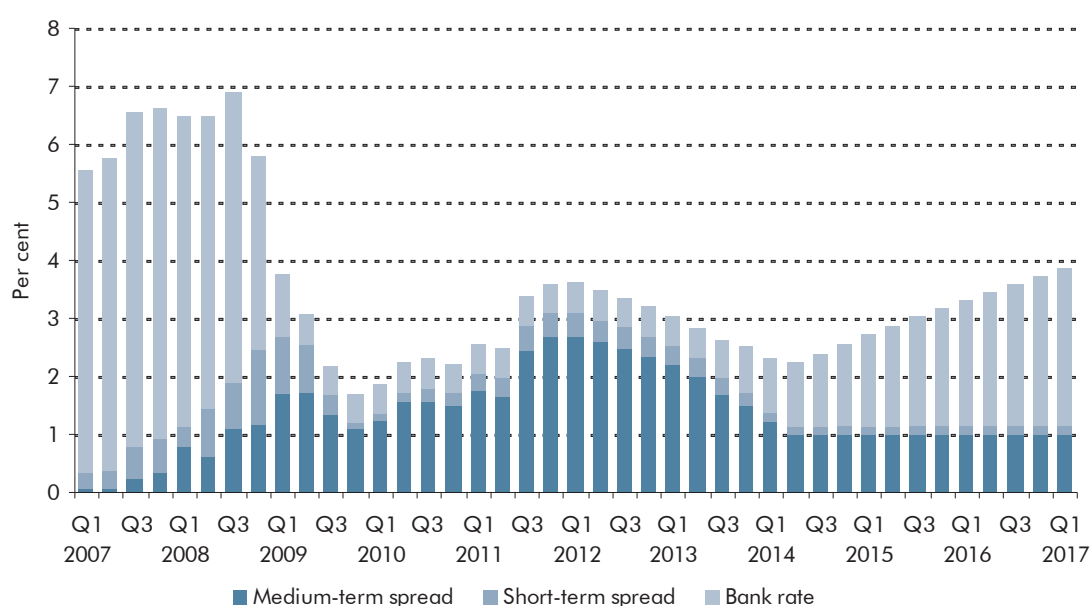
- 3.57 A further key assumption underpinning our GDP growth path is the outlook for credit conditions faced by households and firms, which is currently closely linked to the situation in the euro area. Since our March forecast, prospects for a swift resolution of the euro area sovereign debt crisis have receded. The cost of insuring periphery sovereign debt relative to that of Germany has continued to rise, risk aversion has increased and euro area and UK banks' access to funding has been impaired. Recent policy announcements have done little to alleviate the concerns of financial market participants and the focus has shifted to larger core economies, most notably Italy and Spain. Box 3.3 discussed the wider channels through which the euro area crisis could affect the UK economy.
- 3.58 While the rise in funding costs for euro area banks has been more pronounced, UK banks have also seen the price of insuring their debt against default and the price of interbank lending go up. Chart 3.13 shows that the credit premia faced by banks have risen sharply, by around 100 basis points between the first and final quarters of 2011. The short-term spread is the price of 3-month interbank lending relative to Bank Rate. The medium-term spread is the price of insuring banks' debt against default for five years.<sup>11</sup>

<sup>10</sup> Joyce, Tong, & Woods, 2011, *The United Kingdom's quantitative easing policy: design, operation and impact*, Bank of England Quarterly Bulletin Volume 51 No. 3.

<sup>11</sup> An asset-weighted average of 5-year UK bank credit default swap premia.

3.59 Despite the higher funding costs for banks, interest rates faced by households and firms have stayed relatively flat in recent months, although quoted mortgage rates appear to have risen modestly in September and October. This may be because UK banks issued enough term-debt in early 2011 to avoid needing to access the market in recent months. This is supported by the lower volume of term issuance seen since the euro area crisis intensified over the summer.

Chart 3.13: UK Banks' implied funding costs



Source: OBR, Reuters

3.60 We expect that UK banks will need to return to the market for term-funding over the coming months as outstanding debt matures. If funding costs remain elevated then the price of credit available to households and firms is likely to rise. Supporting this view, some major UK lenders have noted that if current wholesale funding conditions do not improve, then higher funding costs are likely to be reflected in loan pricing.<sup>12</sup>

3.61 Chart 3.13 shows that we assume that credit premia faced by banks start to fall over 2012, as the situation in the euro area improves, and then stabilise in 2014. We do not expect the price or availability of credit to return to pre-crisis levels but to stabilise at a higher position, reflecting the effects of tighter regulatory policy and the mispricing of risk in the run up to the crisis. Our forecast assumes that credit conditions for households and firms follow this path with a lag, implying

<sup>12</sup> Bank of England, 2011, *Trends in Lending*, October.

tighter conditions to come in early 2012 followed by a gradual improvement thereafter.

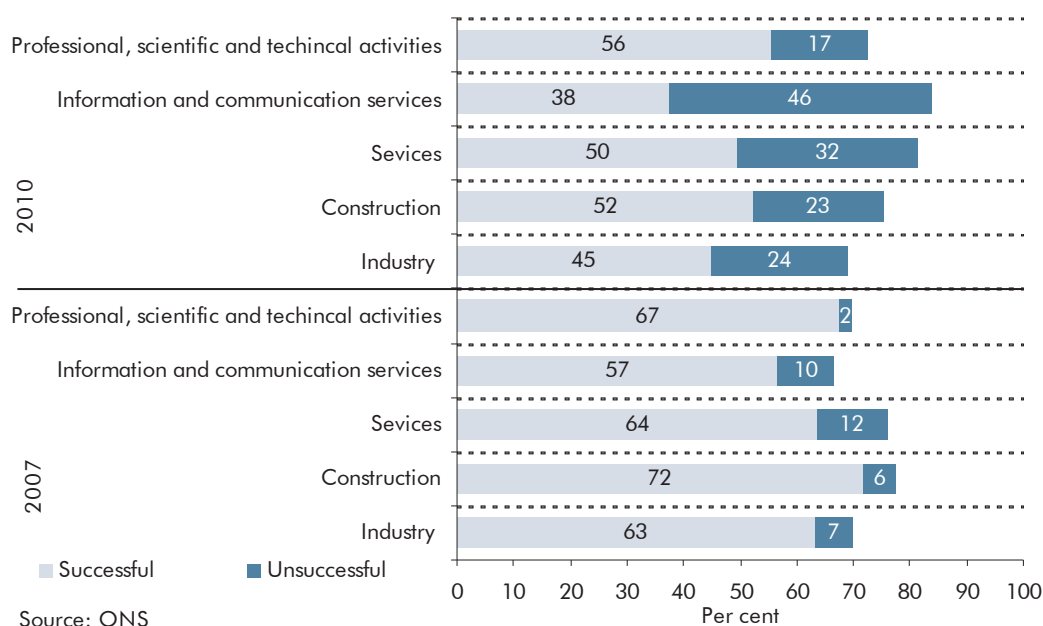
## Credit demand

### Corporations

**3.62** Credit demand from small and large businesses fell in the third quarter, according to lenders surveyed by the Bank of England. Demand from medium-sized businesses picked up slightly but was expected to fall back in the fourth quarter, reflecting economic uncertainty.

**3.63** An ONS survey reports that the demand for credit from small and medium-sized enterprises (SMEs) held up between 2007 and 2010 but that their success in obtaining bank lending fell markedly, as shown in Chart 3.14. The Bank of England's network of agents also reported that small businesses continue to find bank finance difficult to obtain.<sup>13</sup> As set out in Box 3.1, one possible explanation for the low implied potential productivity growth since the recession is that constrained credit availability, particularly to SMEs, may have held back innovation.

**Chart 3.14: SME approaches for lending from banks: Approvals and rejections**



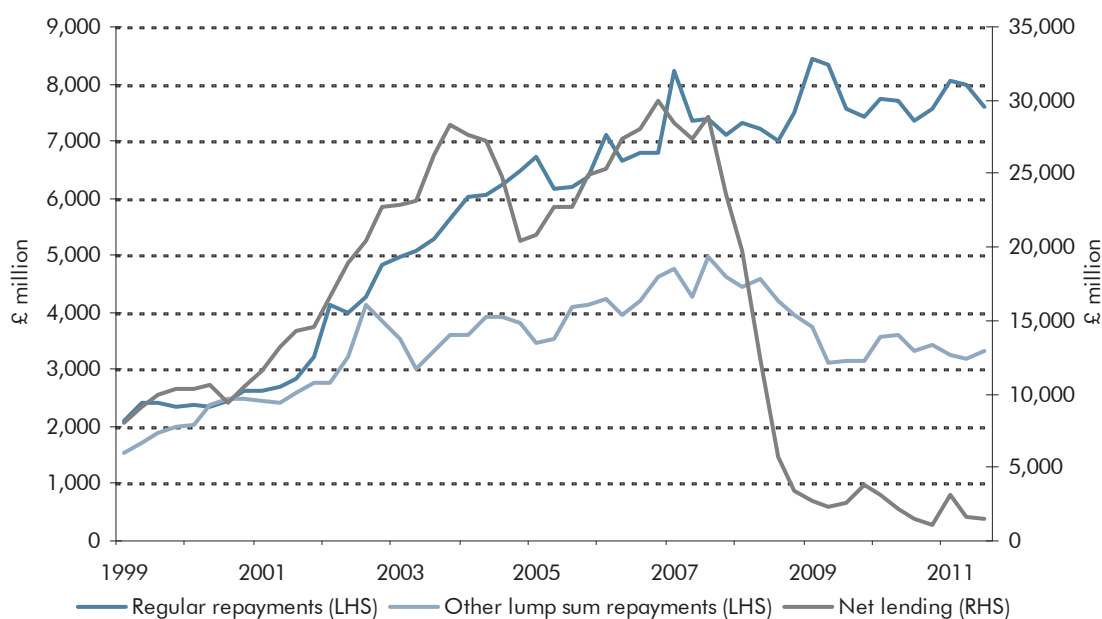
<sup>13</sup> Bank of England, 2011, *Agents' summary of business conditions*, November.

3.64 In aggregate, firms have paid back more than they borrowed in every month since January 2010. However, Deloitte’s survey of Chief Financial Officers reports that firms see themselves as having reached a broadly optimal degree of leverage. This assessment of gearing is likely to include bond issuance so we expect firms to continue paying down bank loans, as large firms continue to raise finance at favourable rates in capital markets.

### Households

3.65 Lenders surveyed by the Bank of England reported an increase in demand for secured mortgage lending from the household sector in the second and third quarters of 2011, following five quarters of falling demand. The increase in demand appears to be driven by an increase in appetite for buy-to-let mortgages as rental yields rise. Demand for unsecured (e.g. credit card) lending was broadly unchanged in the third quarter but is expected to pick up in the fourth quarter.

Chart 3.15: Household mortgage repayments



Source: Bank of England

3.66 Net lending to households remains subdued as weaker credit availability and efforts to reduce indebtedness weigh on the outlook. However, as yet there is little evidence of household sector deleveraging. If households were actively seeking to reduce leverage, we might expect to see an increase in one-off repayments of mortgage debt. Chart 3.15 shows that other lump sum repayments fell during the recession and remain depressed. The outlook for the household sector balance sheet is presented in more detail in Box 3.4.

## The composition of GDP

3.67 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 split between price increases and real activity growth, 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

3.68 Chart 3.16 sets out our forecast of nominal GDP split into the growth of prices and the growth of real activity and our March 2011 *EFO* forecast. We have revised down our forecast of the level of nominal GDP in 2015 by around 3 per cent since March. This is smaller than our reduction in real GDP because we expect prices to rise a little more strongly than we did in March. We discuss the inflation outlook in detail from para 3.100. The effect of the methodological changes to the calculation of real GDP and the GDP deflator, discussed in Chapter 2, is most apparent in the final years of the forecast. As a result of these changes, real GDP growth is 0.2 per cent higher and GDP deflator inflation 0.2 per cent lower than in our March forecast.

Chart 3.16: Nominal GDP growth

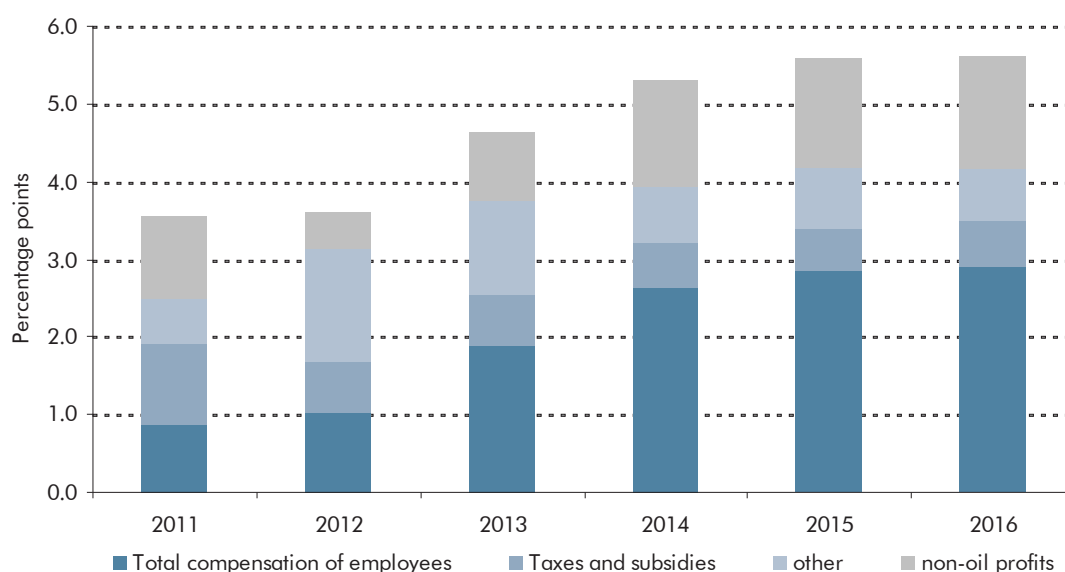


## Income

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

3.70 Chart 3.17 shows the contributions to nominal GDP growth from total compensation of employees, net taxation and subsidies, and other income components of GDP.<sup>14</sup> We expect real wages to fall until the second half of 2013 and this is reflected in a relatively small contribution to GDP growth from total compensation of employees. Private non-financial corporation profits (excluding the oil industry) tend to be very pro-cyclical and we expect only a modest contribution to nominal growth in 2012 from this component.

Chart 3.17: Income contributions to growth



Source: ONS, OBR

3.71 The labour share of national income is falling until 2014 because profits and other income make a greater contribution to growth than labour income in the first few years of our forecast. This fall is a little less pronounced than in our March forecast. This reflects our judgement that, with the growth outlook

<sup>14</sup> This is the operating surplus of general government and households, among other things.

worsening since March, firms will make more of an adjustment to the new lower level of expected income than households.

## Expenditure

3.72 Table 3.4 shows our forecast for the expenditure components of GDP. Household consumption is forecast to continue falling as a share of GDP, with business investment and net trade contributing a large proportion of forecast growth. In 2015 there is an additional reduction in the contribution from Government, reflecting the impact of the fiscal consolidation which extends in to 2016. Our forecast for these expenditure components is discussed in more detail in the following sections.

Table 3.4: Expenditure contributions to growth

	Percentage points, unless otherwise stated						
	Outturn	Forecast					
	2010	2011	2012	2013	2014	2015	2016
<b>GDP growth, per cent</b>	1.8	0.9	0.7	2.1	2.7	3.0	3.0
<b>Main contributions</b>							
Private consumption	0.7	-0.7	0.1	0.7	1.4	1.7	1.8
Business investment	0.1	-0.1	0.6	0.8	0.9	1.3	1.4
Dwellings investment <sup>2</sup>	0.3	-0.1	0.1	0.4	0.5	0.4	0.4
Government <sup>3</sup>	0.4	0.3	-0.3	-0.5	-0.5	-0.7	-0.7
Change in inventories	1.3	0.0	-0.3	0.0	0.1	0.0	0.0
Net trade	-0.8	1.2	0.3	0.6	0.3	0.2	0.1

<sup>1</sup> Components may not sum to total due to rounding and the statistical discrepancy.

<sup>2</sup> The sum of public corporations and private sector investment in new dwellings and improvements to dwellings.

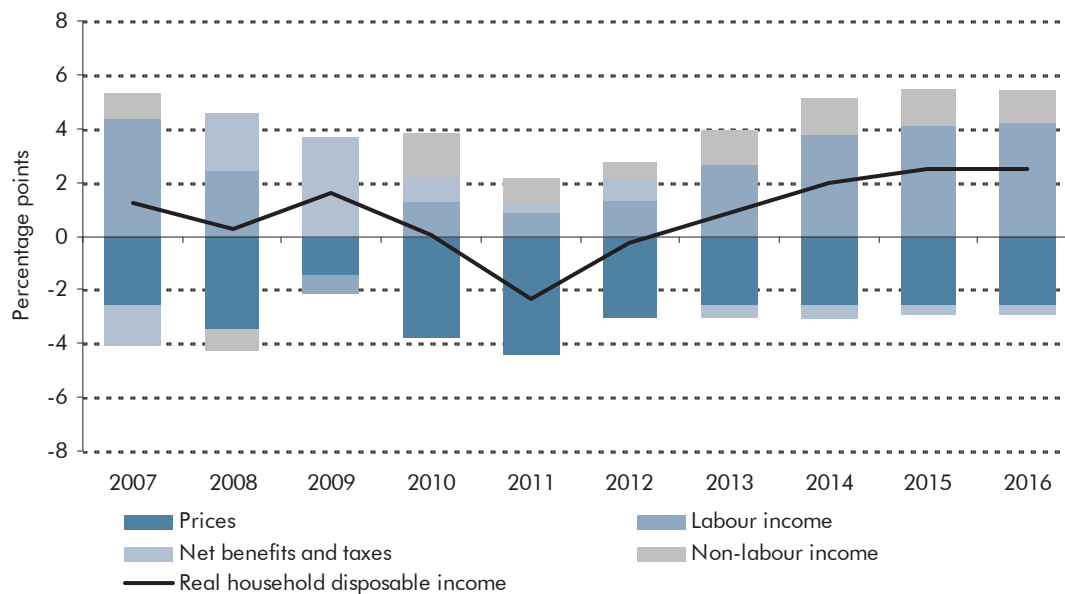
<sup>3</sup> The sum of government consumption and general government investment.

## Components of domestic demand

### Consumer spending

3.73 Real household disposable income is forecast to have fallen by 2.3 per cent in 2011, a post-war record. Chart 3.18 shows how this fall is composed: moderate nominal income growth is more than offset by elevated inflation. It is not until 2014 that we expect earnings to rise faster than prices by a significant margin. We also expect weaker prices and activity in the housing market to provide little support to households. House prices are forecast to fall slightly next year and property transactions are not expected to return to more normal levels until 2013. In the face of such pressures, we expect household consumption to remain broadly flat in real terms next year before growing more strongly in later years as sustained real wage and income growth resumes.

Chart 3.18: Contributions to real household disposable income growth



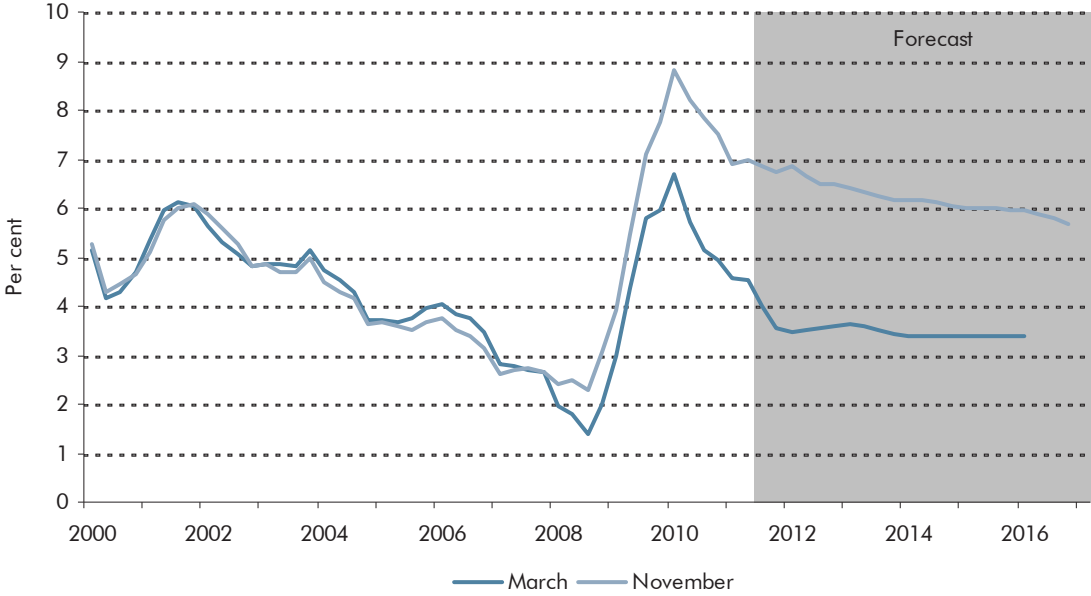
Source: ONS, OBR

3.74 Prior to the recent *Blue Book* revisions described in Chapter 2, the relatively modest increase in the household saving ratio during the recession looked unusual in comparison to the response in previous recessions. The current vintage of data now suggests that the household saving response was more in keeping with previous experience. However, the weak prospects for income growth mean that we continue to expect households to reduce their saving a little over coming years. Therefore, following the data revisions, Chart 3.19<sup>15</sup> shows that the shape of our saving ratio forecast is broadly preserved from March, but that the level is now higher. This has implications for our household debt forecast, which we discuss alongside the household assets forecast in Box 3.4.

<sup>15</sup> The series are presented as four-quarter rolling averages.



Chart 3.19: The household saving ratio



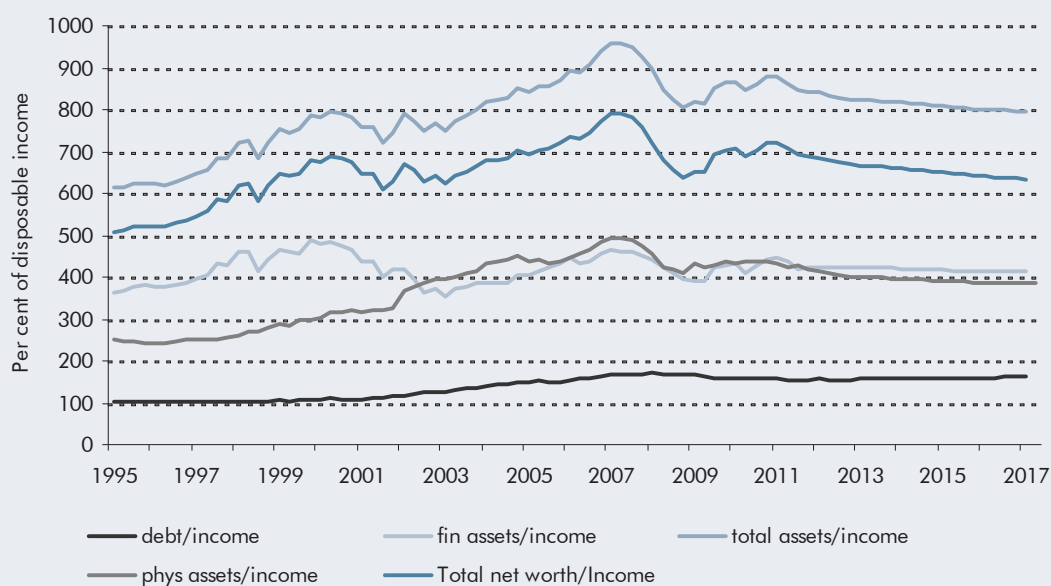
Source: ONS, OBR

### Box 3.4: Household debt and the household balance sheet

We forecast that households will take on around £480 billion of additional debt over the forecast period leaving household debt at 161 per cent of disposable income in 2016. A large part of this increase reflects borrowing by households to purchase assets, as activity in the housing market picks up. Our latest forecast is for households to purchase financial assets of around £500 billion over the forecast period. The purchase of assets, rather than the financing of consumption, is the most important driver of our household debt forecast. So if household debt were to be lower, this would not necessarily imply lower consumption or GDP growth.

Household net worth represents the difference between liabilities (debt) and assets. We expect household net worth to fall as a share of disposable income over the forecast period because the value of assets is expected to grow more slowly than incomes, while liabilities are expected to rise more quickly as activity in the property market recovers and as households borrow to fund the purchase of housing assets.

Chart A: The household balance sheet



Source: ONS, OBR

Compared to March, our forecast for the increase in household debt by 2015 is around £215 billion lower. This reflects two main factors:

- *Blue Book 2011* data revisions suggest that household saving, for a given level of income, was higher over recent years than previously thought. This means that households are likely to borrow less in the future than we previously thought. Overall, this reduces our household debt forecast by around £150 billion by 2015; and

- we now expect the housing market to take longer to recover. This reduces the amount of household borrowing necessary to fund property transactions by around £35 billion by 2015, with a similar reduction in expected household bank deposit holdings. Therefore, this change has very little impact on our forecast of household net worth overall.

The remainder of the change in the liabilities forecast since March reflects changes to the forecasts for the accumulation of physical and financial assets following revisions to outturn data.

### Business investment

- 3.75 Business investment growth has been exceptionally volatile in recent quarters, but has shown virtually no growth in the year to the third quarter. The CBI's latest *Quarterly Industrial Trends Survey* suggests that the investment that has taken place has been driven largely by companies undertaking capital replacement projects postponed during the recession. The survey now suggests that this factor is declining in importance as a driver of investment plans and the desire to expand capacity is becoming more important.
- 3.76 This implies that the short-term outlook is becoming more vulnerable to firms' assessment of demand prospects. The Bank of England's latest Agents' survey on investment intentions reported that, despite the recent weakness of activity, the majority of contacts had not made any changes to investment plans recently. But this may be because investment levels are already very low; forward-looking survey measures of business optimism and investment intentions from the BCC, CBI and Deloitte CFO surveys all indicate that the near-term outlook is weakening. However, it is likely that some deferred projects can be restarted relatively easily and we expect a strong recovery in later years once the demand outlook stabilises and credit conditions have normalised. But our forecast is still for the investment share of GDP to remain relatively low by historical standards.
- 3.77 As we discuss in Box 3.5, internal finance flows within firms, which are likely to be an important source of capital for investment given the low availability of bank credit, may not be as strong as implied by corporate saving data. This is one reason why we have lowered our projection of investment growth relative to the other components of domestic demand, since our March forecast.

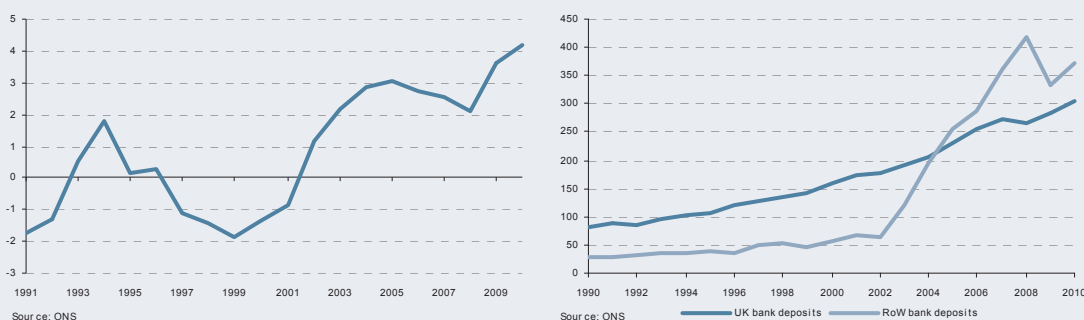
### Box 3.5: Explaining corporate saving

Our assessment of the outlook for business investment takes into account the availability and cost of finance. Given our expectation that credit conditions will tighten in the near term, retained earnings and financial assets will likely become a more important source of finance for investment. The corporate sector has run a significant surplus of profits over investment since 2003, but it rose substantially further over the recession (as investment fell more sharply than profits) and remains elevated.

Businesses have used some of this surplus to pay back bank loans, but they may also have wished to build up a buffer against further shocks as uncertainty over the outlook rose. There is also evidence that liquidity is used as an indicator of solvency by lenders because of information asymmetries in the banking sector. So firms with more cash reserves can access finance at a lower rate of interest than those with fewer.

Unfortunately, measuring corporate accumulation of cash reserves is difficult. To construct a measure, the ONS uses data from the Bank of International Settlements that shows the claims of UK entities on foreign banks. This is reported at an aggregate level, which means that it includes UK corporations but also financial institutions such as hedge funds. The difficulty lies in judging how much of the cash deposits held in foreign banks are owned by the non-financial sector. The ONS uses surveys to identify the holdings of securities dealers and the holdings of non-financial companies are then estimated as the residual. In recent releases roughly 80 per cent of deposits held with foreign banks were apportioned to non-financial companies. This may be too high.

**Chart A: PNFC net lending (% GDP) Chart B: Bank deposits (£billion)**

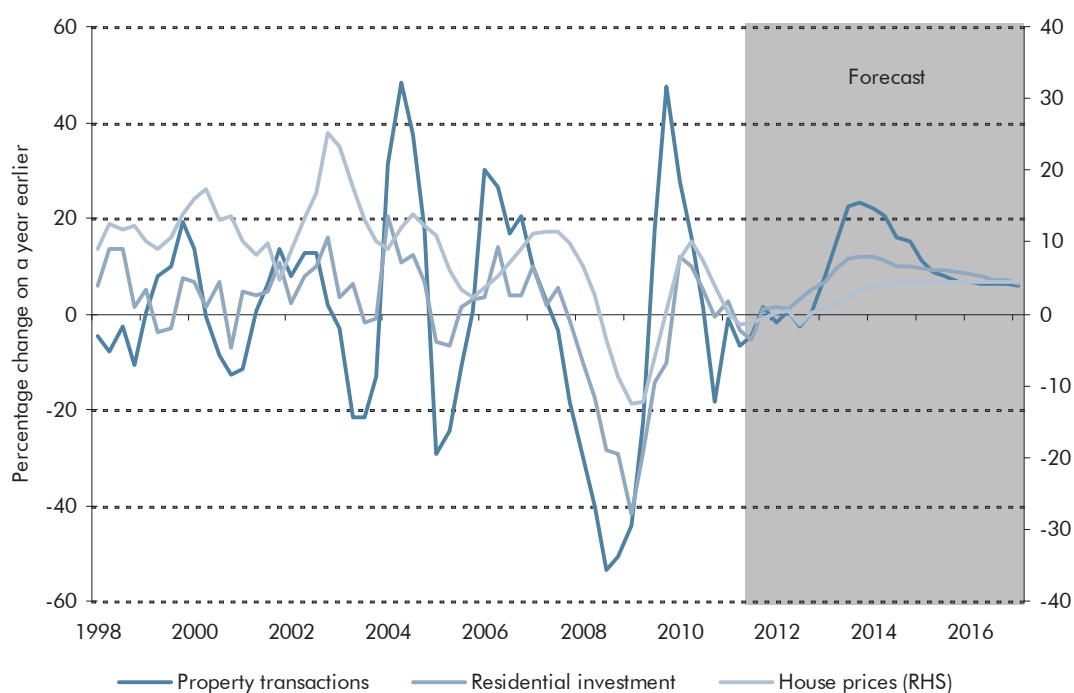


Charts A and B plot the corporate surplus as a share of GDP and corporate holdings of cash deposits in foreign banks and cash deposits held in UK banks. While it is possible that cash deposits in foreign banks grew at this rate, we view the data with caution given the measurement difficulties. If cash deposits of non-financial companies in foreign banks had grown only in line with domestic deposits then firms may have substantially less cash to invest than we previously thought.

## Residential investment

**3.78** Residential investment shares the same vulnerability to tighter credit conditions as business investment and its recovery has been similarly subdued. Chart 3.20 shows that, in line with our subdued forecast for the housing market, residential investment growth does not gain much momentum until 2013. We then expect four consecutive years of relatively strong growth, but the level of residential investment at the start of 2017 is still forecast to be more than 10 per cent below its pre-recession peak. We have increased our forecast of the number of property transactions by an additional 30,000 over the forecast period as a result of the Government's new build indemnity scheme, discussed in Box 3.2.

Chart 3.20: Residential investment growth and the housing market



Source: ONS, OBR

## Stockbuilding

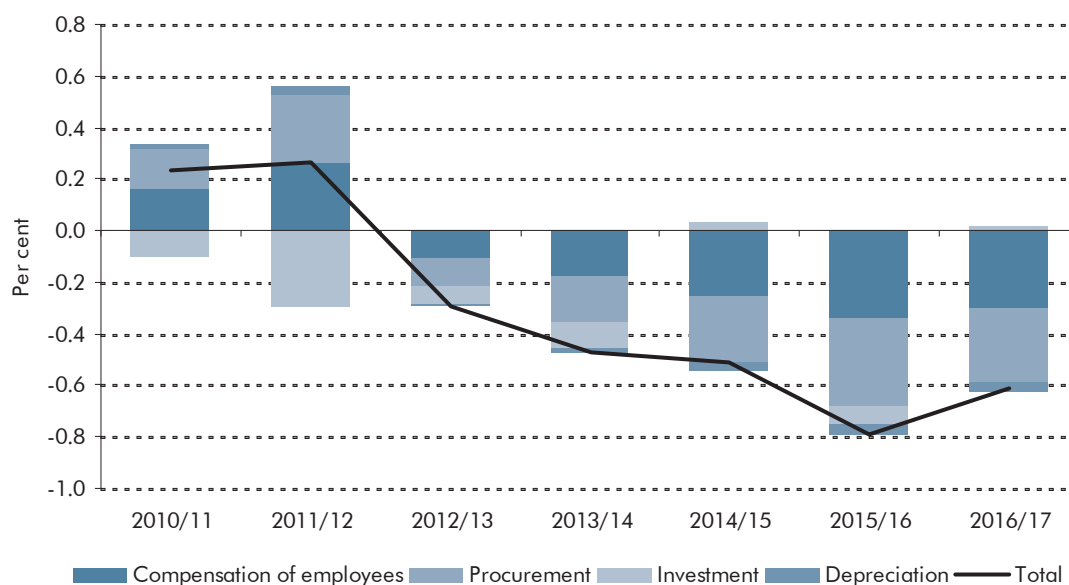
**3.79** By the end of 2010, the stock-output ratio had returned to its stable pre-recession level and the stock cycle appeared complete. Although stockbuilding was a drag on growth in the first half of 2011, this may have been related to global supply chain disruptions following the Japanese tsunami. In addition, the CBI and Bank of England's November Agents' surveys suggest firms' stock adequacy is currently around normal levels, indicating that voluntary stockbuilding is unlikely to contribute to growth in the near-term. However, the strong contribution of stockbuilding to growth in the third quarter suggests that the recent weakening in

domestic demand may lead to an involuntary stock build-up over the next couple of quarters. We expect firms subsequently to run down their stocks to match the shortfall in demand, resulting in a further mini stock-cycle, as happened in 2008.

## Government

- 3.80** Fiscal tightening has now been underway for two years. The fall in headline borrowing in 2010-11 was larger than we expect in any year in our forecast. This is partly the result of discretionary fiscal policy, as the removal of temporary economic stimulus measures and the increase in the standard rate of VAT to 20 per cent have reduced borrowing.
- 3.81** From the next fiscal year, the focus of the discretionary fiscal consolidation will switch to spending measures. The discretionary spending consolidation includes reductions in transfer payments (AME) and government consumption and investment (RDEL and CDEL respectively). The reductions in transfer payments will reduce household disposable income and therefore show up in GDP via their effect on household consumption. Government consumption and investment are constituent parts of GDP, so the planned real terms reductions in them will reduce GDP directly. The profile and composition of this contribution is shown in chart 3.21.
- 3.82** Government consumption is forecast to make a positive contribution to real GDP growth in the current fiscal year, and a slightly stronger one than last year. This is despite the fact the spending growth is slowing in cash terms, and is due to extremely weak growth in the price of government consumption. For the next five years government consumption is forecast to make, on average, a negative contribution to GDP growth of 0.5 percentage points per annum. There is a roughly equal split between reductions in employee compensation and reductions in procurement. Reductions in public investment are more front-loaded and are forecast to reduce GDP by 0.3 percentage points in 2011-12, with smaller reductions in the subsequent two years. The chart also shows the fiscal tightening pencilled in for 2015-16 and 2016-17, announced in the Autumn Statement.

Chart 3.21: Contributions of general government consumption and investment to GDP growth

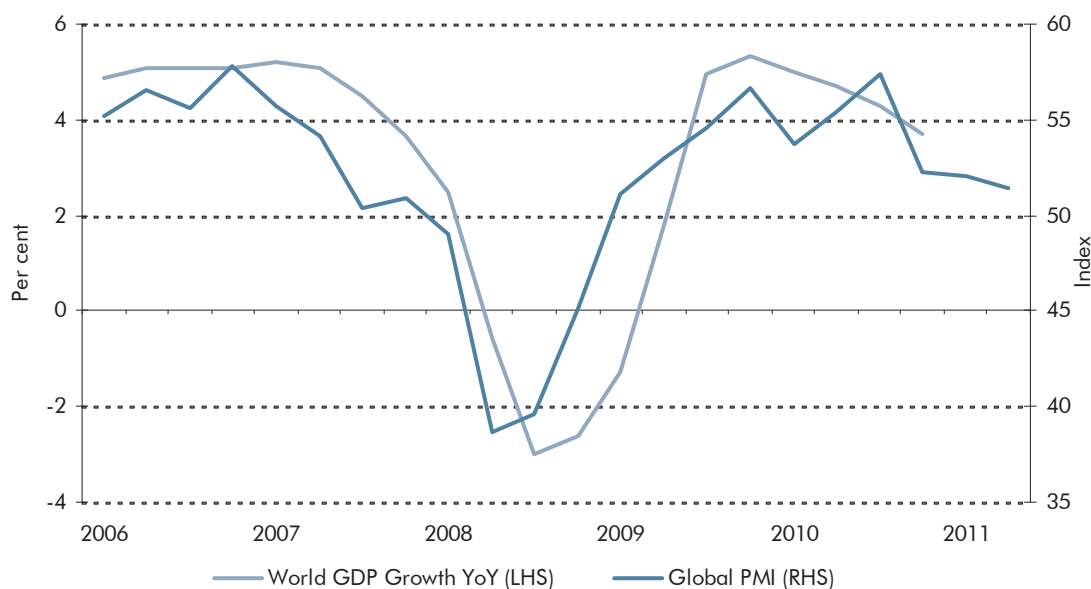


Source: ONS, OBR

## World economy

- 3.83** The outlook for the world economy has deteriorated since our March forecast. Near-term indicators of world output point to weaker growth in the third and fourth quarters of 2011, with the JP Morgan Global PMI index data for October consistent with the weakest expansion of output since August 2009 (Chart 3.22). We have lowered our forecast for world output growth to 3.8 per cent in 2011 and 3.5 per cent in 2012, reflecting developments in both advanced and emerging economies.
- 3.84** Growth among the advanced economies has slowed in recent quarters and is expected to remain weak in the near term. This predominately reflects the intensification of the euro area sovereign debt crisis, with its associated impact on credit conditions and confidence, and a weaker than expected recovery in the US labour and housing markets.

Chart 3.22: World GDP growth and PMI indicator



Source: IMF, JP Morgan Global PMI

- 3.85** The outlook for the euro area has deteriorated significantly since our forecast in March. The intensification of the sovereign debt crisis has started to weigh on domestic demand with near-term indicators pointing to considerable weakness. As a consequence, we have lowered our euro area growth forecast for 2012 by 1.3 percentage points to 0.5 per cent and our forecast for 2013 by 0.2 percentage points to 1.6 per cent. We assume that the euro area struggles through its current problems, with credit conditions beginning to ease over the course of 2012. On this basis we would expect the euro area economy to grow by 1.9 and 1.8 per cent in 2014 and 2015. A significant risk to our forecast is that the crisis intensifies further and is not resolved over this timescale. In Box 3.3 we set out the channels through which further weakness in the euro area could affect the UK economy.
- 3.86** Substantial revisions to US output data in July showed that the recovery there had been weaker than previously assumed, with a considerable downward revision to growth in the first quarter of this year. As a result, we have revised down our forecast for US growth in 2011. We also expect the US economy to grow more slowly in 2012 than we forecast in March, reflecting continued weakness in the housing and labour markets, prospects for tighter fiscal policy and the deteriorating outlook for the global economy.
- 3.87** Emerging and developing economies have grown strongly over 2011 but growth is expected to moderate in 2012. This reflects the adoption of tighter monetary

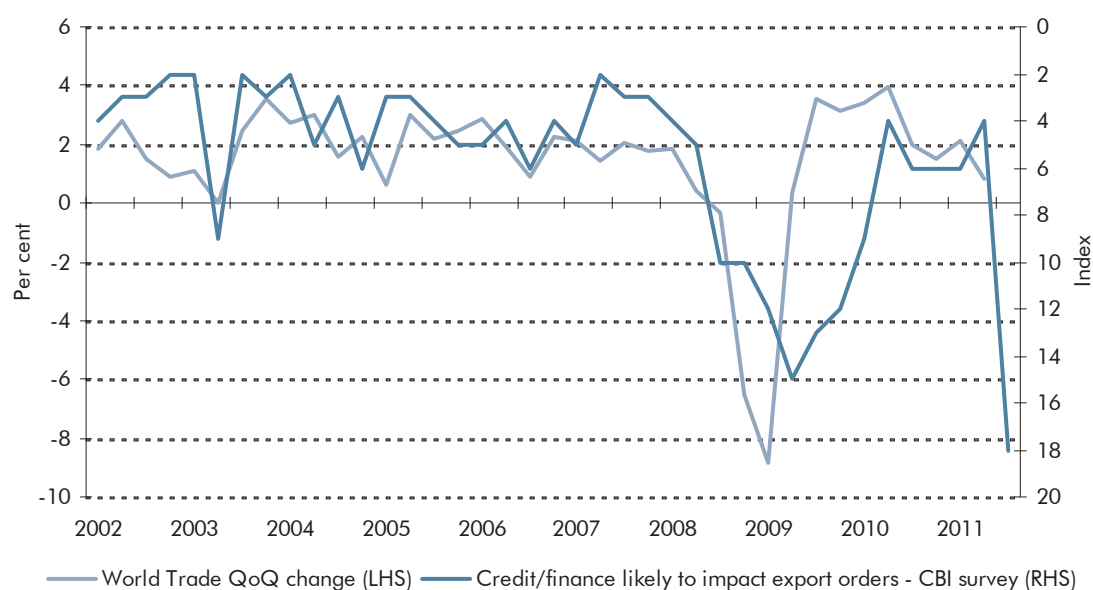


policy to contain inflationary pressures and deteriorating trade prospects as the advanced economies slow.

## World Trade

- 3.88** Near-term indicators also point to slower trade growth, with US, German and Asian manufacturers all reporting a fall in new export orders in recent months. We expect this trend to continue as world output growth moderates. We have revised down our world trade forecast by 0.3 percentage points this year and 1.9 percentage points in 2012.
- 3.89** The downward revision to our forecast of world trade growth also reflects the possibility that tighter credit conditions might affect the availability and price of trade credit. Chart 3.23 shows a sharp increase in the number of businesses telling the CBI's *Industrial Trends Survey* that credit or finance is likely to affect export orders negatively in coming months.

Chart 3.23: Credit and world trade



Source: OECD, CBI

- 3.90** The availability of trade credit clearly presents a risk to our imports and exports forecasts. However, studies suggest that it played only a small role in the very

sharp fall in world trade during the recession of 2008. Weaker demand for tradable goods was more important.<sup>16</sup>

### Exports

- 3.91 Following the latest set of *Blue Book* revisions, export growth in the recent past has been revised up. The majority of the revision was concentrated in exports of services, the path for which now looks more consistent with survey evidence. Part of this increase in volume growth can be explained by a downward revision to export prices, as exporters took slightly less of the sterling depreciation as a boost to their margins than previously thought. Nevertheless, exporters do seem to be continuing to take higher profits in margins at the expense of gaining market share, as export price competitiveness has fallen this year despite the stability of sterling.
- 3.92 In line with the worsening global outlook, there is already evidence of a slowdown in export growth in the ONS and survey data. Export volumes have fallen for the last two quarters, with exports to EU countries driving the weakness in the third quarter. Oil exports also fell by 20 percent in the third quarter, but this is likely to be a temporary effect reflecting the fall in UK oil production in the first half of the year, discussed in more detail in Chapter 4. Survey measures of export orders have turned down in recent months and both manufacturing and services export indicators point to weaker growth. The export orders series in the November CBI *Industrial Trends Survey* recorded its largest ever monthly fall, following two months of smaller contractions, and is now below its long-run average for the first time since October 2010.
- 3.93 The ongoing difficulties in the euro area – the UK’s main export market – are likely to restrict export growth next year. As a result of this expected slowdown in the euro area, and advanced economies more generally, we forecast growth in UK export markets next year will be significantly weaker than we projected in March. We therefore expect the rate of export growth to slow in 2012 to less than half the rate in our previous forecast. In future years, export growth recovers in line with the forecast recovery in UK export markets.

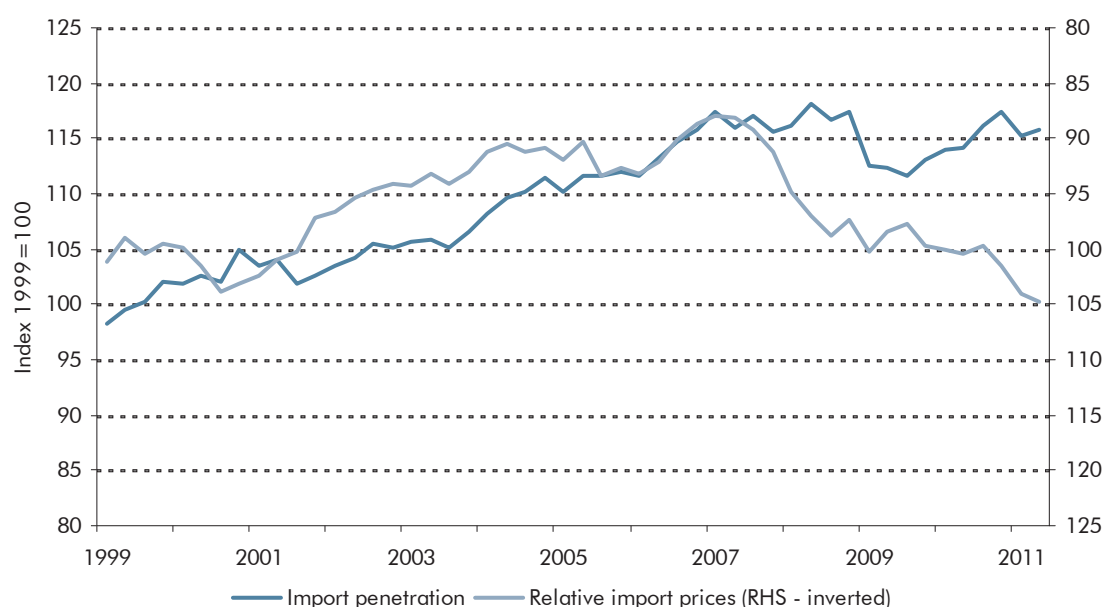
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<sup>16</sup> See for example Crowley and Luo, 2011, *Understanding the great trade collapse of 2008-09 and the subsequent trade recovery*, Federal Reserve Bank of Chicago Economic Perspectives, Q2 and Domit and Shakir, 2010, *Interpreting the world trade collapse*, Bank of England Quarterly Bulletin Volume 50 No. 3, Q3

## Imports

**3.94** Import growth is also forecast to be weaker than we expected in March. This is due to weaker domestic demand rather than a larger ‘import substitution’ response by firms and consumers to cheaper domestically produced goods, given the current low level of sterling. Chart 3.24 shows that the decline in sterling does appear to have slowed the growth in import penetration, as the normally-rising share of imports in domestic spending has slowed since 2007. But this effect has been more limited than we might have expected given the size of the depreciation.

Chart 3.24: UK import penetration



Source: ONS, OBR

**3.95** With the terms of trade forecast to remain broadly flat, the outlook for import growth will be determined by prospects for import-weighted domestic demand. This measure of demand has been close to flat in 2011 and has been matched by negligible growth in imports. We expect this pattern to repeat in 2012, as all components of domestic demand remain weak. Further out, the composition of our forecast contributes to a pick-up in import growth, as it relies on stronger contributions from investment and exports, which have a relatively high import content.

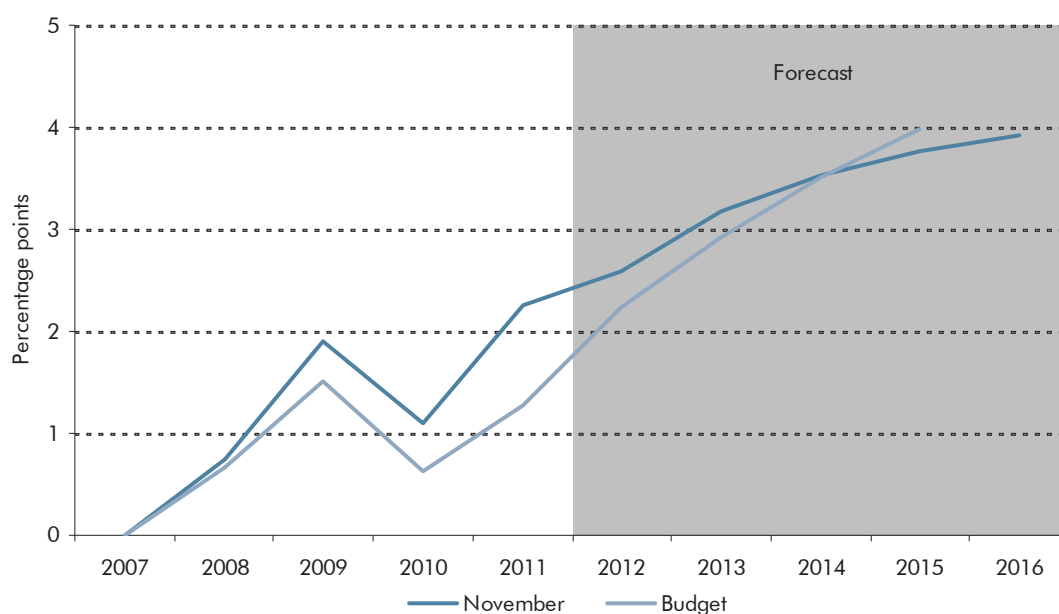
## Net trade

**3.96** The contribution of net trade to GDP around the turn of the year was distorted by large movements in aircraft imports related to a change in the VAT rate.

However, from the third quarter of 2010 to the first quarter of 2011, net trade made an average positive contribution to GDP growth of 0.4 percentage points. This trend has reversed in the two most recent quarters, with net trade making negative contributions of a similar size, although this is almost entirely explained by the weakness in oil exports.

3.97 By 2014, net trade is forecast to make roughly the same cumulative contribution to GDP growth following the 2007 sterling depreciation as we assumed back in March – 3.5 percentage points of a total increase in GDP now forecast to be 2.7 per cent over the seven years. But Chart 3.25 shows that, while GDP has fallen by 2.8 per cent between 2007 and 2011, net trade has already contributed 2.2 percentage points, rather than the 1.3 percentage points we expected in March. So as more of the anticipated trade response has already occurred, we expect a smaller contribution in future years.

Chart 3.25: Cumulative net trade contributions to GDP growth



Source: ONS, OBR

3.98 Sterling has been relatively stable since our last forecast. But although the nominal depreciation seen since 2007 has remained intact, the real depreciation (which matters for competitiveness) has been partially eroded by higher inflation in the UK than relative to our trading partners. The real exchange rate is now a little higher than we expected in March. Combined with the weaker global outlook, this reduces the total trade contribution to growth relative to March.

## Balance of payments

3.99 *Blue Book* revisions to the trade balance and investment income mean that the current account is now significantly narrower as a share of GDP than previously thought. However, short-run movements in the current account can be very volatile and we continue to forecast a small current account deficit in the medium term as a slightly stronger trade balance is offset by weaker investment income.

## Inflation and the GDP deflator

3.100 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 way in which the RPI and CPI measures of inflation are constructed.<sup>17</sup>

3.101 The RPI and CPI measures of inflation are important because they have different effects on the OBR's fiscal forecast. The Government's stated policy is to use CPI for the indexation of most tax rates, allowances and thresholds and the uprating of benefits and public sector pensions. The RPI is used for the uprating of index-linked gilts and the revalorisation of excise duties.

## CPI inflation

3.102 Since March, CPI inflation has remained at or above 4 per cent, reaching 5.2 per cent in September 2011. In October, CPI inflation fell slightly to 5.0 per cent, with some downward pressure since September due to widespread food price discounting by supermarkets. The elevated rate of inflation over 2011 continues to reflect the ongoing effect of the increase in VAT to 20 per cent in January 2011 and increases in energy prices.

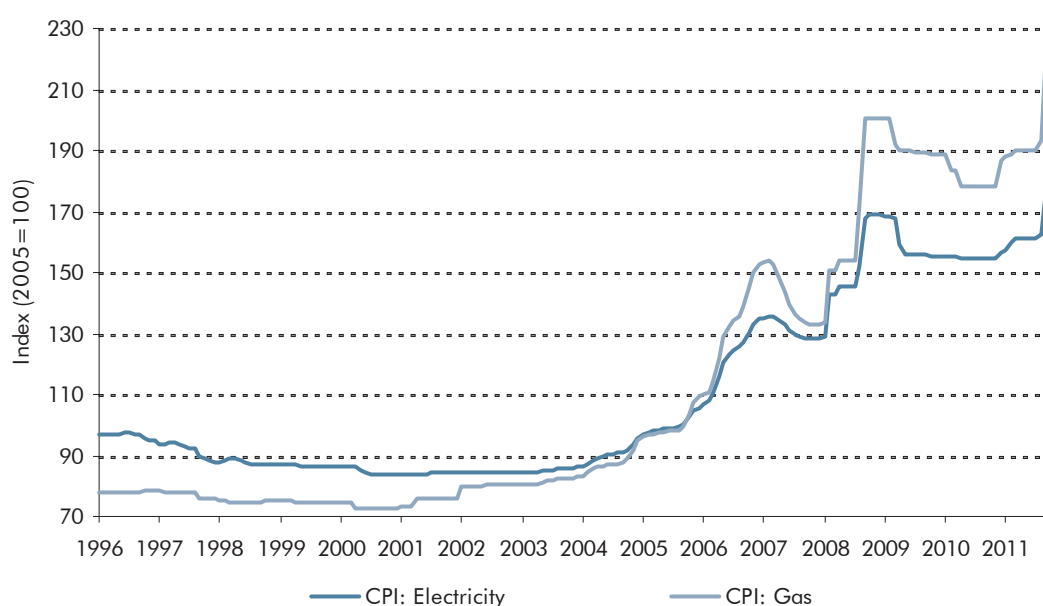
3.103 CPI inflation was in line with our March forecast for the first half of 2011, but was higher than expected in the third quarter of 2011. The contribution of gas and electricity price increases to CPI inflation has increased sharply in the third quarter of 2011 and utility price increases have been larger than we forecast in March. All of the UK's major domestic energy suppliers have announced electricity and gas price rises over the past few months, with the last being implemented in November. As such, the majority of these announcements have

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<sup>17</sup> For more details on the differences between the RPI and CPI see OBR Working Paper no. 2, *The long-run difference between RPI and CPI inflation* available on our website.

now fed through to CPI inflation. In particular, the September CPI was boosted by increases in gas prices of 13 per cent and electricity prices of 7.5 per cent, compared to a month earlier (see Chart 3.26).

Chart 3.26: Domestic gas and electricity prices



Source: ONS

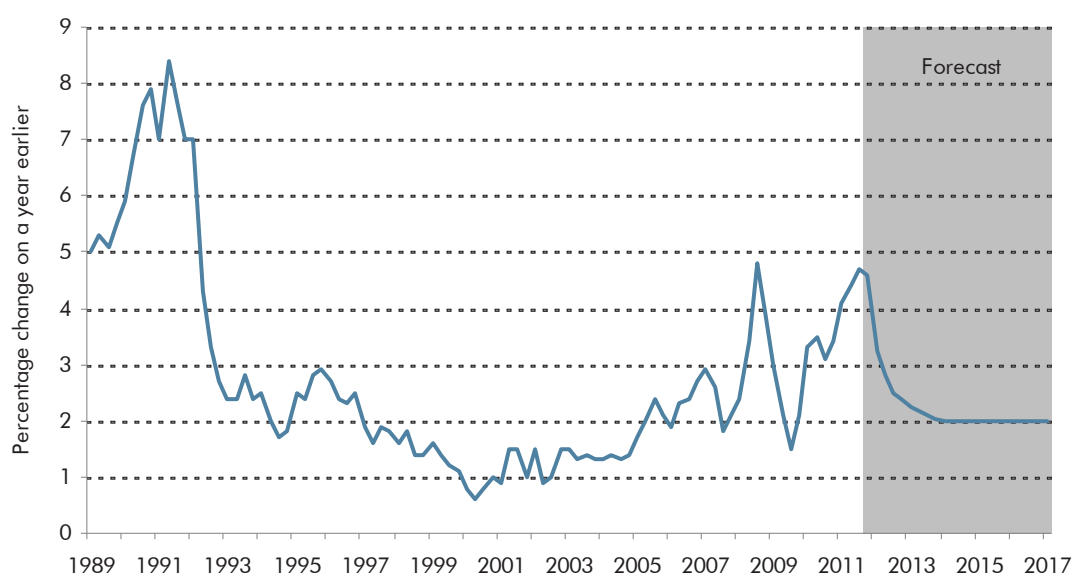
3.104 We now expect that CPI inflation will remain above 4 per cent in the final quarter of 2011. The extent to which the January 2011 VAT rise has been passed through to consumer prices is uncertain; in our forecast we assume that around 75 per cent had been passed through by the end of the first quarter, adding around 1 percentage point to CPI inflation.<sup>18</sup> Consequently, we expect CPI inflation to fall back sharply in the first quarter of 2012 as the rise in VAT falls out of the comparison. Chart 3.27 plots our estimate of CPI inflation over the forecast period.

3.105 Our forecast assumes that world oil prices will move in line with the prices implied by futures markets, as of 21 November 2011. This suggests that oil prices will fall back gradually over the forecast period, and by slightly more than

<sup>18</sup> The ONS has calculated an estimate for the impact of the VAT increase on CPI inflation for January 2011 only, which suggests that the rise in VAT increased the annual rate of CPI inflation by 0.76 percentage points. Annual CPI inflation was 4.0 per cent in January 2011. Therefore, if VAT had remained unchanged at 17.5 per cent in January 2011, annual CPI inflation would have been around 0.76 percentage points lower. For more details see: ONS, 2011, Information note, *Impact of the VAT increase on the CPI*, April. Details of the ONS methodology can be found in the Economic and Labour Review: *Impact of VAT reduction on the consumer price indices*, August 2009.

expected in March. We also expect that food price inflation will begin to fall back over the forecast period. Overall, we expect that the upward pressure from higher energy and commodity prices will fade and that the disinflationary impact of spare capacity in the economy will bear down on inflation, so that CPI returns to target by the beginning of 2014.

Chart 3.27: CPI inflation forecast



Source: ONS, OBR

**3.106** We have incorporated the effect of increases in higher education tuition fees in England in 2012 into our CPI forecast. We expect the effects on inflation to be felt over a few years as new cohorts of students paying higher fees replace existing cohorts.<sup>19</sup> We judge that the average increase in tuition fees in 2012 could add around 0.2 percentage points to CPI inflation in the fourth quarter of 2012.

There are a number of uncertainties around this estimate, including the average level of fees charged, changes to postgraduate and part-time course fees, and the effect of differences in regional policies. We do not judge these effects will be significant in the medium term.

**3.107** Policy announcements made by the Government have also been incorporated into our inflation forecast. Delaying the rise in fuel duty due in January 2012 until August 2012 and cancelling the rise in fuel duty due in August 2012 are

<sup>19</sup> 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. The initial charge made is used rather than the full economic cost of the service. For more details see ONS, 2010, *Consumer Price Indices Technical Manual*.

estimated to reduce CPI inflation by around 0.1 percentage points in 2012. This estimated impact is relative to a baseline of pre-announced changes to fuel duty.

### RPI inflation

**3.108** RPI is expected to follow a similar profile to CPI, but it also includes mortgage interest payments (MIPs) and housing depreciation.

**3.109** As elevated funding costs feed through to the effective interest rate on the stock of mortgages held by households, we expect MIPs to rise in the near term. Then, as credit conditions ease and funding costs fall at a faster rate than the rise in policy rates, mortgage rates, and therefore MIPs, are expected to fall towards the end of 2013. Thereafter, credit conditions are assumed to stabilise and MIPs to rise in line with expected policy rates.

**3.110** We assume that house prices rise in line with the median outside forecast of Communities and Local Government (CLG) house prices. House price inflation has been higher than assumed in March during the middle of the year and the median forecast points to a smaller fall than we assumed in the fourth quarter of 2011. The median also suggests weaker house price inflation in the fourth quarter of 2012 than expected in March. We then assume that house price inflation recovers over 2013 and rises broadly in line with the long-term average rate of earnings growth from mid-2014 onwards.

**3.111** Since March, the OBR has revisited its assessment of the long-run difference between RPI and CPI inflation. In the long run, we now expect annual RPI inflation to be around 1.4 percentage points higher than CPI inflation.<sup>20</sup> A decomposition of the differences between RPI and CPI inflation by their underlying components and an analysis of the long-term prospects for the difference between these inflation rates is set out in Working Paper no. 2 *The long-run difference between RPI and CPI inflation* which is published on our website alongside this forecast.

### The GDP deflator

**3.112** 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.

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<sup>20</sup> Over the long term we might expect MIPs to grow in line with the long-run average earnings growth assumption of 4.7 per cent and we assume interest rates are unchanged. As MIPs are not necessarily rising in line with the average earnings growth assumption by the end of our forecast, RPI does not always return to the long term rate in 5 years time in our forecast.



- 3.113 Over the second half of 2011, the increase in the growth of the consumption deflator is likely to reflect the announced rises in domestic gas and electricity prices. As the GDP deflator measures the price of domestic value added (and so excludes imported goods) there are likely to be some offsetting effects from the rises in wholesale energy prices feeding into import prices.
- 3.114 As we set out in Chapter 2, the ONS has recently introduced a number of methodological changes to the way in which price deflators are calculated in the National Accounts. Where components of the RPI were used to deflate output, the ONS has replaced them with components of the CPI. As explained in Chapter 2, we have assumed in this forecast that this will lead to a permanent reduction in the GDP deflator growth rate of 0.2 percentage points.

## The labour market

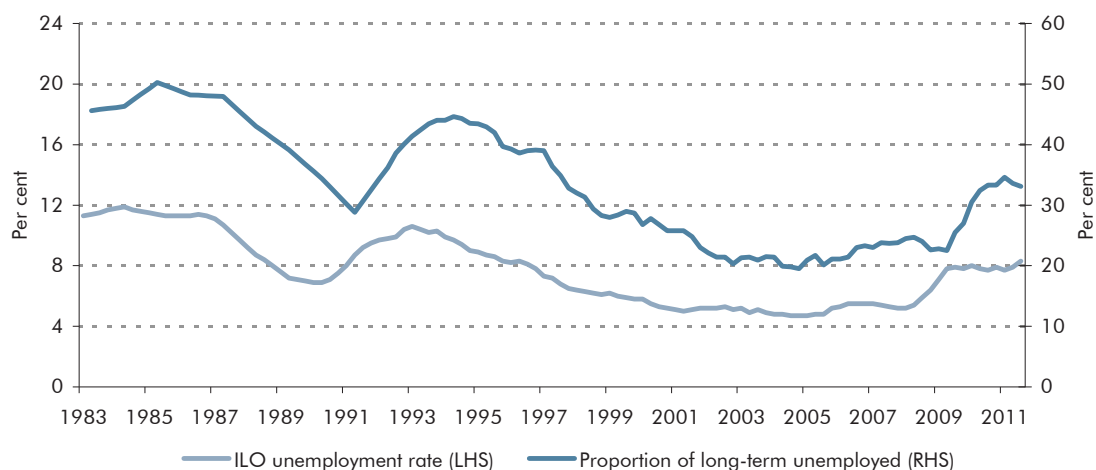
### Employment, unemployment and inactivity

- 3.115 Labour market data have provided a mixed picture since our March 2011 *EFO*. Employment performed much better than we expected over the first half of 2011, but the increase in unemployment and inactivity in the third quarter then brought the level of employment closer to the level we forecast in March.
- 3.116 An important judgement with regard to the labour market outlook is whether elevated levels of unemployment are likely to translate into a pick up in the structural unemployment rate, or Non-Accelerating Inflation Rate of Unemployment (NAIRU). While estimates of the NAIRU are inevitably subject to a large degree of uncertainty, a number of indicators can be used to evaluate the risk of a structural deterioration in the labour market.
- 3.117 An increase in the structural unemployment rate could be caused by an increase in long-term unemployment. While the proportion of those unemployed for more than 12 months has increased since 2008, the incidence of long-term unemployment remains low compared to previous UK recessions (Chart 3.28). In particular, the proportion of long-term unemployed remains below the level seen following the recession of the early 1990s, a period over which the NAIRU is often estimated to have fallen or remained broadly stable.<sup>21</sup>

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<sup>21</sup> For example, the OECD estimate that the UK NAIRU remained stable at around 8.9 per cent between 1990 and 1992 before falling gradually to 7.8 per cent by 1996. Similarly, the European Commission estimate that the UK NAWRU (Non-Accelerating Wage Rate of Unemployment) fell steadily from 9.1 per cent in 1990 to 7.3 per cent by 1996.

Chart 3.28: Long-term unemployment

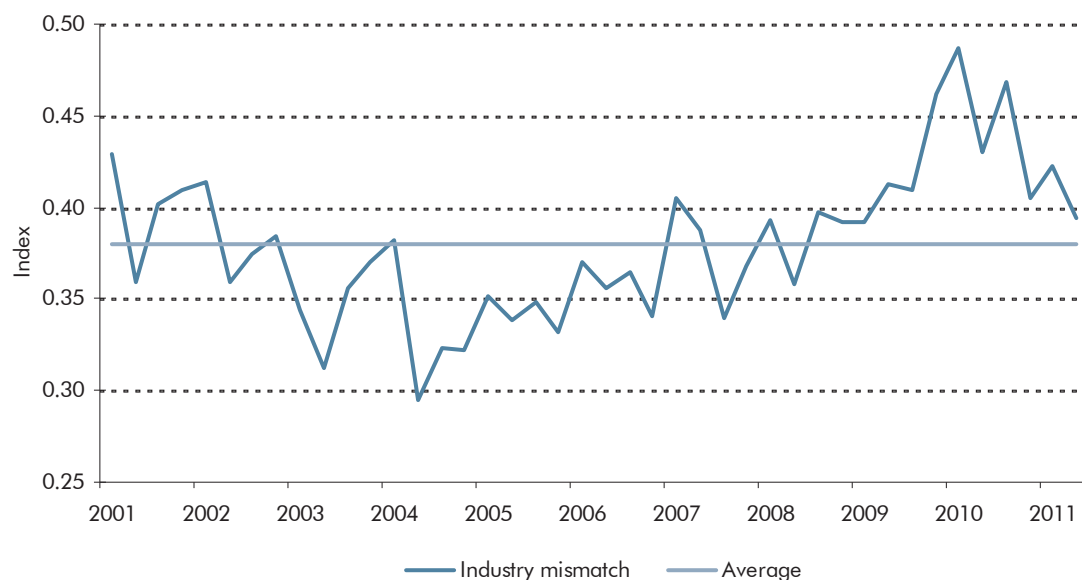


Source: OBR, ONS, OECD. Long-term unemployed defined as those unemployed for more than 12 months. Prior to 1992 estimates available on an annual basis only, and derived from OECD data on unemployment by duration. Pre-1992 quarterly estimates derived by interpolating annual estimates. Estimates from 1992 onwards sourced from the ONS Labour Market Statistics bulletin.

3.118 An increase in structural unemployment may also arise if there is an increase in the mismatch between the skills offered by those seeking jobs and those demanded by employers. This may occur if job losses are heavily concentrated in a few industries and the skills of those that have become unemployed are largely industry-specific. Chart 3.29 shows that mismatch<sup>22</sup> increased following the recession but fell back in recent quarters and is now close to its ten-year average. The increase was driven by a mismatch in the construction, education, health and social work sectors.

<sup>22</sup> The mismatch index is calculated as the sum of the absolute difference between the share of vacancies and unemployment for each industry or region. The level of mismatch can increase if there are more vacancies in one industry compared to unemployed people or if there are more people unemployed in the industry compared to vacancies.

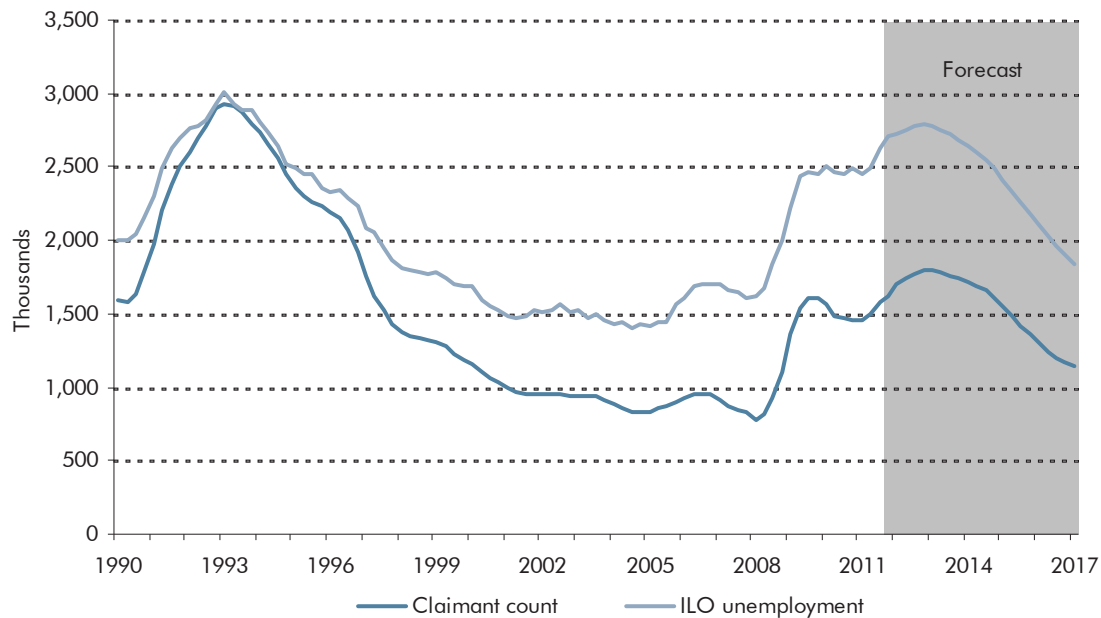
Chart 3.29: Labour market mismatch by industry



Source: ONS, OBR

- 3.119** A further uncertainty surrounds the long-term impact of the recent increase in youth unemployment: since the start of 2008 the unemployment rate for those aged 18-24 has risen by just over 7 percentage points, set against an increase of just under 3 percentage points in the aggregate rate. If the higher incidence of unemployment among the young leads to a greater likelihood of labour market detachment later in life, then this may place upward pressure on the long-term structural unemployment rate.
- 3.120** At this stage, the indicators suggest little evidence of a permanent structural deterioration in the labour market and we have maintained our long-term NAIRU assumption of 5.35 per cent. However, in line with a weaker outlook for GDP growth, we have revised up the projected level of unemployment over the near term. The unemployment rate is forecast to continue to rise over the next four quarters, peaking at around 8.7 per cent by the end of next year. This serves to increase the level of unemployment from around 2.6 million to around 2.8 million by the fourth quarter of 2012 (Chart 3.30).
- 3.121** Consistent with the upward adjustment to ILO unemployment, we have also adjusted our forecast of the claimant count. We now expect the claimant count to increase to around 1.8 million by the second half of next year, around 240,000 higher than the peak level we forecast in March. The projection also includes an upward adjustment of around 40,000 relative to March for changes to employment programmes requiring participants to remain on the claimant count, rather than transfer to a separate training allowance.

Chart 3.30: Unemployment levels



Source: ONS, OBR

3.122 Between the start of 2011 and the start of 2017 we expect total employment to increase by around 1 million. Within this, market sector employment is expected to increase by around 1.7 million, offsetting a total reduction in general government employment of around 710,000. More details of our latest projection for general government employment are set out in Box 3.6.

### Box 3.6: General government employment

Our projection of general government employment (GGE) is based on projections of the growth of total government paybill and paybill per head. Since our last forecast we have written to the Government to ask whether it intends to compile and publish specific departmental workforce plans, which would provide a more accurate projection than this top-down approach. The Government has told us that they have no plans to do this and we have therefore maintained our top-down approach. This approach is very sensitive to small adjustments in spending plans, but is the best available in the absence of specific workforce plans.

Also since March, the ONS has begun to publish GGE outturn data for the period covered by the Spending Review. As these data will gradually reveal the time profile of employment reductions, we now use our established methodology to estimate the total decline in GGE over the forecast horizon and then make a stylized assumption that employment falls at a constant rate to that end-point from the latest outturn data.

Our latest projections incorporate updated expenditure projections<sup>a</sup> and new data on public sector average earnings and workforce reductions so far in 2011-12:

- latest data suggest slightly stronger public sector average earnings growth so far this year than we assumed in March, so we have increased our 2011-12 paybill per head assumption to 2 per cent. Over the rest of the forecast, paybill per head is assumed to grow at an average rate of 2.4 per cent per year;<sup>b</sup>
- the Government's decision to pencil in further spending cuts in 2015-16 and 2016-17 implies a reduction in total paybill growth for those years. Combining these with our paybill per head assumption implies a total reduction in GGE of around 710,000 between the first quarter of 2011 and the first of 2017 compared to 400,000 between the first quarter of 2011 and the first of 2016 in our March forecast; and
- the latest ONS outturn data suggest that GGE fell by 80,000 in the second quarter of 2011, implying an average decline of around 30,000 per quarter for the remainder of the forecast horizon. Anecdotal evidence suggests that a number of public sector employers are attempting to front-load their intended workforce reductions, so it would not be surprising if GGE continues to fall more rapidly per quarter than this average rate for some time.

It is important to emphasise that there are considerable uncertainties around the total reduction in GGE that is implied by the Government's spending plans, let alone around the time profile. The overall change will depend on choice between squeezing paybill and non-paybill costs and on the choice between employing smaller numbers

of relatively high paid workers and larger numbers of relatively low paid workers.

The Autumn Statement announced that public sector pay awards will be set at an average of 1 per cent for the two years after the current freeze comes to an end. The Government has stated that departmental budgets for these years have been adjusted in line with this policy, with the exception of the NHS and schools budgets, where the money saved will be recycled. For our central forecast we have not assumed any effect on the level of general government employment from this measure. It is unclear what the measure will imply for overall paybill per head growth, which is determined by pay drift as well as the growth of basic pay awards. For example this year most of the public sector has had a basic pay award freeze, but data suggests annual pay growth has averaged over 1½ per cent since March.

In all departments except NHS and schools the measure would not have any effect on employment assuming there is an equal fall in paybill and paybill per head. In the NHS and schools, if paybill per head growth were to fall exactly in line with the reduction in pay awards, and the NHS and schools were to use all the additional resources to finance a proportionate increase in workforce rather than non-paybill expenditure, then this could offset the total forecast reduction in general government employment by around 50,000.

<sup>a</sup> For the purposes of the forecast we have replaced total RDEL with Public Sector Current Expenditure (PSCE) in RDEL, which is a better proxy for paybill growth, although it has relatively little impact on the projection. Estimated transfer payments related to the Universal Credit have been excluded from RDEL for the purposes of projecting paybill growth, consistent with our economic forecast.

<sup>b</sup> More details of the paybill per head growth assumptions and the general government employment projections by year in the latest forecast can be found in the supplementary tables accompanying this EFO, available on our website.

## Earnings

**3.123** Average earnings growth remains subdued. Having picked up slightly over the first half of 2011, private sector average earnings growth fell back to 2.3 per cent in the third quarter. Whole economy wages and salaries per employee grew by less than 1 per cent in the year to the second quarter of 2011, although this measure of earnings growth has been very volatile over recent quarters.

**3.124** Important determinants of the outlook for average earnings growth include the degree of spare capacity in the labour market, the growth of output per worker and the resistance of real wages to changes in prices.<sup>23</sup> In line with higher unemployment and slower productivity growth, we now expect nominal wage

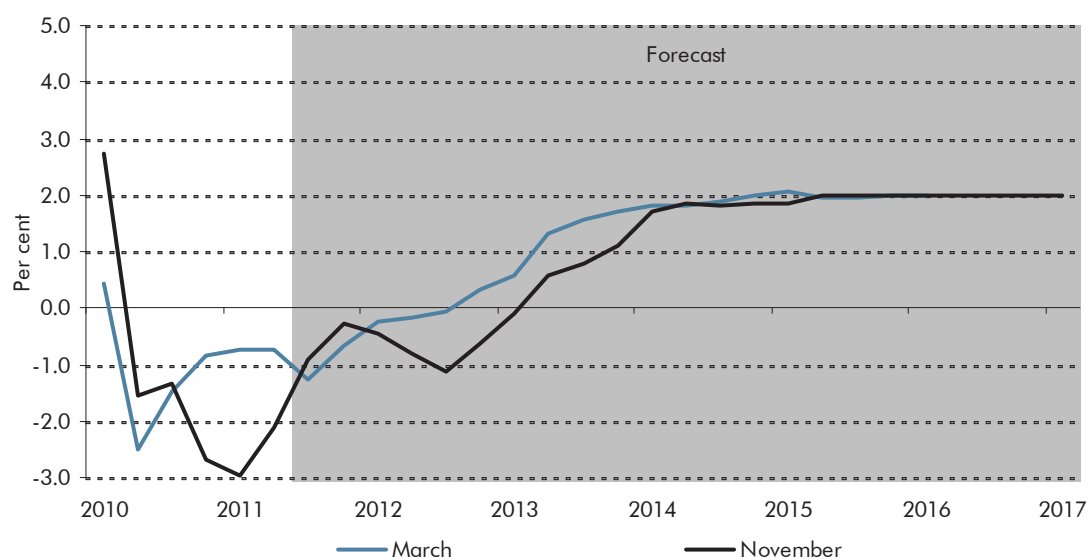
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<sup>23</sup> See OBR Briefing paper No.3: *Forecasting the economy* for more details of our approach to forecasting average earnings growth, available from our website.

growth to be weaker than we forecast in March. Wages and salaries per employee are expected to grow by around 2 per cent in 2012 before picking up gradually to 4½ per cent from the second half of 2014, a rate consistent with our medium-term forecasts of productivity and GDP deflator growth.

**3.125** The response of earnings growth to recent elevated inflation has been limited and there is little evidence of an increase in real wage resistance since our March *EFO* forecast. The weaker outlook for the economy, taken together with higher inflation from utility price increases, has led us to revise down our forecast of real earnings growth (Chart 3.31). We now expect growth of real wages and salaries per employee to remain negative until the start of 2013 as nominal earnings growth continues to lag behind price inflation. As nominal earnings growth picks up in the medium term, in line with productivity growth, and as CPI inflation falls back to target, we expect real earnings to return to positive annual growth in 2013 but not significantly so until 2014.

Chart 3.31: Real earnings growth



Source: ONS, OBR. Annual growth of wages and salaries per employee, deflated by the GDP deflator. Estimates for March forecast adjusted for changes to the ONS' methodology for the process of deflation.

**3.126** Taken together, the downward adjustments we have made to our forecasts of employment and average earnings mean total wages and salaries – a key determinant of expected tax receipts from labour income – are just over 2 per cent lower by 2015-16 than we expected in March. The announced public sector pay restraint in 2013-14 and 2014-15 reduces total wages and salaries by just under 0.2 per cent by 2015-16. Chapter 4 discusses the how the wages and salaries forecast affects the public finances outlook.

## Comparison with external forecasts

- 3.127 As we noted in Chapter 2, external forecasts differ on a number of key issues. 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 forecasts at the current time. There also remains a wide range of forecasts of the current degree of spare capacity and the potential growth rate of the economy. The degree to which the economy will shift away from consumption towards investment and net exports is a further area of debate. In what follows, we compare selected external forecasts to our own.
- 3.128 In its September *World Economic Outlook*, the IMF saw slightly more spare capacity in the economy than we do in 2011 and expected stronger output growth in 2011-2013. Most of the difference is likely to reflect the escalation of the euro area crisis and the weakening of the global economy since the IMF produced its forecast. In the medium term the IMF expected slightly weaker growth for 2015 and 2016, part of this difference is probably due to the ONS methodological changes explained in Chapter 2, the likely effect of which was not known until October. The IMF expected lower inflation in 2012, which could be partly explained by its wider output gap forecast.
- 3.129 In its October *Economic Review*, the National Institute for Economic and Social Research (NIESR) presented a slightly stronger growth profile than ours in the short term but weaker growth in the medium term. The NIESR forecast was based on the delivery of a successful package of reforms from the euro area summit at the end of October which failed to materialise. This may explain why NIESR expected stronger private consumption growth and a larger contribution from net trade in 2012 and 2013 than we do now. Its lower medium term growth forecast may also partly be explained by ONS methodological changes.
- 3.130 In its November *Autumn Economic Forecast*, the European Commission expected a weaker GDP growth profile than we do. The main difference is in 2013, when the Commission expected growth to be 0.6 percentage points lower. Its forecast was for weaker domestic demand growth, compared to our central forecast, but a higher contribution from net trade. This reflected the Commission's judgement that the level of potential output would be around 1.5 per cent lower than in our central forecast by 2013. Like us, the Commission assumed that policy measures would eventually prove to be successful in combating the euro crisis and that uncertainty in financial markets would dissipate towards mid 2012.
- 3.131 In its *November Economic Outlook*, the OECD presented a slightly more downbeat view of the economy than our central forecast. This primarily reflects its expectations of weaker investment and government consumption growth. By the end of 2013 the OECD expected output to be 4.1 per cent below potential,



compared to our estimate of 2.9 per cent. Inflation is lower than in our forecast, likely reflecting their expectation of a wider output gap.

- 3.132** 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. The GDP forecast appears alongside the November *Inflation Report*, but is not available on a calendar year basis. However, looking at its annual median growth forecasts for the final quarters of 2011, 2012 and 2013, we are forecasting slightly weaker growth.
- 3.133** The MPC's median forecast for annual CPI inflation was in line with our central forecast for the final quarter of 2011, but below our projections in the final quarters of 2012 and 2013. Since the *Inflation Report* was published, market participants' expectations of policy rates, which are a conditioning assumption in our forecast, have fallen back, implying a slightly looser monetary policy stance across the forecast period. This is likely to explain part of the difference.

**Table 3.5: Comparison of external forecasts**

	Per cent					
	2011	2012	2013	2014	2015	2016
<b>OBR (November 2011)</b>						
GDP growth	0.9	0.7	2.1	2.7	3.0	3.0
CPI inflation	4.5	2.7	2.1	2.0	2.0	2.0
Output gap	-2.7	-3.1	-2.9	-2.4	-1.7	-0.9
<b>IMF (September 2011)</b>						
GDP growth	1.1	1.6	2.4	2.6	2.7	2.7
CPI inflation	4.5	2.4	2.0	2.0	2.0	2.0
Output gap	-2.9	-3.2	-2.8	-2.1	-1.5	-0.8
<b>NIESR (October 2011)</b>						
GDP growth	0.9	0.8	2.6	2.5	2.3	
CPI inflation	4.4	2.3	1.7	1.8	1.8	
Output gap <sup>1</sup>	-4.0					
<b>EC (November 2011)</b>						
GDP growth	0.7	0.6	1.5			
CPI inflation	4.3	2.9	2.0			
Output gap	-3.3	-3.6	-3.1			
<b>OECD (November 2011)</b>						
GDP growth	0.9	0.5	1.8			
CPI inflation	4.4	2.7	1.3			
Output gap	-3.7	-4.4	-4.1			
<b>Bank of England (November 2011)</b>						
GDP growth (median) <sup>2</sup>	1.3	1.2	3.2			
CPI inflation (median) <sup>2</sup>	4.7	1.7	1.3			

<sup>1</sup> Output gap not provided in main features of forecast

<sup>2</sup> Median forecast based on market interest rates. Figures relate to Q4-on-Q4. Median figures represent central forecast of probability distribution illustrated by fan charts.

Table 3.6: Detailed summary of forecast

	Percentage change on a year earlier, unless otherwise stated						
	Outturn	Forecast					
	2010	2011	2012	2013	2014	2015	2016
<b>World economy</b>							
World GDP at purchasing power parity	5.1	3.8	3.5	4.4	4.7	4.8	4.9
Euro Area GDP	1.7	1.6	0.5	1.6	1.9	1.8	1.7
World trade in goods and services	12.2	6.6	5.0	7.1	7.1	6.9	7.0
UK export markets <sup>1</sup>	11.5	6.1	3.7	6.8	6.3	5.8	5.9
<b>UK economy</b>							
Gross domestic product (GDP)	1.8	0.9	0.7	2.1	2.7	3.0	3.0
<b>Expenditure components of GDP</b>							
Domestic demand	2.7	-0.5	0.3	1.5	2.4	2.8	2.9
Household consumption <sup>2</sup>	1.1	-1.1	0.2	1.2	2.2	2.7	2.9
General government consumption	1.5	2.2	-0.1	-1.6	-2.3	-3.2	-3.5
Fixed investment	2.6	-2.1	3.5	7.4	8.5	10.0	9.5
Business	0.8	-0.8	7.7	8.9	9.4	12.6	12.4
General government	2.8	-6.8	-9.4	-4.2	-0.1	-1.1	-2.3
Private dwellings <sup>3</sup>	6.4	-1.5	2.5	9.9	10.5	9.0	7.5
Change in inventories <sup>4</sup>	1.3	0.0	-0.3	0.0	0.1	0.0	0.0
Exports of goods and services	6.2	4.0	3.1	5.8	5.6	5.4	5.1
Imports of goods and services	8.5	0.1	1.8	3.8	4.4	4.6	4.7
<b>Balance of payments current account</b>							
£ billion	-37	-32	-36	-25	-23	-22	-22
Per cent of GDP	-2.5	-2.1	-2.3	-1.6	-1.3	-1.2	-1.1
<b>Inflation</b>							
CPI	3.3	4.5	2.7	2.1	2.0	2.0	2.0
RPI	4.6	5.2	3.3	2.9	3.1	3.6	3.8
Terms of trade <sup>5</sup>	-0.2	-1.5	-0.6	-0.1	-0.1	-0.1	-0.2
GDP deflator at market prices	2.9	2.5	2.8	2.5	2.5	2.5	2.5
<b>Labour market</b>							
Employment (millions)	29.0	29.2	29.1	29.2	29.4	29.7	30.0
Wages and salaries	1.9	1.4	1.8	3.5	5.1	5.5	5.6
Average earnings <sup>6</sup>	2.1	0.9	2.0	3.1	4.3	4.5	4.5
ILO unemployment (% rate)	7.9	8.1	8.7	8.6	8.0	7.2	6.2
Claimant count (millions)	1.50	1.54	1.75	1.77	1.67	1.45	1.23
<b>Household sector</b>							
Real household disposable income	0.1	-2.3	-0.3	0.9	2.0	2.5	2.5
Saving ratio (level, per cent)	7.5	6.7	6.5	6.2	6.1	6.0	5.7
House prices	7.2	-0.9	-0.2	1.9	4.3	4.5	4.5
<b>Nominal indicators</b>							
Nominal GDP	4.6	3.4	3.5	4.6	5.3	5.6	5.6
Non-oil PNFC profits <sup>7</sup>	1.5	7.6	3.4	6.2	9.4	9.4	9.3

<sup>1</sup> Other countries' imports of goods and services weighted according to the importance of those countries in the UK's total exports

<sup>2</sup> Includes households and non-profit institutions serving households

<sup>3</sup> Includes transfer costs of non-produced assets, which were excluded in previous forecasts

<sup>4</sup> Contribution to GDP growth, percentage points

<sup>5</sup> Ratio of export to import prices

<sup>6</sup> Wages and salaries divided by employees

<sup>7</sup> Private non-oil non-financial corporations' gross trading profits

Table 3.7: Detailed summary of changes to forecast

	Percentage change on a year earlier, unless otherwise stated					
	Outturn		Forecast			
	2010	2011	2012	2013	2014	2015
<b>World economy</b>						
World GDP at purchasing power parity	0.1	-0.4	-0.8	0.1	0.3	0.4
Euro Area GDP	0.0	0.2	-1.3	-0.2	0.0	-0.1
World trade in goods and services	-0.5	-0.3	-1.9	0.2	0.2	-0.1
UK export markets <sup>1</sup>	0.8	0.3	-2.1	1.0	0.2	-0.2
<b>UK economy</b>						
Gross domestic product (GDP)	0.5	-0.8	-1.8	-0.8	-0.1	0.2
<b>Expenditure components of GDP</b>						
Domestic demand	0.2	-1.6	-1.2	-0.7	0.1	0.5
Household consumption <sup>2</sup>	0.3	-1.7	-1.1	-0.6	0.2	0.5
General government consumption	0.5	1.5	1.0	0.2	0.2	-1.3
Fixed investment	-0.5	-4.3	-2.5	-1.5	-0.2	3.0
Business	-1.7	-7.5	-1.2	-1.6	-0.9	4.8
General government	-1.6	5.2	0.5	1.4	1.3	-3.5
Private dwellings <sup>3</sup>	2.9	4.1	-3.3	-6.6	-3.3	-0.5
Change in inventories <sup>4</sup>	-0.1	-0.2	-0.3	-0.1	0.1	0.0
Exports of goods and services	0.4	-3.9	-3.5	-0.5	-0.2	-0.3
Imports of goods and services	0.0	-4.9	-1.1	0.0	0.7	0.5
<b>Balance of payments current account</b>						
£ billion	-2	10	-2	2	-1	-7
Per cent of GDP	-0.1	0.6	-0.2	0.1	-0.1	-0.4
<b>Inflation</b>						
CPI	0.0	0.3	0.2	0.1	0.0	0.0
RPI	0.0	0.1	-0.3	-0.5	-0.5	-0.2
Terms of trade <sup>5</sup>	0.2	1.1	0.3	0.1	-0.1	-0.1
GDP deflator at market prices	-0.2	-0.5	0.3	-0.2	-0.2	-0.2
<b>Labour market</b>						
Employment (millions)	0.0	0.1	-0.1	-0.3	-0.3	-0.3
Wages and salaries	0.4	-0.4	-1.0	-1.3	-0.2	0.1
Average earnings <sup>6</sup>	0.4	-1.1	-0.2	-0.7	0.0	0.0
ILO unemployment (% rate)	0.0	-0.1	0.6	1.0	1.0	0.7
Claimant count (thousands)	-1	-2	222	346	357	270
<b>Household sector</b>						
Real household disposable income	0.7	-1.9	-1.7	-0.7	0.1	0.4
Saving ratio (level, per cent)	2.6	3.2	2.9	2.7	2.7	2.6
House prices	-0.1	1.4	-0.2	-1.6	0.0	0.2
<b>Nominal indicators</b>						
Nominal GDP	0.2	-1.4	-1.5	-1.0	-0.3	0.0
Non-oil PNFC profits <sup>7</sup>	-0.4	0.7	-8.0	-2.8	0.6	2.1

<sup>1</sup> Other countries' imports of goods and services weighted according to the importance of those countries in the UK's total exports

<sup>2</sup> Includes households and non-profit institutions serving households

<sup>3</sup> Includes transfer costs of non-produced assets, which were excluded in previous forecasts

<sup>4</sup> Contribution to GDP growth, percentage points

<sup>5</sup> Ratio of export to import prices

<sup>6</sup> Wages and salaries divided by employees

<sup>7</sup> Private non-oil non-financial corporations' gross trading profits



## 4 Fiscal outlook

### Summary

- 4.1 Our central forecast is that public sector net borrowing (PSNB) will drop steadily as a share of GDP over the next five years from its post war peak in 2009-10. But we now expect it to be substantially higher across all years of the forecast than in March, largely reflecting the weaker outlook for the economy. As a result public sector net debt (PSND) is also forecast to be higher than we expected in March, but we still expect it to start falling toward the end of the forecast period.
- 4.2 This forecast takes into account the policy measures announced by the Chancellor in his Autumn Statement. The impact of policy measures included in the Treasury's scorecard on PSNB is broadly neutral up to 2014-15 and then reduces borrowing by £8.3 billion in 2015-16 and £15.1 billion in 2016-17.
- 4.3 The key elements of our fiscal forecast, including the impact of these policy measures, are presented in Table 4.1:
- PSNB falls from 11.2 per cent of GDP in 2009-10 to 1.2 per cent in 2016-17. In 2015-16, we estimate PSNB will be around £24 billion or 1.4 per cent of GDP higher than we thought in the March *EFO*;
  - the cyclically-adjusted current budget (CACB) is expected to move from a deficit of 4.5 per cent of GDP in 2010-11 to a surplus of 0.5 per cent in 2016-17;
  - in March we forecast that the CACB would be in surplus by 0.8 per cent of GDP or £15 billion in 2015-16, but we now expect it to be in deficit by 0.6 per cent of GDP or £11 billion; and
  - public sector net debt (PSND) is forecast to peak at 78 per cent of GDP in 2014-15 before falling to 77.7 per cent in 2015-16 and 75.8 per cent in 2016-17. The peak in 2014-15 is 7.5 per cent of GDP higher than we expected in March, reflecting higher borrowing and a lower forecast for nominal GDP.

Table 4.1: Fiscal forecast overview

	Per cent of GDP							
	Outturn				Forecast			
	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Public sector net borrowing	11.2	9.3	8.4	7.6	6.0	4.5	2.9	1.2
Cyclically-adjusted net borrowing	9.0	7.1	6.4	5.5	4.0	2.8	1.7	0.6
Surplus on current budget	-7.7	-6.7	-6.5	-6.0	-4.7	-3.3	-1.8	-0.1
<b>Fiscal mandate and supplementary target</b>								
Cyclically-adjusted surplus on current budget	-5.5	-4.5	-4.6	-3.9	-2.7	-1.6	-0.6	0.5
Public sector net debt <sup>1</sup>	52.9	60.5	67.5	73.3	76.6	78.0	77.7	75.8
	Changes since March forecast							
Public sector net borrowing	0.0	-0.6	0.5	1.4	1.9	2.0	1.4	
Cyclically-adjusted net borrowing	0.1	-0.3	1.2	1.8	2.0	1.9	1.2	
Surplus on current budget	-0.1	0.4	-0.7	-1.5	-2.0	-2.1	-1.5	
Cyclically-adjusted surplus on current budget	-0.2	0.1	-1.4	-1.9	-2.1	-2.0	-1.4	
Public sector net debt <sup>1</sup>	0.2	0.2	1.4	3.6	5.7	7.5	8.6	

<sup>1</sup> Debt at end March; GDP centred on end March.

4.4 The deterioration in the public finances in this forecast reflects lower government receipts and higher spending as a share of national income, as shown in Table 4.2. The downward revision to public sector receipts worsens the PSNB by 0.7 per cent of GDP compared with March. The main factors are:

- lower forecast growth in the key economic drivers of tax receipts – labour income, household consumption and company profits – which feed through to lower forecasts for income tax, VAT and corporation tax;
- falls in oil prices, equity prices and interest rates compared to March, leading to lower North Sea taxes, stamp duties, and interest receipts; and
- the sharp fall in financial sector corporation tax receipts seen so far this year, which we assume not to be recovered over the forecast period.

4.5 The upward revision to total managed expenditure (TME) as a share of GDP worsens the PSNB by 0.7 per cent of GDP by 2015-16. The most significant changes here are:

- departmental spending over the spending review period is generally fixed in cash terms. Our forecast of lower nominal GDP means this is higher as a share of GDP;

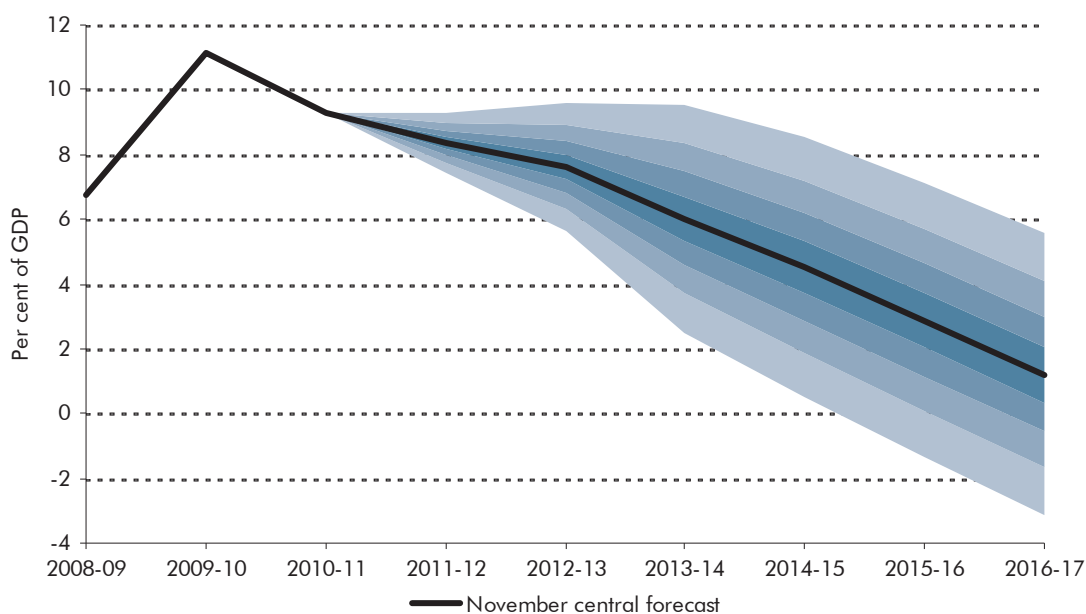
- our forecast of social security benefits and public sector pension payments has increased partly due to higher CPI and claimant count unemployment forecasts;
- this is partly offset by reduced government debt interest payments due to lower expected interest rates and lower RPI inflation; and
- in 2015-16, the Government's additional discretionary fiscal tightening reduces total expenditure as a share of GDP by 0.5 per cent.

Table 4.2: Changes to public sector net borrowing since March forecast

	Per cent of GDP				
	Outturn 2011-12	2012-13	Forecast		
			2013-14	2014-15	2015-16
PSNB March	7.9	6.2	4.1	2.5	1.5
PSNB November	8.4	7.6	6.0	4.5	2.9
Change	0.5	1.4	1.9	2.0	1.4
<i>of which:</i>					
Tax	-0.3	-0.5	-0.8	-0.7	-0.7
<i>of which: policy</i>	0.0	0.0	0.0	0.0	0.0
Spending	0.2	1.0	1.2	1.2	0.7
<i>of which: policy</i>	0.0	0.0	0.0	0.0	-0.5

4.6 All fiscal forecasts are subject to significant uncertainties. Chart 4.1 shows our central forecast for PSNB with the probability of different outcomes, based purely on our and the Treasury's past forecasting performance, shown in a fan chart. The solid black line shows our central (median) forecast and each shaded area represents a 10 per cent probability band.

Chart 4.1: Public sector net borrowing fan chart



Source: ONS, OBR

## Introduction

4.7 This chapter sets out our medium term forecasts for the public finances. These consist of an in-year estimate for 2011-12 that makes use of outturn data for April to October<sup>1</sup>, and then forecasts to 2016-17.

4.8 As in previous *EFOs*, this fiscal forecast:

- represents our central view for the path of the public finances. We believe that the outturns are as likely to be above the forecast as below it;
- is based on our forecast of the economy as set out in Chapter 3. Public sector receipts and expenditure are closely linked to the performance of the economy;
- is based on announced Government policy on the indexation of rates, thresholds and allowances for taxes and benefits;
- incorporates the impact of certified costings for all new policy measures announced by the Chancellor in his Autumn Statement;

<sup>1</sup> Outturn data is consistent with the October 2011 Public Sector Finances statistical bulletin published by the Office for National Statistics.



- includes cyclically-adjusted versions of the key fiscal aggregates, which adjust for the effect of the economic cycle on the public finances. We currently use the Treasury's approach to cyclical adjustment along with our own estimates of output gaps over the forecast period;<sup>2</sup> and
- focuses on fiscal aggregates that exclude the temporary effects of interventions in the financial sector.<sup>3</sup> The Government's fiscal mandate and supplementary target are based on these measures.

4.9 We have set out our approach to the fiscal forecast in a briefing paper *Forecasting the public finances* available on our website. This explains in detail how we work with government departments to assemble a bottom-up forecast of the UK public finances. We produce separate forecasts for individual categories of receipts, spending and financial transactions, and our briefing paper outlines how each is constructed, the key economic determinants used, and the judgements that need to be taken. All judgements and assumptions have been agreed by the OBR's Budget Responsibility Committee (BRC) which takes full responsibility for the final forecast.

4.10 The outline for this chapter is as follows:

- the key economic and market determinants that drive the fiscal forecast to 2016-17. In particular we consider how these have changed since our previous forecast (paragraphs 4.12 to 4.28);
- the effect of new policy announced since the last Budget on the fiscal forecast (paragraphs 4.29 to 4.36);
- the outlook for public sector receipts, including a tax by tax analysis explaining how the forecasts have changed since March (paragraphs 4.37 to 4.83);
- the outlook for public sector expenditure, focussing in particular on the components of annually managed expenditure (paragraphs 4.84 to 4.141);

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<sup>2</sup> HM Treasury, 2008, *Public sector finances and the cycle: Treasury Economic Working Paper No. 5*. The cyclical adjustment coefficients we use are based on the relationship between past fiscal aggregates and the Treasury's estimates of past output gaps. Alongside this report we have published Working Paper No.1: *Estimates of the UK output gap* which explores methods of estimating a historical output gap series. This will enable us to reassess the size of the cyclical adjustment coefficients.

<sup>3</sup> Office for National Statistics, 2010, *Public sector finances excluding financial sector interventions*.

- an updated forecast of the public sector net cash requirement (PSNCR) which adds financial transactions and accruals adjustments to the PSNB (paragraphs 4.142 to 4.147); and
- key fiscal aggregates including public sector net borrowing, the cyclically-adjusted current budget balance and public sector net debt (paragraphs 4.148 to 4.160).

4.11 Further breakdowns of receipts and expenditure and other details of our fiscal forecast are provided in the supplementary tables available on our website.

### **Economic determinants of the fiscal forecast**

4.12 Many aspects of the public finances are driven by the strength and composition of the economy. Tax receipts are closely linked to economic activity. Although around half of public expenditure is fixed in multi-year plans, the remainder, such as social security and debt interest payments, is closely linked to the economy. Therefore, our outlook for the public finances is largely driven by the economic forecast we presented in Chapter 3. Table 4.3 shows the path of some of the key economic determinants of the fiscal forecast and Table 4.4 how these have changed since our last forecast in March.

### **GDP and trend output**

4.13 While most economic forecasts focus on the outlook for real GDP, it is nominal GDP that is most important for the public finances forecast. In this forecast we expect nominal GDP to be 3.8 per cent lower by 2015-16 than we thought in March.

4.14 We have also revised down our estimate of the level of potential output in 2015-16 as set out in Chapter 3. This has important implications for the 'structural' or cyclically-adjusted measures of the deficit. It implies that less of the deficit will disappear automatically as the economy recovers, pushing up revenues and reducing spending.

Table 4.3: Determinants of the fiscal forecast

	Percentage change on previous year unless otherwise specified						
	Outturn 2010-11	2011-12	2012-13	Forecast 2013-14 2014-15 2015-16 2016-17			
<b>GDP and its components</b>							
Real GDP	1.9	0.6	0.9	2.4	2.8	3.1	3.0
Nominal GDP (£ billion) <sup>1</sup>	1477	1521	1577	1654	1743	1842	1945
Nominal GDP <sup>1</sup>	5.4	3.0	3.7	4.9	5.4	5.6	5.6
Nominal GDP (centred end-March)	4.1	3.4	4.3	5.2	5.5	5.6	5.6
Wages and salaries <sup>2</sup>	1.3	1.6	2.0	4.1	5.2	5.6	5.6
Non-oil PNFC profits <sup>2,3</sup>	1.5	7.6	3.4	6.2	9.4	9.4	9.3
Consumer spending <sup>2,3</sup>	4.9	3.4	3.2	3.8	4.8	5.3	5.5
<b>Prices and earnings</b>							
GDP deflator	2.8	2.6	2.7	2.5	2.5	2.5	2.5
RPI (September)	4.6	5.6	3.1	2.9	3.1	3.6	3.9
CPI (September)	3.1	5.2	2.5	2.1	2.0	2.0	2.0
Whole economy earnings growth	0.6	1.7	2.1	3.5	4.4	4.5	4.5
<b>Key fiscal determinants</b>							
Claimant count unemployment (millions) <sup>4</sup>	1.47	1.60	1.78	1.75	1.63	1.39	1.19
Employment (millions)	29.1	29.1	29.1	29.3	29.5	29.8	30.1
VAT gap (per cent)	9.7	9.8	9.8	9.7	9.8	9.8	9.8
<i>Financial and property sectors</i>							
Equity prices (FTSE All-share index)	2885	2850	2904	3047	3211	3392	3582
HMRC financial sector profits <sup>1,3,5</sup>	4.0	-10.0	4.1	6.8	5.3	3.9	3.4
Residential property prices <sup>6</sup>	5.3	-0.9	-0.1	2.7	4.4	4.5	4.5
Residential property transactions	-1.8	-3.0	1.5	20.7	15.6	7.4	6.2
Commercial property prices <sup>7</sup>	0.1	4.7	1.1	3.6	5.4	5.9	5.4
Commercial property transactions <sup>7</sup>	8.5	-4.7	3.7	3.7	5.7	6.4	6.2
Volume of share transactions	-8.8	-7.7	1.9	2.4	2.8	3.1	3.0
<i>Oil and gas</i>							
Oil prices (\$ per barrel) <sup>3</sup>	80	111	105	101	97	94	91
Oil prices (£ per barrel) <sup>3</sup>	52.0	68.3	64.5	61.8	59.1	57.1	55.8
Gas prices (p/therm)	43.4	59.9	60.4	61.1	60.6	58.6	57.3
Oil production (million tonnes) <sup>3,8</sup>	63.0	53.3	53.3	51.2	49.5	47.6	46.0
Gas production (billion therms) <sup>3,8</sup>	20.6	16.1	16.8	16.1	15.5	14.9	14.4
<i>Interest rates and exchange rates</i>							
Market short-term interest rates (per cent) <sup>9</sup>	0.7	0.9	0.9	1.0	1.5	2.1	2.7
Market gilt rates (per cent) <sup>10</sup>	2.8	2.3	2.6	2.9	3.2	3.4	3.6
Euro/Sterling exchange rate	1.18	1.13	1.13	1.14	1.14	1.14	1.14

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

Table 4.4: Changes to determinants since the March forecast

	Percentage change on previous year unless otherwise specified					
	Outturn	Forecast				
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<b>GDP and its components</b>						
Real GDP	0.0	-1.1	-1.7	-0.6	0.0	0.3
Nominal GDP (£ billion) <sup>1</sup>	3	-23	-48	-63	-70	-73
Nominal GDP <sup>1</sup>	0.5	-1.8	-1.5	-0.8	-0.2	0.1
Nominal GDP (centred end-March)	-0.5	-1.6	-1.3	-0.4	-0.1	0.1
Wages and salaries <sup>2</sup>	-0.5	-0.2	-1.3	-1.0	-0.1	0.2
Non-oil PNFC profits <sup>2,3</sup>	-0.4	0.7	-8.0	-2.8	0.6	2.1
Consumer spending <sup>2,3</sup>	-0.2	-1.8	-1.0	-0.8	0.0	0.3
<b>Prices and earnings</b>						
GDP deflator	-0.2	-0.3	0.2	-0.2	-0.2	-0.2
RPI (September)	0.0	0.4	-0.3	-0.6	-0.5	-0.2
CPI (September)	0.0	0.9	0.2	0.1	0.0	0.0
Whole economy earnings growth	-0.7	-0.3	-0.4	-0.6	-0.1	0.0
<b>Key fiscal determinants</b>						
Claimant count unemployment (millions) <sup>4</sup>	-0.01	0.05	0.27	0.35	0.35	0.24
Employment (millions)	0.0	0.1	-0.1	-0.3	-0.3	-0.2
VAT gap (per cent)	-2.2	-2.2	-2.2	-2.3	-2.2	-2.2
<i>Financial and property sectors</i>						
Equity prices (FTSE All-share index)	-7	-319	-429	-477	-511	-537
HMRC financial sector profits <sup>1,3,5</sup>	0.0	-15.3	-1.2	1.0	-0.3	-1.7
Residential property prices <sup>6</sup>	-0.2	2.0	-1.3	-1.1	0.2	0.2
Residential property transactions	0.1	-1.1	-18.7	0.3	5.1	2.2
Commercial property prices <sup>7</sup>	-4.6	2.6	-2.8	-2.0	0.2	1.7
Commercial property transactions <sup>7</sup>	-2.5	-9.2	0.6	-1.4	0.4	1.2
Volume of share transactions	1.9	-5.7	-1.4	-1.2	0.9	1.7
<i>Oil and gas</i>						
Oil prices (\$ per barrel) <sup>3</sup>	0	-2	-7	-8	-11	-13
Oil prices (£ per barrel) <sup>3</sup>	0.0	-1.0	-4.1	-5.2	-7.2	-9.1
Gas prices	0.1	6.7	2.0	-0.3	-1.3	-4.7
Oil production (million tonnes) <sup>3,8</sup>	0.0	-6.9	-3.8	-4.1	-3.9	-3.2
Gas production (billion therms) <sup>3,8</sup>	0.0	-2.8	-1.2	-1.2	-1.1	-0.9
<i>Interest rates and exchange rates</i>						
Market short-term interest rates (per cent) <sup>9</sup>	0.0	-0.7	-1.8	-2.5	-2.5	-2.3
Market gilt rates (per cent) <sup>10</sup>	-1.0	-1.5	-1.7	-1.8	-1.7	-1.7
Euro/Sterling exchange rate	0.00	-0.03	-0.03	-0.02	-0.02	-0.01

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

## Income and expenditure

4.15 The composition of nominal GDP growth is also very important for the fiscal forecast. For example, additional consumption leads to extra indirect tax receipts, while the initial effect of higher business investment would be to reduce tax receipts via capital allowances. As explained in Chapter 3, in this forecast we have revised down the growth in investment by more than consumption and net trade is now expected to make a smaller contribution. We have also revised down our estimate of labour income, which is more tax-rich than profits. Some specific changes to the components of income and expenditure are set out below:

- **labour income**, a key determinant for income tax and NIC, is weaker throughout the forecast period, following downward revisions to employment and average earnings. Total wages and salaries are £18 billion lower in 2015-16 than we had assumed in March;
- **company profits**, which largely determine corporation tax receipts, are much weaker than in the March forecast. The level of non-North Sea company profits is expected to be around 7½ per cent lower in 2015-16 than in the March EFO; and
- the level of **nominal household consumption**, which drives VAT receipts, is over 3 per cent lower in 2015-16 than in the March EFO.

## Inflation

4.16 **CPI inflation** affects the indexation of most tax rates, allowances and thresholds and the uprating of benefits and public sector pensions. Our forecast of CPI inflation is stronger in the short run than at the March EFO due to higher utility prices. **RPI inflation** affects the forecast of interest on index-linked gilts and the revalorisation of excise duties. RPI inflation is lower in the medium-term compared to March due to the impact of lower interest rates on mortgage interest payments.

4.17 The **GDP deflator** is an important determinant for our forecast of total managed expenditure. We expect that annual growth will be 0.2 percentage points lower than in the March EFO from 2013-14 onwards, due to the methodological changes introduced by ONS which are explained in Chapter 2.

## Equity prices

4.18 **Equity prices** are an important determinant of capital gains tax, inheritance tax and stamp duty receipts. They also affect receipts from self assessment income tax and financial corporations.

- 4.19 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 21 November 2011. The lower starting point and weaker forecast for the level of nominal GDP means that equity prices are lower throughout the forecast period than in our March *EFO*.

## Property market

- 4.20 The residential property market is a key driver of receipts from stamp duty land tax and inheritance tax. **Residential property prices** in 2012 are assumed to rise in line with the median of independent forecasts, which is currently lower than the March forecast. From 2013 onwards house prices are expected to rise broadly in line with average earnings, resulting in slower growth than in the March *EFO*.
- 4.21 Our forecast for **residential property transactions** is sluggish in 2011-12 and 2012-13 and weaker than our March forecast due to ongoing credit restrictions. Transaction volumes then pick up slightly more strongly in the second half of the forecast period as we expect credit restrictions to ease and housing transactions to return towards a level consistent with the historical average duration of home ownership. We have increased our forecast of the number of property transactions by an additional 30,000 as a result of the Government's New Build Indemnity scheme.
- 4.22 Our forecast of **commercial property prices** is driven by real GDP and real fixed investment spending by businesses. Both are forecast to follow lower trajectories than in the March *EFO*, particularly in the short-term. **Commercial property transactions** are also forecast to be weaker in the near term than we expected at the March Budget.

## Oil and gas sector

- 4.23 **Oil prices** are assumed to move in line with the prices implied by futures markets as of 21 November 2011. Oil prices are lower since the March forecast with prices in this forecast expected to be \$6.7 per barrel lower in 2012 and \$13.1 per barrel lower by 2015. In sterling prices this fall is partially offset by a slightly stronger sterling-US dollar exchange rate.
- 4.24 We have amended our assumptions on **gas prices** since our last forecast so that they increase up to 2015 and then follow the trend in oil prices from there onwards. The near-term rise in gas prices reverses some of the decoupling from the oil price in 2009 and results in higher prices than the March forecast. However, gas prices then follow the weaker trend in oil prices and are expected to be 4.7 pence per therm lower by 2015-16 than the March forecast.

- 4.25 **Oil and gas production** uses the detailed central projections published by the Department of Energy and Climate Change (DECC). New data consistent with DECC's September 2011 production projections suggest that both oil and gas production will be lower throughout the forecast period than we thought at the March Budget. This reduces our forecasts of offshore corporation tax and petroleum revenue tax receipts.

### Interest rates

- 4.26 **Short-term interest rates** are defined as the 3 month sterling interbank rate (LIBOR). Our forecast uses the average rates for the ten working days ending 21 November 2011. At that point the futures curve had fallen by an average of 200 basis points compared to March. Market expectations for the LIBOR in 2015 are currently 2.1 per cent compared to 4.4 per cent at the March forecast.
- 4.27 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 21 November 2011. The futures curve has fallen by an average of around 170 basis points compared to market expectations at the time of the March *EFO*.
- 4.28 Interest rates have an important and multifaceted impact on the components of public sector receipts and expenditure. Box 4.1 provides some further analysis on the overall effect on the public sector finances of the lower interest rates we are now assuming.

### Box 4.1: Impact of interest rates on the public finances

Since the March *EFO* short term interest rates have fallen significantly, by an average of 200 basis points over the forecast period. This reflects the weaker outlook for the global economy, leading to market expectations that monetary authorities will keep interest rates lower for longer than we previously assumed. The fall in short-term interest rates has also fed through to longer-term interest rates, with gilt rates down an average of 170 basis points over the forecast period. In part this is also likely to reflect market perceptions that UK gilts are currently low risk relative to many euro area countries. Downward pressure on gilt rates may also have resulted from recent volatility in equity markets, which may have encouraged investors to hold safer assets.

Lower short and long-term interest rates make it cheaper for the Government to rollover its existing debt and issue new debt. As Table A shows, in this *EFO* we forecast that the lower paths of short and long-term interest rates reduce debt interest payments by £11 billion in 2015-16 compared to the March *EFO*.

However, the total impact on the public sector finances also depends on how lower interest rates affect receipts. Lower interest rates have direct effects on the incomes of individuals and corporations and therefore on government receipts. Compared to the March *EFO* we forecast that in 2015-16 as a result of lower interest rates:

- income tax receipts from self assessment saving income will be lower by £1.6 billion;
- income tax receipts relating to the tax deducted scheme for interest (TDSI) will be lower by £2.4 billion;
- corporation tax paid by businesses on their interest income will be lower by £0.6 billion; and
- interest earned by central and local government on their reserves and holdings of financial assets will be lower by £2.3 billion.

The total direct impact of lower interest rates in our forecast is to reduce receipts by £6.9 billion in 2015-16. The net improvement in the public finances as a result of lower interest rates since March is therefore £4.4 billion by 2015-16, around 60 per cent less than the improvement implied by lower debt interest spending alone.

A full assessment of how interest rates affect the public sector finances would also require us to consider indirect effects on receipts and expenditure. Changes in interest rates can significantly affect RPI inflation through their impact on mortgage interest payments (MIPs), and RPI inflation is then used in the uprating of income tax thresholds and allowances, the revalorisation of duty rates and affects the debt interest costs of index-linked gilts. Interest rates also help determine a range of economic variables, such as consumption and investment.



Table A: Effect of change in interest rates on the public finances

	£ billions				
	2011-12	2012-13	Forecast 2013-14	2014-15	2015-16
<b>Direct impact on debt interest payments<sup>1</sup></b>	<b>-0.6</b>	<b>-3.9</b>	<b>-7.2</b>	<b>-9.5</b>	<b>-11.2</b>
<i>of which:</i>					
Gilt rates	-0.2	-2.5	-5.1	-7.3	-9.0
Short rates	-0.4	-1.5	-2.1	-2.2	-2.2
<b>Direct impact on receipts</b>	<b>-1.2</b>	<b>-4.0</b>	<b>-6.0</b>	<b>-6.7</b>	<b>-6.9</b>
<i>of which:</i>					
Self assessment income tax on saving	-0.3	-0.7	-1.2	-1.5	-1.6
Tax deducted scheme for interest (TDSI)	-0.7	-1.7	-2.3	-2.4	-2.4
Corporation tax	-0.1	-0.4	-0.5	-0.6	-0.6
Government interest receipts	-0.2	-1.2	-2.0	-2.2	-2.3
<b>Net impact on PSNB<sup>2</sup></b>	<b>0.6</b>	<b>0.1</b>	<b>-1.1</b>	<b>-2.8</b>	<b>-4.4</b>

1. Not including any reductions in interest payments by National Savings and Investments.

2. A negative number indicates an improvement in PSNB

## Effect of new policy announcements and policy risks

4.29 The Government publishes estimates of the direct impact of policy decisions on the public finances. The OBR provides independent scrutiny and certification of these costings and explains if it agrees with them. We are also responsible for determining any indirect effects of policy measures on the economic forecast, which are discussed in Box 3.2 in Chapter 3. The OBR also notes significant policy proposals that are not quantifiable at the current time as fiscal risks.

### Direct effect of new policy announcements on the public finances

4.30 Annex A reproduces the Treasury's table of the direct effect on PSNB of policy decisions in the Autumn Statement 2011 or announced since March. The OBR has endorsed all of the tax and AME expenditure costings in the scorecard as being reasonable and central estimates. As we explain in more detail in our annex to the Treasury's *Autumn Statement 2011 policy costings* document, a number of these costings are highly uncertain, in particular the announcements on VAT cost sharing, the ring-fenced expenditure supplement, the Seed Enterprise Investment Scheme CGT holiday and business rates deferral.

4.31 Table 4.5 summarises the Treasury's policy costings table. The overall direct effect of measures on PSNB is broadly neutral to 2014-15, and then represents a fiscal tightening of £8.3 billion in 2015-16 and £15.1 billion in 2016-17.

- 4.32 The fiscal tightening in the final two years is a result of the Government's announcement that total public spending will fall by 0.9 per cent a year in real terms in 2015-16 and 2016-17, and that public sector gross investment will be flat in real terms in 2015-16 and 2016-17.<sup>4</sup> This results in the reductions in total and current (non-investment) expenditure in these years shown in Table 4.5. The costings in Table 4.5 are estimated against an 'unchanged policy' baseline that assumes that the freeze in real total public spending growth previously announced for 2015-16 is rolled forward into 2016-17.
- 4.33 Changes to expenditure and receipts are both broadly neutral up to 2014-15:
- within receipts the main changes are the fuel duty announcement, which leads to lower revenue, and the measure on asset-backed pension contributions which increases corporation tax receipts; and
  - within expenditure the main changes are additional investment expenditure up to 2014-15, and lower current expenditure, mainly due to additional public sector pay restraint and a reduction in the value of tax credit payments.
- 4.34 Table 4.5 also shows the impact of policy announcements classified in the National Accounts as financial transactions. These do not affect PSNB, but do affect the central government net cash requirement and PSND. The sale of Northern Rock announced on 17 November reduces PSND in 2011-12 by £0.7 billion. The Business Finance Partnership increases PSND in the years to 2015-16. The National Loan Guarantee Scheme, which was also announced in the Autumn Statement, does not affect PSND but will create a contingent liability for the Government of up to £20 billion.

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<sup>4</sup> The Treasury has calculated these growth rate assumptions from a baseline in 2014-15 which excludes additional investment expenditure announced in the Autumn Statement. In full, the Treasury's stated policy assumption for 2015-16 and 2016-17 is: "Total Managed Expenditure will fall by 0.9 per cent in real terms, the same growth rate as in the 2010 Spending Review period, with a baseline excluding the one-off investments in infrastructure announced today".

Table 4.5: Summary of Treasury table of new policy measures

	£ billion					
	Outturn		Forecast			
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Effect of receipts measures	0.0	-0.3	0.1	0.1	0.0	0.0
of which:						
Fuel duty	-0.4	-1.0	-0.8	-0.9	-0.9	-0.9
Onshore corporation tax	0.3	0.5	0.5	0.5	0.5	0.5
Other	0.0	0.2	0.5	0.5	0.4	0.4
Effect of expenditure measures <sup>1</sup>	0.0	0.2	-0.3	0.1	8.3	15.1
of which:						
Current DEL	0.0	-0.2	0.2	0.8	7.4	14.2
Current AME	0.0	1.0	1.0	0.9	0.9	0.9
Capital DEL	0.0	-0.7	-1.5	-1.6	0.0	0.0
<b>Total direct effect of policy measures on PSNB</b>	<b>0.0</b>	<b>-0.1</b>	<b>-0.1</b>	<b>0.2</b>	<b>8.3</b>	<b>15.1</b>
<b>Total direct effect of policy measures on current balance</b>	<b>0.0</b>	<b>0.6</b>	<b>1.3</b>	<b>1.9</b>	<b>8.3</b>	<b>15.1</b>
Financial transactions	0.7	0.5	0.6	0.3	0.0	-0.1
of which:						
Business Finance Partnership	0.0	0.2	0.4	0.4	0.1	0.0
Get Britain Building	0.0	0.3	0.2	-0.1	-0.1	-0.1
Northern Rock	0.7	0.1	0.0	0.0	0.0	0.0

<sup>1</sup> Expenditure categories are equivalent to PSCE in RDEL, PSCE in AME and PSGI in CDEL in Table 4.18

Note: This uses the Treasury convention that a positive figure means an improvement in the PSNB

## Policy fiscal risks

4.35 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's intention, announced to Parliament in June, to take on the **Royal Mail's historic pension deficit**. There is significant uncertainty over the timing, nature and size of the corresponding transactions, with the proposal still subject to state aid discussions. However, there are potentially very large fiscal implications, for example PSNB may be reduced by around £25 billion in the year the transaction takes place. This is discussed in Box 4.2. While the effect on some fiscal aggregates would be large, they would not have a significant effect on the Government's chances of hitting its fiscal targets;
- the *Coalition Agreement* stated that the Government has a long-term objective to support lower and middle income earners by raising the **personal allowance** to £10,000. The Treasury has previously confirmed that no commitment has been made regarding the progress to be achieved over

our forecast horizon, which means we cannot include it in our central projection. The impact of further increases would depend on their timing and the outlook for inflation, among other things;

- the **UK-Switzerland tax deal** announced on 24 August, which is not included in the central projection as it is subject to ratification by the Swiss Parliament and a possible referendum. HMRC and Ministers have stated that the yield from this policy is in the range of £4 to £7 billion. We have not certified this costing. Our initial discussions with HMRC suggest there are significant uncertainties (in particular over the amount of UK funds in Switzerland that would be subject to the deal and the assumed level of compliance) and we currently judge that the yield is likely to be towards the lower end of the range. We will consider the available evidence further for the final costing; 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. Annex A of our July *Fiscal sustainability report (FSR)* provided a detailed discussion of the potential impact of asset sales on the public finances. Since then, the Government has announced the sale of Northern Rock and the Tote which we have included in our central fiscal forecast. No other substantive announcements have been made since the *FSR* that would allow us to quantify the effects of other proposed sales with reasonable accuracy.

4.36 It should be noted that there are both upside and downside risks to the forecast from these policy risks. The personal allowance commitment would lead to lower tax receipts while the UK-Swiss deal could potentially increase receipts. The Royal Mail transfer and certain financial asset sales 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 4.3, the sale of the public sector banks would lead to a significant loss to the taxpayer.

#### Box 4.2: Implications of transferring the historic deficit of Royal Mail's pension fund to the public sector

The Government announced in June that it intends to take on Royal Mail's historic pension deficit with effect from April 2012 and also restructure the company's balance sheet. This support is conditional on state aid approval.

Under the proposals, the Government would take over the pension liabilities accrued up to March 2012 and a share of the pension fund's assets, leaving behind a fully funded pension scheme. The Treasury estimates the value of the assets being transferred at around £25 billion, with the present value of the liabilities around £35 billion. The assets would largely be transferred to the Government immediately. The liabilities would crystallise over time in the form of payments to pensioners as current employees retire and existing pensioners continue to draw down their pensions.

It is likely that in the National Accounts the initial transfer of assets would be treated as a capital grant from the private to the public sector. The liabilities would be treated as a contingent liability which would not affect the National Accounts but would feature in the Whole of Government Accounts. Although it remains dependent on the final amount and breakdown of the assets and liabilities transferred, the Treasury's provisional estimates are that:

- the central government net cash requirement (CGNCR) would be reduced by around £2 billion, reflecting the cash transferred. There would be no immediate impact on the CGNCR from the transfer of other assets;
- the transfer of assets in the form of cash and gilts held by the fund could reduce PSND by around £10 billion in the fiscal year in which the transfer is made;
- if sold, the remaining assets would decrease the CGNCR and PSND further;
- PSNB would be reduced by the total value of the assets transferred of around £25 billion in the year that the transaction takes place;
- interest and dividend income from the assets or from the proceeds from these assets will reduce PSNB by between £0.8 to £1 billion each year; and
- payments will raise public sector expenditure and PSNB over time, by between £1 and £1.4 billion in each year of the forecast period.

The immediate impact on the public finances would appear to be significantly beneficial. But the net effect over the long term would probably be negative as the current present value of the pension fund's liabilities significantly exceeds the current present value of its assets.

### Box 4.3: Fiscal impact of the financial interventions

In past reports, we have certified the Treasury's approach for calculating the overall direct net cost or benefit to the taxpayer of the interventions to stabilise the financial sector. This is highly uncertain and will depend in large part on the eventual sale price for the Government's shareholdings in RBS and LBG, which it is not possible to predict with any confidence.

The Treasury's approach therefore uses market prices to value these shares. On the basis of the latest volume weighted average market prices this implies a loss of £30.6 billion on these investments. With RBS shares falling by around 19p per share (45 per cent) since Budget and LBG shares also falling by around 31p per share (51 per cent), this is significantly larger than the implied £1.6 billion loss reported in the March *EFO*.

The Treasury then uses the Asset Protection Agency's central projection of a net benefit to the taxpayer from the Asset Protection Scheme of £5 billion, including fee income. The aggregate costs of all other interventions are not expected to be material once fees, income and recoveries are taken into account. Overall, this implies an estimated eventual loss to the taxpayer of £25.6 billion, contrasting to the estimate at the time of the March *EFO* of a £3.4 billion gain.

This provides an estimate of the direct cost of interventions. In the past the Treasury has not provided an estimate of the additional costs of financing the funds raised to support the interventions. We have now asked the Treasury to produce this estimate, in line with the recommendation of the Public Accounts Committee. It is not possible to provide a precise estimate of these costs, as no gilt auction proceeds were directly hypothecated to cover these activities. However, by capturing all of the relevant flows and making a number of reasonable assumptions, the Treasury estimates that these have amounted to £12.8 billion to date, spanning a 39 month period.

These figures do not however represent the potential impact on our fiscal forecast. That is because some of the costs and benefits have already been recognised, including all of the financing costs and some offsetting income. We also include additional fees and interest income in our forecasts, where these are quantifiable with a reasonable degree of accuracy. Any sale of shares in RBS or Lloyds would have an impact on public sector net debt. In addition, we have recognised proceeds from the sale announced on 17 November of Northern Rock plc, although the total benefit or loss of that particular intervention will not be clear for a number of years, as the Government will retain and run down Northern Rock Asset Management.

## Public sector receipts

- 4.37 Our central forecasts for current receipts are set out in Table 4.6, which shows the main streams of receipts as a per cent of GDP, and Table 4.7, which provides a detailed breakdown of the forecast by individual taxes and other types of receipts. Table 4.8 shows how the forecast has changed since the March *EFO*.
- 4.38 Total public sector current receipts as a share of GDP are forecast to be stable over the forecast period. Income tax and NIC rise as a share of GDP reflecting policy changes and the effects of ‘fiscal drag’ (more of people’s incomes being taxed at higher rates as earnings rise faster than tax thresholds and allowances) in the later years of the forecast. This is offset by a decline in VAT and excise duties as a share of GDP, largely reflecting our economic forecast that consumption will decline as a share of GDP, and a fall in UK oil and gas receipts as oil and gas production declines over time.

Table 4.6: Major taxes as a percentage of GDP

	Per cent of GDP						
	Outturn 2010-11	2011-12	2012-13	Forecast			
				2013-14	2014-15	2015-16	2016-17
Income tax and NICs	17.0	17.0	16.9	17.0	17.1	17.3	17.5
Value added tax	5.8	6.4	6.4	6.3	6.2	6.2	6.1
Onshore corporation tax	2.4	2.3	2.2	2.1	2.1	2.1	2.2
UK oil and gas receipts	0.6	0.7	0.7	0.6	0.5	0.4	0.4
Fuel duties	1.8	1.8	1.7	1.7	1.7	1.7	1.6
Business rates	1.6	1.6	1.7	1.7	1.7	1.6	1.6
Council tax	1.7	1.7	1.7	1.7	1.6	1.6	1.6
Excise duties	1.3	1.3	1.3	1.3	1.2	1.2	1.2
Capital taxes	1.0	1.1	1.0	1.1	1.2	1.3	1.3
Other taxes	2.5	2.6	2.8	2.8	2.8	2.7	2.6
<b>National Accounts taxes</b>	<b>35.8</b>	<b>36.4</b>	<b>36.2</b>	<b>36.2</b>	<b>36.2</b>	<b>36.0</b>	<b>36.1</b>
Gross operating surplus	1.7	1.6	1.6	1.6	1.6	1.5	1.5
Other receipts	-0.2	-0.2	-0.2	-0.1	0.0	0.1	0.2
<b>Current receipts</b>	<b>37.3</b>	<b>37.8</b>	<b>37.7</b>	<b>37.7</b>	<b>37.7</b>	<b>37.7</b>	<b>37.8</b>

Table 4.7: Current Receipts

	£ billion						
	Outturn 2010-11	2011-12	2012-13	Forecast			
				2013-14	2014-15	2015-16	2016-17
Income tax (gross of tax credits) <sup>1</sup>	153.2	155.5	159.8	170.3	181.7	194.8	208.3
<i>of which: Pay as you earn</i>	130.5	132.1	134.5	142.8	152.7	163.9	175.9
<i>Self assessment</i>	22.1	23.8	25.8	26.7	28.3	30.4	31.7
Tax credits (negative income tax)	-5.5	-4.8	-4.2	-4.3	-4.3	-4.3	-4.2
National insurance contributions	97.7	102.4	106.2	110.6	117.0	124.5	132.4
Value added tax	86.2	97.1	100.2	104.1	108.8	113.6	118.6
Corporation tax <sup>2</sup>	43.0	44.1	43.6	43.1	43.8	44.9	48.6
<i>of which: Onshore</i>	35.7	34.7	34.9	35.3	36.7	38.9	42.3
<i>Offshore</i>	7.3	9.4	8.7	7.8	7.2	6.0	6.3
Corporation tax credits <sup>3</sup>	-0.9	-0.9	-0.9	-1.0	-1.0	-1.0	-1.1
Petroleum revenue tax	1.5	1.8	1.7	1.6	1.5	1.2	1.0
Fuel duties	27.3	27.0	27.3	28.4	29.4	30.7	31.9
Business rates	23.6	24.5	26.3	28.0	29.1	29.5	31.1
Council tax	25.7	25.9	26.1	27.6	28.7	29.8	31.0
VAT refunds	13.3	14.0	14.5	14.5	14.3	13.9	13.6
Capital gains tax	3.6	4.6	4.1	4.4	5.2	6.1	7.0
Inheritance tax	2.7	2.9	2.9	3.0	3.1	3.3	3.5
Stamp duty land tax	6.0	6.0	6.4	7.5	9.0	10.2	11.4
Stamp taxes on shares	3.0	3.0	3.1	3.3	3.5	3.8	4.1
Tobacco duties	9.1	9.6	9.8	10.0	10.1	10.3	10.6
Spirits duties	2.7	2.8	2.9	3.0	3.2	3.3	3.5
Wine duties	3.1	3.3	3.6	3.9	4.2	4.5	4.9
Beer and cider duties	3.7	3.8	3.9	3.9	4.0	4.0	4.1
Air passenger duty	2.2	2.6	2.8	2.9	3.2	3.4	3.8
Insurance premium tax	2.5	2.9	2.9	3.0	3.0	3.1	3.2
Climate Change Levy	0.7	0.7	0.8	1.4	1.8	2.1	2.5
Other HMRC taxes <sup>4</sup>	5.9	6.1	6.4	6.7	7.0	7.2	7.5
Vehicle excise duties	5.8	5.8	5.9	5.9	5.9	5.9	5.9
Temporary bank payroll tax	3.5	0.0	0.0	0.0	0.0	0.0	0.0
Bank levy	0.0	2.1	2.7	2.7	2.8	2.8	2.9
Licence fee receipts	3.1	3.1	3.1	3.2	3.2	3.2	3.2
Environmental levies	0.5	1.7	2.0	2.6	2.9	3.2	3.6
EU ETS Auction Receipts	0.0	0.3	0.7	1.8	1.9	1.9	2.0
Other taxes	6.0	6.4	6.8	6.9	7.4	7.4	7.4
<b>National Accounts taxes</b>	<b>528.9</b>	<b>554.1</b>	<b>571.3</b>	<b>599.0</b>	<b>630.5</b>	<b>663.6</b>	<b>702.4</b>
Less own resources contribution to EU budget	-5.3	-5.3	-5.6	-5.9	-6.2	-6.4	-6.7
Interest and dividends	2.4	3.1	4.2	5.1	6.8	9.0	11.3
Gross operating surplus	25.1	24.4	25.5	26.4	27.4	28.3	29.3
Other receipts	0.2	-0.8	-0.9	-1.0	-1.0	-1.1	-1.1
<b>Current receipts</b>	<b>551.4</b>	<b>575.5</b>	<b>594.4</b>	<b>623.6</b>	<b>657.4</b>	<b>693.5</b>	<b>735.2</b>
<i>Memo:</i>							
UK oil and gas revenues <sup>5</sup>	8.8	11.1	10.5	9.4	8.7	7.2	7.3

<sup>1</sup> Income tax includes PAYE and Self Assessment and also includes tax on savings income and other minor components.

<sup>2</sup> National Accounts measure, gross of enhanced and payable tax credits

<sup>3</sup> Includes enhanced company tax credits

<sup>4</sup> Consists of landfill tax, aggregates levy, betting and gaming duties and customs duties and levies.

<sup>5</sup> 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 4.8: Changes to current receipts since March forecast

	£ billion					
	Outturn 2010-11	2011-12	2012-13	Forecast 2013-14	2014-15	2015-16
Income tax (gross of tax credits) <sup>1</sup>	1.7	-2.1	-5.9	-9.7	-10.4	-9.8
of which: <i>Pay as you earn</i>	1.4	0.2	-1.8	-3.1	-3.4	-3.1
<i>Self assessment</i>	-0.6	-1.6	-2.3	-4.0	-4.2	-3.7
Tax credits (negative income tax)	0.0	-0.1	0.0	0.0	-0.1	-0.1
National insurance contributions	1.3	1.7	0.1	-1.2	-1.6	-1.3
Value added tax	0.2	-3.2	-3.3	-4.0	-3.9	-4.1
Corporation tax <sup>2</sup>	0.4	-5.0	-6.7	-8.6	-9.8	-10.1
of which: <i>Onshore</i>	0.4	-2.9	-4.7	-6.3	-6.7	-6.7
<i>Offshore</i>	-0.1	-2.0	-2.1	-2.3	-3.1	-3.4
Corporation tax credits <sup>3</sup>	0.0	0.0	0.0	0.0	0.0	0.0
Petroleum revenue tax	0.0	-0.3	-0.3	-0.3	-0.3	-0.4
Fuel duties	0.0	0.1	-1.3	-1.6	-1.9	-2.0
Business rates	-0.2	-1.0	-0.9	-0.5	-0.6	-0.6
Council tax	0.0	-0.1	-1.0	-1.2	-1.3	-1.4
VAT refunds	0.1	-1.0	-0.5	-0.2	-0.3	-1.1
Capital gains tax	0.4	1.2	1.2	0.7	0.6	1.0
Inheritance tax	0.0	0.2	0.1	0.1	0.0	0.0
Stamp duty land tax	0.0	0.3	-0.5	-0.9	-0.9	-0.8
Stamp taxes on shares	0.0	-0.3	-0.5	-0.6	-0.7	-0.7
Tobacco duties	0.0	0.2	0.3	0.2	0.2	0.2
Spirits duties	0.0	0.1	0.2	0.2	0.3	0.3
Wine duties	0.0	0.1	0.2	0.2	0.2	0.2
Beer and cider duties	0.0	0.0	0.0	-0.1	-0.2	-0.4
Air passenger duty	0.0	0.1	-0.1	-0.2	-0.1	-0.2
Insurance premium tax	0.0	0.0	0.0	-0.1	-0.1	-0.1
Climate Change levy	0.0	-0.1	0.1	0.0	0.1	0.1
Other HMRC taxes <sup>4</sup>	-0.1	-0.3	-0.2	-0.2	-0.2	-0.2
Vehicle excise duties	0.1	-0.1	-0.1	-0.2	-0.3	-0.3
Temporary bank payroll tax	0.0	0.0	0.0	0.0	0.0	0.0
Bank levy	0.0	0.2	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	-0.1	-0.1	-0.1	-0.3	-0.5	-0.7
EU ETS Auction Receipts	-0.4	0.0	0.0	-0.2	-0.3	-0.3
Other taxes	0.6	1.1	0.7	0.4	0.6	0.5
<b>National Accounts taxes</b>	<b>3.6</b>	<b>-8.4</b>	<b>-18.5</b>	<b>-28.2</b>	<b>-31.2</b>	<b>-32.1</b>
Less own resources contribution to EU budget	-0.5	-0.4	-0.6	-0.8	-0.8	-0.9
Interest and dividends	-0.9	-2.1	-3.6	-4.9	-5.0	-4.8
Gross operating surplus	0.6	-1.4	-1.6	-1.9	-2.1	-2.4
Other receipts	0.0	-0.9	-0.9	-0.9	-0.9	-0.9
<b>Current receipts</b>	<b>2.9</b>	<b>-13.1</b>	<b>-25.3</b>	<b>-36.7</b>	<b>-40.0</b>	<b>-41.0</b>
Memo:						
UK oil and gas revenues <sup>5</sup>	0.0	-2.3	-2.4	-2.5	-3.4	-3.9

<sup>1</sup> Income tax includes PAYE and Self Assessment receipts, and also includes tax on savings income and other minor income tax

<sup>2</sup> National Accounts measure, gross of enhanced and payable tax credits

<sup>3</sup> Includes enhanced company tax credits

<sup>4</sup> Consists of landfill tax, aggregates levy, betting and gaming duties and customs duties and levies.

<sup>5</sup> Consists of offshore corporation tax and petroleum revenue tax.

## Overall change in the receipts forecast

4.39 There is a significant deterioration in our forecast of public sector receipts compared to the March *EFO*. Current receipts in 2011-12 are expected to be £13.1 billion lower than the March forecast, and £41 billion lower by 2015-16. Table 4.9 shows the key drivers of this split by changes due to economic factors, market determinants and other factors. The key drivers are:

- lower forecast growth in the key economic determinants of tax receipts – labour income, household consumption and company profits – which feed through to lower forecasts for income tax, VAT and corporation tax;
- falls in oil prices, equity prices and interest rates compared to March, leading to lower oil and gas revenues, stamp duty, and interest receipts;
- the sharp fall in financial sector corporation tax receipts seen so far this year, which we assume is not recovered over the forecast period; and
- other changes which reduce receipts in the medium-term include lower profits from public corporations reflecting the weaker outlook for the economy, and further non-determinant driven falls in VAT. The relative strength of receipts so far this year increases our forecast in 2011-12 by £4 billion compared to that implied by weaker economic determinants.

4.40 In subsequent sections we explain these changes in more detail on a tax by tax basis. Before doing this we consider the latest outturn data on receipts in 2011-12, which provides the starting point for our forecast.

Table 4.9: Change to the receipts forecast compared to March

	£ billion				
	2011-12	2012-13	Forecast 2013-14	2014-15	2015-16
March forecast	588.6	619.7	660.3	697.5	734.5
November forecast	575.5	594.4	623.6	657.4	693.5
<b>Total Change in Receipts</b>	<b>-13.1</b>	<b>-25.3</b>	<b>-36.7</b>	<b>-40.0</b>	<b>-41.0</b>
<i>of which:</i>					
<b>Income determinants</b>	<b>-4.9</b>	<b>-9.6</b>	<b>-15.2</b>	<b>-16.5</b>	<b>-16.1</b>
Wages and salaries	-0.1	-2.7	-5.3	-6.2	-6.1
Industrial and commercial profits	-2.3	-3.0	-4.6	-5.0	-4.6
Financial sector profits and bonuses	-2.4	-3.1	-3.6	-3.3	-3.7
Other income	-0.2	-0.8	-1.7	-2.0	-1.7
<b>Expenditure determinants</b>	<b>-1.8</b>	<b>-1.9</b>	<b>-3.1</b>	<b>-2.9</b>	<b>-2.8</b>
Household consumption	-2.1	-2.3	-2.9	-3.0	-2.9
Fixed investment	-0.1	0.8	0.8	1.2	1.6
Other expenditure	0.3	-0.5	-1.0	-1.2	-1.6
<b>Market assumptions</b>	<b>-4.5</b>	<b>-8.9</b>	<b>-12.4</b>	<b>-14.3</b>	<b>-14.8</b>
Equity markets	-0.6	-2.0	-2.6	-2.9	-3.2
Commercial property market	-0.2	-0.2	-0.4	-0.4	-0.4
Residential property market	0.1	-0.5	-1.0	-1.0	-1.0
Oil and gas prices	0.1	-0.7	-0.8	-1.4	-1.8
North sea production (and expenditure)	-2.7	-1.4	-1.6	-1.9	-1.5
Interest rates	-1.2	-4.0	-6.0	-6.7	-6.9
<b>RPI inflation</b>	<b>0.0</b>	<b>-0.6</b>	<b>-0.8</b>	<b>-0.8</b>	<b>-0.5</b>
<b>Other assumptions</b>	<b>-1.9</b>	<b>-4.0</b>	<b>-5.3</b>	<b>-5.6</b>	<b>-7.0</b>
VAT refunds	-1.0	-0.5	-0.2	-0.3	-1.1
VAT residual	-2.6	-1.6	-1.5	-1.6	-1.7
Public sector gross operating surplus	-1.4	-1.6	-1.9	-2.1	-2.4
Mobile phone accruals	-1.0	-1.0	-1.0	-1.0	-1.0
Other	4.1	0.6	-0.7	-0.6	-0.8
<b>Autumn Statement measures</b>	<b>0.0</b>	<b>-0.3</b>	<b>0.1</b>	<b>0.1</b>	<b>0.0</b>

## Public sector current receipts in 2011-12

- 4.41 Growth in National Accounts taxes in the first half of 2011-12 was 5 per cent, driven primarily by the growth in VAT receipts, due to the rise in the standard rate of VAT to 20 per cent in January 2012. Year-on-year growth in the first half of the financial year has been suppressed by the different timings of the bank payroll tax and the bank levy. The bank payroll tax was not repeated this year and scored in April of last year. The bank levy is boosting receipts from July 2011 onwards. Relative to our March EFO forecast, receipts from corporation tax so far this year have been much weaker than expected. This primarily reflects lower payments from financial firms and oil producers.
- 4.42 The forecast assumes that growth in National Accounts taxes in the second half of 2011-12 will only be slightly slower than in the first half. Some of this reflects the timing issue on bank taxes, but receipts growth is likely to be boosted by rises in self assessment income tax and capital gains tax which relate to activity in 2010-11. Partly offsetting this, the forecast assumes slower growth in VAT receipts as

the effect of the rise in the standard rate of VAT falls out of the annual comparison in the final three months of 2011-12 and also the impact from subdued consumer spending. PAYE receipts are also likely to be affected in the final months of the year by a fall in financial sector bonuses.

Table 4.10: Receipts in 2011-12

	£ billion			Percentage change on 2010-11		
	Outturn	Forecast		Outturn	Forecast	
	Apr-Sep	Oct-Mar	Full Year	Apr-Sep	Oct-Mar	Full Year
Income tax, NIC and capital gains tax	117.2	140.4	257.6	4.7	3.7	4.1
Value added tax	49.0	48.1	97.1	18.8	6.8	12.5
Corporation tax	18.9	25.2	44.1	2.5	6.3	4.6
Petroleum revenue tax	1.0	0.7	1.8	38.2	2.9	20.7
Fuel duties	13.6	13.5	27.0	-1.5	-0.2	-0.9
Inheritance tax	1.5	1.4	2.9	10.1	5.9	8.0
Stamp duties	4.6	4.4	9.0	-1.2	3.6	1.1
Tobacco duties	4.8	4.8	9.6	3.9	5.6	4.8
Alcohol duties	4.7	5.1	9.9	5.5	4.3	4.8
Business rates	12.0	12.5	24.5	1.4	6.0	3.7
Council tax	12.9	13.0	25.9	0.6	0.7	0.7
Other	22.4	22.3	44.8	-7.5	8.1	-0.3
<b>National Accounts taxes</b>	<b>262.7</b>	<b>291.4</b>	<b>554.1</b>	<b>5.0</b>	<b>4.6</b>	<b>4.8</b>

Note: Table is for first six months of the financial year due to the unavailability of some data on a monthly basis.

## Tax by tax analysis

### Income tax and NIC

- 4.43 Combined income tax and NIC receipts are expected to be around £0.5 billion below the March forecast in 2011-12. This largely reflects downward revisions to the forecast for self assessment receipts and tax on savings income. The shortfall compared to March then grows so that by 2015-16 receipts are £11.2 billion lower. Much of this reflects our weaker labour income forecast and a lower path for short-term interest rates, which feeds into saving income. Table 4.11 sets out the key changes to income tax and NIC receipts since the March forecast.
- 4.44 PAYE and NIC receipts from employment income have grown more strongly than would have been expected on the basis of our March forecast in the first seven months of 2011-12. While employment and earnings growth have been broadly in line with the March forecast, receipts growth has been strongest in the financial and business services sectors, where salaries are higher than average, leading to an increase in the effective tax rate.
- 4.45 However, PAYE and NIC receipts from the financial sector in the remainder of the year are expected to be significantly weaker. This is consistent with recently announced job losses and recruitment freezes in the sector and lower reported profits this year. This partly unwinds the unexpected strength in PAYE and NIC

receipts in the first half of 2011-12. The forecast assumes a 20 per cent fall in the cash value of financial sector bonuses in 2011-12, compared with an assumption of a 9 per cent increase in March.

- 4.46 Because the majority of bonuses are usually paid in February and March, with HMRC receiving related tax and NIC in March and April, this estimate is still particularly uncertain. It is also difficult to predict the possible impact of deferred bonus schemes and any possible substitution of bonus for base pay. For the remainder of the forecast period financial sector bonuses are expected to follow the path of financial company profits which are lower than in the March *EFO*.
- 4.47 With the labour market forecast to weaken in 2012 and earnings expected to remain subdued for longer than previously assumed, PAYE and NIC receipts show a deterioration relative to the March forecast in each year from 2012-13. Lower labour income growth takes over £6 billion off the forecast by 2015-16. Other economic determinants add £0.8 billion to receipts in 2015-16 relative to the March *EFO* due to our lower forecast of RPI generating higher fiscal drag.
- 4.48 Our income tax forecast incorporates the announced rise in the personal allowance to £8,105 in 2012-13. We estimate that if the personal allowance continues to be uprated by RPI it will have reached £9,215 by the end of the forecast period in 2016-17.
- 4.49 The final payments of 2010-11 self assessment (SA) liabilities are due at the end of January 2012. The level of these payments is particularly uncertain this year because they will, for the first time, include the direct effects of the 50p tax rate for incomes over £150,000. However the impact of the new tax rate will be affected by the forestalling that appears to have increased SA receipts in January 2011. Detailed data derived from 2009-10 SA returns that became available this summer indicates that this forestalling was higher than anticipated, especially in respect of dividend payments. HMRC have also reallocated outturn receipts from income tax to capital gains tax and class 4 NIC.
- 4.50 Overall these changes lead to a reduction of £1.6 billion in 2011-12 SA receipts relative to the March *EFO*. The shortfall rises to £3.7 billion by 2015-16, due to the effect of the lower interest rates and company profits in our latest forecast on saving and dividend income, and weaker growth in self-employment income.
- 4.51 The new forecast for the tax deducted scheme for interest (TDSI) is considerably lower than at the March forecast due to lower expected interest rates in all years.

Table 4.11: Key changes to income tax and NICs since March forecast

	£ billion				
	2011-12	2012-13	2013-14	2014-15	2015-16
March forecast	253.5	267.6	287.5	306.5	326.2
November forecast	253.0	261.8	276.6	294.4	314.9
<b>Change</b>	<b>-0.5</b>	<b>-5.8</b>	<b>-10.9</b>	<b>-12.1</b>	<b>-11.2</b>
<i>of which: (by source)</i>					
PAYE income tax and Class 1 NIC	1.8	-1.8	-4.4	-5.1	-4.6
Self-assessment income tax (SA)	-1.6	-2.3	-4.0	-4.2	-3.7
Tax deducted scheme for interest (TDSI)	-0.9	-2.0	-2.6	-2.9	-3.2
Other income tax and NIC	0.2	0.3	0.1	0.1	0.2
<i>of which: (by economic determinant)</i>					
Wages and salaries	-0.1	-2.7	-5.3	-6.2	-6.1
Financial sector profits and bonuses	-0.2	-0.3	-0.3	-0.3	-0.4
Self-employment income	-0.3	0.0	-0.4	-0.7	-0.7
Dividend income	-0.3	-1.0	-1.0	-1.1	-1.1
Interest rates	-0.9	-2.4	-3.5	-3.9	-4.0
Other economic determinants	0.1	0.0	-0.8	-0.2	0.8
Non-determinant changes	1.3	0.5	0.3	0.1	0.2

### Value added tax

- 4.52 Accrued VAT receipts in the first half of 2010-11 are 18.8 per cent higher than in the same period a year before, mainly reflecting the rise in the standard rate of VAT to 20 per cent at the start of 2011. Year-on-year growth will slow sharply as the VAT rise falls out of the annual comparison in the final three months of the financial year. Even without the effect of the rate rise, VAT receipts have held up in the first half of the year despite weaker than expected growth in nominal consumer spending. We judge that this is a temporary effect and with consumer spending expected to remain subdued over the rest of the financial year, our forecast assumes that VAT receipts weaken.
- 4.53 Table 4.12 presents the key changes to the VAT forecast since the March *EFO*. Growth in nominal consumer spending is markedly weaker in both 2012 and 2013 than assumed in the March *EFO*, which explains over half of the £4.1 billion shortfall by 2015-16.
- 4.54 Major revisions to ONS data for the consumer and exempt sectors have led to a downward revision in the estimate of the VAT theoretical tax liability. This implies that the VAT gap – which is the difference between the VAT theoretical tax liability and actual receipts – is smaller for a given level of receipts. The latest estimate of the VAT gap in 2010-11 is 9.7 per cent, over 2 percentage points lower than the

estimate used in the March *EFO*.<sup>5</sup> Our judgment is that the VAT gap should remain broadly flat at its 2010-11 level throughout the forecast period, which is a similar assumption to that used in the March *EFO*. The residual line in Table 4.12 reflects the adjustment in the model required to generate a flat VAT gap assumption.

- 4.55 A key assumption for the VAT forecast is the household standard rated share (SRS), which reflects the proportion of consumer spending which is subject to the standard rate of VAT. The SRS share for 2012-13 to 2014-15 is slightly lower than in our March forecast because of lower consumer spending on items such as durable goods, new cars and road fuel. In contrast, the share of spending on reduced-rated items is higher because of the recent increase in gas and electricity prices.

Table 4.12: Key changes to VAT since March forecast

	£ billion				
	2011-12	2012-13	Forecast		
			2013-14	2014-15	2015-16
March forecast	100.3	103.5	108.1	112.8	117.8
November forecast	97.1	100.2	104.1	108.8	113.6
<b>Change</b>	<b>-3.2</b>	<b>-3.3</b>	<b>-4.0</b>	<b>-3.9</b>	<b>-4.1</b>
<i>of which:</i>					
Nominal household consumption	-1.8	-1.8	-2.3	-2.4	-2.3
Other expenditure	0.4	0.1	-0.3	-0.3	-0.6
Standard rated share (SRS)	0.0	-0.4	-0.3	0.0	0.0
Reduced rated share (RRS)	0.5	0.3	0.4	0.4	0.5
Litigation	0.3	0.0	0.0	0.0	0.0
Residual	-2.6	-1.6	-1.5	-1.6	-1.7

### Corporation tax

- 4.56 For most of the forecast period we judge that corporation tax receipts will grow less quickly than private sector profits. This is because of the staggered reduction in corporation tax rates to 23 per cent by 2014, other measures such as the Patent Box, and the continued high use of losses to offset against future profits, particularly in the financial sector. Towards the end of the forecast period these factors become less significant leading to more rapid growth in corporation tax receipts.

<sup>5</sup> HMRC's latest estimate of the VAT gap is published online at [www.hmrc.gov.uk/the-library/national-statistics.htm](http://www.hmrc.gov.uk/the-library/national-statistics.htm)

## Fiscal outlook

- 4.57 Compared to the March forecast, onshore corporation tax receipts are expected to be £2.9 billion lower in 2011-12 with the shortfall growing to £6.7 billion by 2015-16. Table 4.13 sets out the key factors accounting for the weaker outlook.
- 4.58 Profits from the industrial and commercial sector are expected to weaken considerably compared to the March *EFO* and are the main contributing factor to lower corporation tax receipts in the later years of the forecast. This is partly offset by weaker investment spending leading to lower capital allowance claims.
- 4.59 Weaker receipts from the financial sector are the main reason for lower than expected onshore corporation tax receipts so far this year. Total receipts for the first seven months of the financial year are around 20 per cent lower than in the same period of last year. We now expect a £2.5 billion shortfall in receipts from the financial sector against our March forecast over the whole of 2011-12. This shortfall persists through the forecast period and increases to £3.8 billion by 2015-16 due partly to the lower path for financial sector profits. This means that financial sector corporation tax is forecast to yield less than two-thirds of its 2006-07 peak revenue by the end of the forecast period in 2016-17.
- 4.60 New policy measures announced in the Autumn Statement add around £0.5 billion per year to receipts, mainly from higher employer asset-backed pension contributions. The non-determinant changes to our forecast partly reflect changes to in-year receipts and our assumption on the amount of tax that is overpaid in each financial year, which leads to a change in the expected profile of receipts.

Table 4.13: Key changes to onshore corporation tax since March forecast

	£ billion				
	Forecast				
	2011-12	2012-13	2013-14	2014-15	2015-16
March forecast	37.6	39.5	41.6	43.4	45.6
November forecast	34.7	34.9	35.3	36.7	38.9
<b>Change</b>	<b>-2.9</b>	<b>-4.7</b>	<b>-6.3</b>	<b>-6.7</b>	<b>-6.7</b>
<i>of which: (by sector)</i>					
Industrial and commercial corporations (ICC)	-0.2	-1.1	-2.4	-2.8	-2.5
Financial corporations	-2.5	-3.1	-3.4	-3.6	-3.8
Life insurance	-0.2	-0.4	-0.4	-0.4	-0.4
<i>of which: (by economic determinant)</i>					
ICC profits and receipts	-1.0	-2.7	-4.6	-4.8	-4.5
ICC investment	0.2	0.5	0.7	1.0	1.2
Financial sector profits and receipts	-2.0	-2.7	-3.1	-2.9	-3.1
Other economic determinants	-0.1	-0.6	-0.8	-0.8	-0.7
Policy measures	0.3	0.5	0.5	0.5	0.5
Non-determinant changes	-0.4	0.3	1.0	0.3	-0.1



## UK oil and gas revenues

- 4.61 In the March *EFO* it was assumed that UK oil and gas revenues would rise by 50 per cent in 2011-12 as buoyant oil prices were combined with the rise in the supplementary charge announced in Budget 2011. However, weak instalment payments in both July and October of this year have led us to revise receipts for 2011-12 down by £2.3 billion since the March *EFO*. The lower forecast in 2011-12 largely reflects significantly lower than expected offshore production and higher expenditure. The weaker outlook continues to reduce revenues through the forecast period with receipts falling by £3.9 billion in 2015-16 relative to the March forecast. Table 4.14 sets out the main changes to our forecast since the March *EFO*.

Table 4.14: Key changes to oil and gas revenues since March forecast

	£ billion				
	2011-12	2012-13	2013-14	2014-15	2015-16
March forecast	13.4	12.8	11.9	12.1	11.070
November forecast	11.1	10.5	9.4	8.7	7.220
<b>Change</b>	<b>-2.3</b>	<b>-2.4</b>	<b>-2.5</b>	<b>-3.4</b>	<b>-3.9</b>
<i>of which:</i>					
Production and expenditure	-2.7	-1.4	-1.6	-1.9	-1.5
Oil prices	-0.3	-0.9	-1.1	-1.4	-1.7
Gas prices	0.4	0.3	0.3	0.0	-0.2
Other factors	0.3	-0.3	-0.2	-0.2	-0.5

## Fuel duties

- 4.62 Fuel duties are expected to be £0.1 billion higher in 2011-12 than expected in the March *EFO*. This reflects stronger than expected receipts so far this year and the announcement in the Autumn Statement delaying the 3 pence per litre rise expected in January 2012 until August 2012. This delay and the cancellation of the 2 pence per litre rise assumed for August 2012 reduces fuel duty by just under £1 billion in each year from 2012-13. In addition, weaker GDP reduces the demand for fuel and the lower path of RPI will reduce revalorisation of duties in future years. By 2015-16 fuel duties are around £2 billion lower than in our March forecast.

## Taxes on capital

- 4.63 **Capital gains tax (CGT)** receipts are very volatile. They fell from £7.9 billion in 2008-09 to £2.5 billion in 2009-10, and then grew by 45 per cent to £3.6 billion in 2010-11. We expect further growth of 25 per cent in 2011-12. Around three-quarters of CGT chargeable gains are on financial assets. CGT is paid in the final quarter of the financial year following the year in which the gains were realised, so this rise in receipts reflects higher equity prices during 2010-11.

- 4.64 CGT is very difficult to forecast because receipts depend on individual decisions about which assets to sell and when. There have been extra complications in recent years because of the number and variety of tax regime changes. HMRC's CGT forecasting model has been updated to reflect latest data, and the changes have increased the sensitivity of CGT receipts to equity price rises. But CGT receipts are expected to be above the March *EFO* forecast throughout the projection period despite the lower outlook for equity prices. The CGT element of 2010-11 self assessment receipts was higher than assumed in the March *EFO* and the higher baseline increases CGT receipts in all future years.
- 4.65 **Inheritance tax** receipts are mainly determined by the value of estates which, in turn, are largely driven by equity prices, residential property prices and the stock of household deposits. Despite weaker determinants our forecast is stronger by £0.2 billion in 2011-12 than the March *EFO* because of outturn receipts in the first half of the year and a higher assumed mortality rate as published by the Government Actuary's Department (GAD) as part of their latest population projections.<sup>6</sup> However, by 2015-16 the forecast is broadly unchanged from the March *EFO* as the positive receipts and mortality effects are increasingly offset by the weaker outlooks for each of the three main drivers of the forecast.

### Stamp duties

- 4.66 **Stamp duty land tax** (SDLT), which presently accounts for two-thirds of stamp duty receipts, is forecast to be £0.3 billion higher in 2011-12 than the March *EFO*. However, receipts in 2012-13 to 2015-16 are between £0.5 billion and £0.9 billion lower than the March *EFO* forecast due to weaker forecasts of residential and commercial property volumes.
- 4.67 Our updated forecast for **stamp duty on shares** is £0.3 billion lower than the March *EFO* in 2011-12 with the shortfall rising to £0.7 billion by 2015-16. This is largely accounted for by the weaker forecast for equity prices.

### Alcohol and tobacco duties

- 4.68 **Alcohol duties** are expected to increase from £9.9 billion in 2011-12 to around £12.5 billion by the end of the forecast period. This primarily reflects the pre-announced duty rises of 2 per cent above RPI inflation in each year to 2014-15 and the rise by RPI in 2015-16 and 2016-17. In each year of the forecast alcohol duties are around £0.2 billion to £0.3 billion higher than in the March *EFO*. This is mainly explained by higher than expected receipts so far this year and a new forecast model, which predicts different growth rates in sales of beer, wine, spirits

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<sup>6</sup> GAD's latest demographic projections for the UK can be found at [www.gad.gov.uk/Demography](http://www.gad.gov.uk/Demography)

and cider to those we had previously assumed. This offsets the effect of lower consumer spending on sales of alcohol over the forecast period.

- 4.69 In each year of the forecast period **tobacco duty** receipts are around £0.2 billion to £0.3 billion higher than the March *EFO* despite slower uprating of duty rates in line with the lower path for RPI inflation. The main factor contributing to the stronger forecast is higher than expected receipts in the year to date.

### Other taxes

- 4.70 The forecast for **business rates** has been revised down in 2011-12 by £1 billion since the March *EFO*, reflecting updated information on liabilities. Business rates bills are calculated by multiplying the rateable value of a non-domestic property by the multiplier, which is uprated for the following financial year in line with RPI inflation. The forecast for 2012-13 incorporates the higher than expected September 2011 RPI outturn of 5.6 per cent and the announcements in the Autumn Statement of the extension of the small business rate relief holiday and the deferral scheme. Thereafter, RPI inflation is lower than previously expected, which will constrain the growth in the multiplier.
- 4.71 The **council tax** forecast incorporates the effect of the 2012-13 freeze announced on 3 October. This reduces receipts by £0.8 to £0.9 billion from 2012-13 onwards. Thereafter, the forecast reverts to a stylised assumption that council tax rises by the average of the three most recent years of council tax rises prior to the freezes. Changes to council tax are broadly offset by changes to locally financed expenditure, so are largely fiscally neutral.
- 4.72 **VAT refunds** to central and local government are fiscally neutral as receipts are offset by an AME accounting adjustment. The key determinants are local government procurement and investment and central government procurement. The forecast has been revised downwards from our March *EFO* and is now lower in every year. The forecast is over £1 billion lower in 2011-12, reflecting the lower outturn data for VAT refunds to central government in the first seven months of the financial year. The VAT refunds forecast is also over £1 billion lower in 2015-16 as a result of the new spending assumption announced in the Autumn Statement.
- 4.73 **Air passenger duty (APD)** is charged per passenger flying from UK airports to domestic and international destinations with various duty bands depending on the destination and class of travel. Receipts in 2011-12 are expected to be £0.1 billion above the March forecast reflecting stronger passenger numbers in the year to date than expected. However, a shortfall in receipts of £0.2 billion arises by 2015-16 due to lower real household disposable incomes and GDP reducing future personal and business demand.

- 4.74 The combined receipts from four environmental taxes – **climate change levy (CCL)**, **aggregates levy**, **landfill tax** and the **Emissions Trading Scheme (ETS)** – are expected to increase from £2.4 billion in 2011-12 to £6.4 billion in 2016-17. This rise primarily reflects the introduction of the carbon price floor in 2013-14 and the start of Phase III of ETS in 2013, which will auction a higher number of allowances.
- 4.75 **Vehicle excise duty (VED)** receipts are £0.1 billion lower in 2011-12 than in the March *EFO* with the shortfall rising to over £0.3 billion by 2015-16. This partly reflects the impact of lower GDP on vehicle sales and lower RPI on the rate at which duty is revalorised. EU regulations on new car CO<sub>2</sub> emissions are expected to cause a gradual shift in the stock of road vehicles to lower VED bands over time as the more efficient new vehicles improves the average fuel efficiency of the entire stock.
- 4.76 Banks have started to make instalment payments for the **bank levy** on their balance sheets. In light of these payments, cash receipts from the bank levy are likely to be £0.2 billion lower in 2011-12 than expected in the March *EFO*. The forecast also incorporates the announcement in the Autumn Statement to raise the levy rate from January 2012. Table 4.7 includes the bank levy on a National Accounts accruals basis. Table 2.8 in the supplementary fiscal tables on the OBR website provides a bank levy on a cash basis which is comparable with the forecast published in the March *EFO*. Following the measure, bank levy receipts are expected to remain similar to their March *EFO* projection.
- 4.77 **Environmental levies** includes 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. The strong increase in receipts through the forecast particularly reflects the rise in electricity generation from renewables. This raises the level of receipts and spending through the RO and its successor. Relative to the March *EFO* forecast, the RO is lower reflecting the banding review and a change in the generation mix between different types of renewables. However, this is fiscally neutral, since it is balanced by spending within AME.

#### Interest and dividend receipts

- 4.78 Interest and dividend receipts capture the interest income on the stock of financial assets held by the government. These are now forecast to be substantially below the March *EFO*, in part due to short-term interest rates which are on average 200 basis points lower across the forecast period than assumed previously. By 2015-16 receipts are £4.8 billion lower than in our March forecast. Box 4.1 has further analysis of the impact of changes in interest rates on this forecast.

4.79 Around £2.3 billion of the reduction in 2015-16 since the March *EFO* is from the impact of lower interest rates on central government assets. A further £1 billion reflects the effect of a lower stock of financial assets. There were also notable falls in the accrued interest on the pre-2012 student loans scheme and the interest received on the loan to Ireland where we have assumed a cut in the interest rate on the loan.

### Other receipts

4.80 We have incorporated ONS's recent classification decision on the proceeds of the **3G mobile auctions**<sup>7</sup> into our forecast. This treats the auction as the sale of an asset rather than as the renting of an asset. The £1 billion per year accrued rent relating to the auctioned licences has now been removed from future receipts.

4.81 **Gross operating surplus** of public corporations is lower by over £2 billion by 2015-16. This is partly because we have now reflected recent ONS decisions to reclassify British Energy and LCR as part of the private sector (see paragraph 4.x) and partly because of a lower profits outlook.

4.82 Once **tax litigation** cases have been finally settled, and their effects in particular years can be quantified to a reasonable degree, they are allowed for in our forecasts of the taxes concerned. However, there are several outstanding cases which have not reached this stage, but which could have an impact over the forecasting period. The receipts forecast includes an assumption that repayments relating to future tax litigation losses across all taxes will amount to £3.8 billion in total between 2012-13 and 2016-17.

4.83 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. Some cases represent an upside risk for Government. The amount of litigation payments in our forecast is unchanged from the March *EFO* but the profile of repayments has been altered so that more falls in the latter part of the forecast period. This reflects the current status and progress of ongoing cases.

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<sup>7</sup> Office for National Statistics, August 2011, *Treatment of the sale of UK 3G mobile phone licences in the National Accounts*.

## Public sector expenditure

- 4.84 This section details our central projections for public sector expenditure. The projections cover the whole public sector, and are based on the National Accounts aggregate Total Managed Expenditure (TME). TME is split into two fiscal aggregates: public sector current expenditure (PSCE) and public sector gross investment (PSGI). PSCE is the current spending component of the surplus on the current budget. TME is the spending component of net borrowing.
- 4.85 For budgeting and public spending control purposes, the Treasury splits TME into departmental expenditure limits (DEL) and annually managed expenditure (AME).<sup>8</sup> DEL spending is fixed for each Government department within multi-year cash spending limits which are set at each Spending Review. The existing DEL plans were set in the 2010 Spending Review, and extend to 2014-15. AME spending is not set within similar fixed limits, because it is affected by economic determinants and is therefore considered to be demand-led and more volatile. It mainly consists of transfer payments, such as social security, and other volatile items such as the Government's debt interest payments.

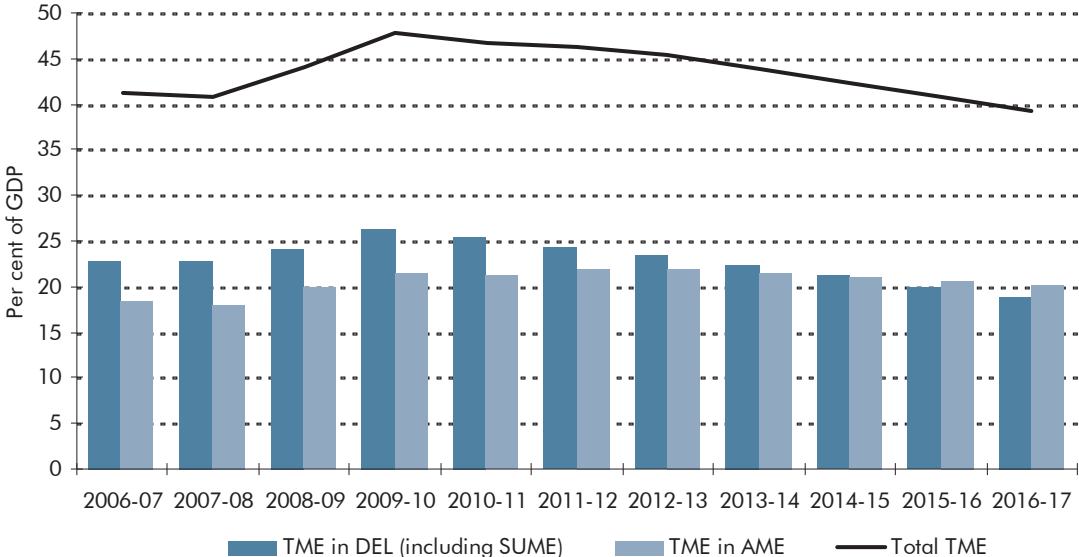
### Summary of the expenditure forecast

- 4.86 Table 4.15 summarises our forecast for public expenditure as a percentage of GDP. TME is expressed as a share of the economy, but not all of TME contributes directly to the calculation of GDP. The difference between TME and the public sector element of GDP is primarily accounted for by benefit payments and other transfers, which do not score in the public sector element of GDP under National Accounts methodology.

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<sup>8</sup> Our presentation of expenditure only includes those components of RDEL and CDEL that are included in the fiscal aggregates of PSCE and PSGI and therefore affect our projections of public sector borrowing and debt. For budgeting purposes HM Treasury includes some 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 4.2: DEL and AME components of TME, as a percentage of GDP



Source: ONS, OBR

Table 4.15: Expenditure as a percentage of GDP

	Per cent of GDP						
	Outturn	Forecast					
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Total managed expenditure	46.6	46.2	45.3	43.7	42.2	40.5	39.0
<i>of which:</i>							
Public sector current expenditure	42.6	42.9	42.3	41.0	39.6	38.1	36.6
<i>of which:</i>							
PSCE in RDEL	22.1	21.5	20.8	20.0	18.9	17.7	16.7
PSCE in AME	20.5	21.4	21.5	21.0	20.7	20.4	19.9
<i>of which:</i>							
Social security	11.4	11.5	11.6	11.1	10.8	10.5	10.2
Debt interest	2.9	3.1	3.0	3.1	3.2	3.4	3.4
Other	6.2	6.8	6.9	6.8	6.7	6.5	6.3
Public sector gross investment	4.0	3.3	3.0	2.7	2.6	2.5	2.4
<i>of which:</i>							
PSGI in CDEL	3.0	2.4	2.3	2.1	2.0	1.9	1.9
PSGI in AME	1.0	0.9	0.8	0.7	0.6	0.5	0.5
Total public sector expenditure that contributes to GDP <sup>1</sup>	25.6	25.1	24.4	23.4	22.3	20.9	19.8
<i>of which:</i>							
General government consumption	22.7	22.6	22.1	21.3	20.2	19.0	17.9
General government gross fixed capital formation	2.4	2.0	1.8	1.7	1.6	1.5	1.4
Public corporations gross fixed capital formation	0.5	0.5	0.5	0.5	0.4	0.4	0.4

<sup>1</sup>GDP at market prices

- 4.87 Chart 4.2 shows the trends in TME, DEL and AME as a per cent of GDP since 2006-07. As a share of GDP, TME rose sharply through the recession to reach a peak of 48 per cent of GDP in 2009-10. With much of departmental spending fixed in cash terms this was primarily the result of the sharp fall in nominal GDP in 2009-10.
- 4.88 TME is forecast to fall to 39 per cent of GDP by 2016-17 mostly driven by reductions in DEL spending due to the Government's fiscal consolidation. AME is also forecast to fall as a share of GDP by 2016-17, 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 payment rise due to high levels of



borrowing. From 2015-16, total AME spending is expected to exceed DEL spending <sup>9</sup>.

- 4.89 Table 4.16 shows changes to TME and its components in real terms. TME falls by an annual average of 0.9 per cent per year in real terms over the Spending Review period from 2010-11 to 2014-15. In 2015-16 and 2016-17, the Government's policy in the Autumn Statement is that TME will fall at -0.9 per cent per year in real terms and PSGI will be flat in real terms, calculated on the basis of a baseline which excludes additional investment expenditure in 2014-15 announced in the Autumn Statement.
- 4.90 Table 4.16 shows that as a result of these changes, against a baseline including all spending in 2014-15, in 2015-16 TME now declines in real terms by -1.1 per cent, PSGI by -3.6 per cent and PSCE by -0.9 per cent.
- 4.91 Our latest forecast is that, on the basis of current policy, total AME will rise by 1.1 per cent and 0.5 per cent in real terms in 2015-16 and 2016-17, respectively. For these years, the implied figures for PSCE in RDEL and PSGI in CDEL are derived as residuals, by subtracting the forecasts for the AME components from the forecasts for total PSCE and total PSGI.
- 4.92 This produces forecasts for PSCE in RDEL which fall in real terms by -3.5 per cent in 2015-16, and by -2.7 per cent in 2016-17. At the time of the March Budget the equivalent fall in PSCE in RDEL was -1.3 per cent in 2015-16. Because the Government has chosen in the Autumn Statement to keep investment spending flat in real terms in these years (excluding the additional investment in 2014-15), the fall in current expenditure is much sharper than in March.
- 4.93 These implied PSCE in RDEL forecasts include the provisional additional costs of introducing Universal Credit, over and above the existing benefits which it replaces. In the *Fiscal sustainability report*, we provisionally estimated these additional costs as £1.8 billion in 2015-16 and £3.1 billion in 2016-17. We intend to review these costs for the March forecast but it is worth noting that this type of spending would normally be included within social security AME. The effect on DEL growth rates of reclassifying it from DEL to AME is shown in the footnote to Table 4.16.

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<sup>9</sup> Total AME and DEL spending are measured as TME in AME and TME in DEL. The detailed definitions for these aggregates are explained in a footnote to Table 4.16.

Table 4.16: Spending growth rates

	Spending review years 2011-12 to 2014-15				Forecast 2011-12 to 2016-17	
	Total change (%)	Average change (%)	change in 2015-16	change in 2016-17	Total change (%)	
<b>Real terms</b>						
<b>Total managed expenditure</b>	<b>-3.4</b>	<b>-0.9</b>	<b>-1.1</b>	<b>-0.9</b>	<b>-5.3</b>	
<i>of which:</i>						
PSCE	-1.0	-0.2	-0.9	-0.9	-2.8	
PSGI	-29.3	-8.3	-3.6	0.0	-31.8	
TME in AME <sup>2</sup>	5.6	1.4	1.1	0.5	7.3	
TME in DEL <sup>2</sup>	-10.9	-2.9	-3.2	-2.3	-15.8	
<i>of which:</i>						
PSCE in RDEL	-8.8	-2.3	-3.5	-2.7	-14.3	
PSGI in CDEL	-26.8	-7.5	-1.8	1.5	-27.0	
<b>Percentage of GDP</b>						
<b>Total managed expenditure</b>	<b>-4.4</b>	<b>-1.1</b>	<b>-1.7</b>	<b>-1.5</b>	<b>-7.6</b>	
<i>of which:</i>						
PSCE	-3.0	-0.8	-1.5	-1.5	-6.0	
PSGI	-1.3	-0.3	-0.2	-0.1	-1.6	
TME in AME <sup>2</sup>	-0.3	-0.1	-0.4	-0.5	-1.1	
TME in DEL <sup>2</sup>	-4.2	-1.0	-1.3	-1.0	-6.5	
<i>of which:</i>						
PSCE in RDEL	-3.2	-0.8	-1.2	-1.0	-5.4	
PSGI in CDEL	-0.9	-0.2	-0.1	0.0	-1.1	

<sup>1</sup> DELs in 2015-16 and 2016-17 include the additional transitional costs of Universal Credit. Based on the provisional estimates of these costs which we used in our Fiscal Sustainability Report, we estimate that the growth rates for the remaining DEL spending, excluding these costs of Universal Credit, for 2015-16 and 2016-17 would be:

PSCE in RDEL	% change in real terms	-4.0	-3.1	-15.2
PSCE in RDEL	change in % of GDP	-1.3	-1.1	-5.5

<sup>2</sup> 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 more detail in paragraph 4.138.

4.94 Table 4.17 shows the main reasons for the changes in our forecast of public sector expenditure since we published our previous forecast in our March *EFO*. The main drivers are:

- changes to the economic determinants, in particular higher CPI and claimant count unemployment, and new ONS population projections lead to higher social security payments;
- a reduction in the GDP deflator, which we use to calculate real terms growth, reduces the cost of the Government's previously stated policy for TME to remain flat in real terms in 2015-16;

- the latest assumptions on short-term interest and gilts rates, based on recent market expectations, reduce the forecast for Government debt interest payments. This is partly offset by an increase in the forecast of CGNCR;
- departmental spending plans for spending included in TME are lower as we are now using detailed information based on departments' own plans published in *Public Expenditure Statistical Analyses (PESA) 2011*;
- a correction to our methodology to ensure that our forecasts for local authority and public corporations capital expenditure do not double-count any Transport for London capital spending; and
- the effect of policies announced in the Autumn statement which are summarised in Table 4.5 and set out in full in Annex A.

Table 4.17: Changes to spending since the March EFO

	£ billion				
	2011-12	2012-13	2013-14	2014-15	2015-16
March forecast	710.4	720.2	730.1	743.6	763.8
November forecast	702.6	714.5	723.1	736.4	746.6
<b>Change</b>	<b>-7.8</b>	<b>-5.7</b>	<b>-7.0</b>	<b>-7.3</b>	<b>-17.2</b>
<i>of which:</i>					
<b>Economic determinants</b>	<b>0.6</b>	<b>3.0</b>	<b>3.7</b>	<b>4.0</b>	<b>2.5</b>
Inflation	0.1	0.1	-0.2	0.5	1.0
Unemployment	0.4	1.8	2.4	2.4	1.7
State pension triple guarantee	0.0	0.4	0.5	0.1	0.1
Population projections	0.2	0.4	0.6	0.8	0.9
Average earnings	0.0	0.2	0.4	0.3	0.3
GDP deflator	0.0	0.0	0.0	0.0	-1.5
<b>Market assumptions</b>	<b>-0.6</b>	<b>-3.9</b>	<b>-7.2</b>	<b>-9.5</b>	<b>-11.2</b>
Gilt rates	-0.2	-2.5	-5.1	-7.3	-9.0
Short rates	-0.4	-1.5	-2.1	-2.2	-2.2
<b>Other assumptions</b>	<b>-7.8</b>	<b>-4.5</b>	<b>-3.8</b>	<b>-1.7</b>	<b>-0.2</b>
Department spending plans <sup>1</sup>	-2.1	-2.3	-1.4	-1.3	-1.3
CGNCR impact on debt interest	0.1	0.5	1.4	2.8	4.4
Transport for London correction	-1.2	-1.6	-2.1	-2.6	-2.2
Other	-4.6	-1.1	-1.6	-0.7	-1.0
<b>Autumn Statement measures</b>	<b>0.0</b>	<b>-0.2</b>	<b>0.3</b>	<b>-0.1</b>	<b>-8.3</b>

<sup>1</sup> Revisions to PSCE in RDEL and PSGI in CDEL from 2011-12 to 2014-15 from departments' spending plans in *PESA 2011*. Effects in 2015-16 calculated using spending growth assumptions in the March EFO.

<sup>2</sup> Autumn statement measures are shown in more detail in annex A.

4.95 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.

Table 4.18: Total managed expenditure

	£ billion						
	Outturn		Forecast				
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
<b>Public sector current expenditure (PSCE)</b>							
<b>PSCE in RDEL<sup>1</sup></b>	<b>326.3</b>	<b>326.7</b>	<b>328.2</b>	<b>330.9</b>	<b>329.7</b>	<b>326.1</b>	<b>325.2</b>
<b>PSCE in Annually Managed Expenditure</b>	<b>303.2</b>	<b>325.7</b>	<b>338.5</b>	<b>346.8</b>	<b>360.5</b>	<b>374.8</b>	<b>386.7</b>
<i>of which:</i>							
Social security benefits <sup>2</sup>	168.5	175.0	182.8	183.6	187.6	193.1	198.3
Tax credits <sup>2</sup>	25.2	27.0	27.8	28.4	28.8	29.6	30.3
Net public service pension payments	5.6	8.4	9.9	10.5	11.6	12.5	13.5
<i>of which:</i> CG unfunded pension schemes	4.5	7.0	8.4	8.9	10.0	11.0	12.0
LG police and fire pension schemes	1.1	1.4	1.5	1.6	1.6	1.6	1.6
National lottery current grants	0.8	0.9	0.9	0.9	0.9	1.0	1.1
BBC domestic services current expenditure	3.4	3.7	3.5	3.4	3.7	3.6	3.7
Fees associated with financial interventions	-2.5	-2.2	-0.7	-0.3	-0.2	0.0	0.0
Other PSCE items in departmental AME	0.3	0.6	0.8	0.6	0.4	0.5	0.5
Expenditure transfers to EU institutions	6.8	5.5	6.5	7.0	7.8	7.0	6.1
Locally-financed current expenditure	22.4	26.2	26.8	28.1	29.1	30.0	30.6
Central government gross debt interest	42.8	47.6	47.1	50.5	56.1	61.7	65.5
Depreciation	15.2	16.3	17.1	17.8	18.5	19.2	19.8
Current VAT refunds	11.2	11.7	12.3	12.6	12.4	12.0	11.8
Single use military expenditure	5.4	6.4	5.8	5.7	5.2	5.4	5.7
Environmental levies	0.6	1.0	1.4	1.8	2.2	2.6	3.3
Other National Accounts adjustments	-2.5	-2.4	-3.8	-3.7	-3.6	-3.4	-3.4
<b>Total public sector current expenditure</b>	<b>629.5</b>	<b>652.4</b>	<b>666.7</b>	<b>677.7</b>	<b>690.2</b>	<b>701.0</b>	<b>711.9</b>
<b>Public sector gross investment (PSGI)</b>							
<b>PSGI in CDEL</b>	<b>43.9</b>	<b>36.7</b>	<b>35.7</b>	<b>34.0</b>	<b>35.6</b>	<b>35.8</b>	<b>37.3</b>
<b>PSGI in Annually Managed Expenditure</b>	<b>15.1</b>	<b>13.4</b>	<b>12.1</b>	<b>11.4</b>	<b>10.6</b>	<b>9.8</b>	<b>9.5</b>
<i>of which:</i>							
National lottery capital grants	0.4	0.5	0.6	0.6	0.6	0.6	0.6
Other PSGI items in departmental AME	0.5	-8.3	0.0	0.4	0.4	0.4	0.4
Locally-financed capital expenditure	6.5	14.2	4.9	4.5	4.1	3.3	3.0
Public corporations capital expenditure	8.0	8.3	8.0	8.0	7.8	7.8	7.7
Other National Accounts adjustments	-0.2	-1.4	-1.4	-2.1	-2.2	-2.3	-2.3
<b>Total public sector gross investment</b>	<b>59.0</b>	<b>50.2</b>	<b>47.9</b>	<b>45.4</b>	<b>46.2</b>	<b>45.7</b>	<b>46.8</b>
Less depreciation	-20.4	-21.5	-22.6	-23.5	-24.4	-25.2	-26.1
<b>Public sector net investment</b>	<b>38.6</b>	<b>28.6</b>	<b>25.2</b>	<b>21.9</b>	<b>21.8</b>	<b>20.4</b>	<b>20.7</b>
<b>Total managed expenditure<sup>3</sup></b>	<b>688.5</b>	<b>702.6</b>	<b>714.5</b>	<b>723.1</b>	<b>736.4</b>	<b>746.6</b>	<b>758.7</b>

<sup>1</sup> Implied DEL numbers for 2015-16 and 2016-17. Calculated as the difference between Resource AME and PSCE in the case of Resource DEL, and between Capital AME and PSGI in the case of capital DEL.

<sup>2</sup> For 2010-11 to 2014-15, child allowances in income support and jobseeker's allowance have been included in tax credits and excluded from social security benefits.

<sup>3</sup> TME is equal to the sum of PSCE, PSNI and public sector depreciation, on a basis which excludes temporary effects of financial interventions.

Table 4.19: Changes to total managed expenditure since March forecast

	£ billion					
	Outturn	Forecast				
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<b>Public sector current expenditure (PSCE)</b>						
<b>PSCE in RDEL<sup>1</sup></b>	<b>-0.9</b>	<b>-0.9</b>	<b>-0.7</b>	<b>-1.1</b>	<b>-1.3</b>	<b>-9.3</b>
<b>PSCE in Annually Managed Expenditure</b>	<b>-2.4</b>	<b>-3.3</b>	<b>-2.1</b>	<b>-3.6</b>	<b>-3.1</b>	<b>-3.2</b>
<i>of which:</i>						
Social security benefits <sup>2</sup>	-0.5	0.7	3.5	4.8	4.3	3.8
Tax credits <sup>2</sup>	0.1	0.0	-0.6	-0.4	-0.1	0.0
Net public service pension payments	-0.2	1.4	2.2	2.5	2.9	2.8
<i>of which:</i>						
CG unfunded pension schemes	-0.1	1.3	2.0	2.4	2.8	2.8
LG police and fire pension schemes	-0.1	0.1	0.1	0.1	0.1	0.0
National lottery current grants	0.0	0.0	0.1	0.1	0.1	0.1
BBC domestic services current expenditure	0.0	0.1	0.0	-0.3	0.2	0.1
Fees associated with financial interventions	0.0	-0.5	-0.3	-0.3	-0.2	0.0
Other PSCE items in departmental AME	-0.1	-0.2	-0.3	-0.5	-0.5	-0.4
Expenditure transfers to EU institutions	0.1	-1.8	-0.3	-0.5	-0.3	-0.3
Locally-financed current expenditure	-1.8	-0.5	-1.5	-1.6	-1.7	-1.9
Central government gross debt interest	-0.3	-1.0	-3.7	-6.2	-6.2	-5.1
Depreciation	0.0	0.2	0.2	0.2	0.1	0.1
Current VAT refunds	0.2	-1.2	-0.7	-0.4	-0.5	-1.2
Single use military expenditure	0.1	0.0	0.0	0.0	0.0	0.2
Environmental levies	0.0	-0.1	-0.1	-0.4	-0.6	-0.9
Other National Accounts adjustments	0.0	-0.5	-0.7	-0.8	-0.6	-0.5
<b>Total public sector current expenditure</b>	<b>-3.4</b>	<b>-4.2</b>	<b>-2.9</b>	<b>-4.7</b>	<b>-4.4</b>	<b>-12.4</b>
<b>Public sector gross investment (PSGI)</b>						
<b>PSGI in CDEL</b>	<b>0.0</b>	<b>-1.2</b>	<b>-0.8</b>	<b>0.8</b>	<b>0.8</b>	<b>-1.3</b>
<b>PSGI in Annually Managed Expenditure</b>	<b>-2.6</b>	<b>-2.4</b>	<b>-2.1</b>	<b>-3.2</b>	<b>-3.7</b>	<b>-3.5</b>
<i>of which:</i>						
National lottery capital grants	-0.2	0.0	0.1	0.0	0.0	0.1
Other PSGI items in departmental AME	-0.1	-1.0	0.0	0.1	0.1	0.1
Locally-financed capital expenditure	-0.1	1.0	-0.4	-0.4	-0.4	-0.5
Public corporations capital expenditure	-1.5	-0.9	-1.2	-1.3	-1.8	-1.5
Other National Accounts adjustments	-0.7	-1.5	-0.5	-1.6	-1.7	-1.7
<b>Total public sector gross investment</b>	<b>-2.6</b>	<b>-3.6</b>	<b>-2.8</b>	<b>-2.4</b>	<b>-2.9</b>	<b>-4.8</b>
Less depreciation	0.2	0.3	0.3	0.4	0.5	0.7
<b>Public sector net investment</b>	<b>-2.4</b>	<b>-3.2</b>	<b>-2.5</b>	<b>-2.0</b>	<b>-2.4</b>	<b>-4.1</b>
<b>Total managed expenditure<sup>3</sup></b>	<b>-5.9</b>	<b>-7.8</b>	<b>-5.7</b>	<b>-7.0</b>	<b>-7.3</b>	<b>-17.2</b>

<sup>1</sup> Implied DEL numbers for 2015-16 and 2016-17. Calculated as the difference between Resource AME and PSCE in the case of Resource DEL, and between Capital AME and PSGI in the case of capital DEL.

<sup>2</sup> For 2010-11 to 2014-15, child allowances in income support and jobseeker's allowance have been included in tax credits and excluded from social security benefits.

<sup>3</sup> TME is equal to the sum of PSCE, PSNI and public sector depreciation, on a basis which excludes temporary effects of financial interventions.

## Expenditure in 2011-12

4.96 Our forecast for TME in 2011-12 is £7.8 billion lower than in the March *EFO*, reflecting reductions in TME in DEL spending of £2.1 billion and reductions in our latest AME forecasts of £5.7 billion. Across the various sectors, we have reduced our forecasts by £2.3 billion for central government spending, £3.1 billion for local government spending, and £2.1 billion for public corporations spending. Detailed sectoral breakdowns of our forecasts are shown in the supplementary fiscal tables on our website.

4.97 Monthly outturn information is only available for central government spending and details of our 2011-12 forecast for this sector are shown in Table 4.20. Our 'net social benefits' forecast for 2011-12 is consistent with the pattern of spending seen so far this year. Growth in 'other' current spending over the first seven months of 2011-12 is significantly lower than the growth rate in our full year forecast. This is partly because of changes to the timing of some grants, which are expected to unwind over the rest of the year. However, the in-year pattern of departmental spending is typically volatile and is often revised. It is also normal for departments to increase the rate of spending over the last five months of the year, and this is reflected in our forecast.

Table 4.20: Central government expenditure in 2011-12

	Spending in 2011-12			Percentage change on 2010-11		
	Outturn Apr-Oct	Forecast Nov-Mar	Forecast Full Year	Outturn Apr-Oct	Forecast Nov-Mar	Forecast Full Year
<b>Total current expenditure</b>	<b>357.7</b>	<b>265.7</b>	<b>623.5</b>	2.4	4.0	3.1
<i>of which:</i>						
Net social benefits	105.0	77.1	182.1	5.2	5.3	5.2
Debt interest	28.9	18.7	47.6	15.3	5.8	11.4
Other	223.8	169.9	393.7	-0.2	3.2	1.2
<b>Total net investment</b> <sup>1</sup>	<b>13.9</b>	<b>18.7</b>	<b>32.6</b>	<b>-20.3</b>	<b>-7.3</b>	<b>-13.3</b>
<b>Depreciation</b>	<b>4.4</b>	<b>3.3</b>	<b>7.8</b>	<b>6.1</b>	<b>10.8</b>	<b>8.1</b>
<b>Total central government expenditure in TME</b> <sup>1</sup>	<b>376.1</b>	<b>287.8</b>	<b>663.9</b>	<b>1.4</b>	<b>3.3</b>	<b>2.2</b>

<sup>1</sup> For comparison purposes, the figures exclude the one-off £8.5 billion central government receipt from local authorities for HRA reform that is scheduled for March 2012.

## Departmental expenditure limits (DELs)

4.98 Our latest forecasts for PSCE in RDEL and PSGI in CDEL are shown in Table 4.18. These have been revised to reflect departments' own spending plans, as published in *PESA 2011*. Compared with our assumptions in the March *EFO*, the *PESA* plans show that departments have allocated more of their DELs to spending that is not included in TME, and less of their DELs to spending that is included in

TME. Taking on these detailed spending plans has reduced our forecasts for PSCE in RDEL and PSGI in CDEL across the whole forecast period. We publish a further table on our website, which shows how the PESA plans for total RDEL and total CDEL split into the figures for PSCE in RDEL and PSGI in CDEL which we have included in our forecast, and the other components that are not included in TME.

- 4.99 The forecasts for PSCE in RDEL and PSGI in CDEL shown in Table 4.18 also include the changes to RDEL and CDEL that the Government has announced in the Autumn Statement, as shown in Table 4.5.
- 4.100 For the current year 2011-12, we have reduced both PSCE in RDEL and PSGI in CDEL by £250m as our assumption of the amount of shortfall in departments' spending against their DEL plans. The amount of this shortfall is always uncertain, and there are particular uncertainties this year because the Treasury has adopted a new system of inter-year flexibility, the Budget Exchange system.
- 4.101 Under the previous system of End Year Flexibility, departments could increase their DELs in the current year by drawing down underspends carried forward from previous years, subject to these increases being approved by the Treasury. Under the new Budget Exchange system, departments have to identify and surrender their underspends by the end of the current financial year, in order to be able to carry them over into the next year. The Treasury aims to redistribute declared underspends to other priorities with the aim of reducing the overall level of underspend. Given this is the first year of the new system there is uncertainty about how it will affect the management of budgets.
- 4.102 DEL plans for 2015-16 and 2016-17 will not be set until the next Spending Review. So for these years, we have derived the implied forecasts for PSCE in RDEL and PSGI in CDEL as residuals, based on the levels of PSCE and PSGI that are determined by the spending assumptions discussed in paragraph 4.89 above and taking account of our AME forecasts.

## Annually managed expenditure

- 4.103 Table 4.18 sets out our latest central projections of AME spending to 2016-17, based on the latest economic determinants in this forecast, the latest estimates of agreed policy commitments, and the effect of measures announced alongside this report.

### Social security

- 4.104 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 10.2 per cent over the forecast period. Social security spending is forecast to be higher than we forecast in March with

the difference around £4 billion by 2015-16. Table 4.21 shows the main factors driving this are changes in the CPI and claimant count unemployment, new ONS population projections, and changes to forecast assumptions affecting caseloads of particular benefits. A breakdown showing forecasts for the main components of social security is included in the OBR's supplementary fiscal tables available on our website.

Table 4.21: Key changes to social security since March forecast

	£ billion				
	2011-12	2012-13	Forecast 2013-14	2014-15	2015-16
March forecast	174.3	179.4	178.8	183.2	189.3
November forecast	175.0	182.8	183.6	187.6	193.1
<b>Change<sup>1</sup></b>	<b>0.7</b>	<b>3.5</b>	<b>4.8</b>	<b>4.3</b>	<b>3.8</b>
<i>of which:</i>					
CPI	0.0	0.6	0.8	0.9	0.9
Claimant count unemployment	0.3	1.4	2.1	2.1	1.4
State pension triple guarantee	0.0	0.4	0.5	0.1	0.1
Population projections	0.2	0.2	0.3	0.3	0.3
ESA modelling	-0.4	0.4	0.8	1.0	1.0
Housing benefit modelling	0.2	0.2	0.4	0.5	0.6
Other	0.4	0.1	0.0	-0.5	-0.5

<sup>1</sup> For 2010-11 to 2014-15, child allowances in income support and jobseekers' allowance have been included in tax credits and excluded from social security benefits.

**4.105** The increase in claimant count unemployment increases benefit payments in all years, and by a maximum of just over £2 billion in 2013-14 and 2014-15. The increase in CPI since the March forecast increases social security spending by up to around £1 billion each year. CPI is used to uprate most benefits. The state retirement pension is uprated in line with the 'triple guarantee', i.e. the maximum of 2.5 per cent, average earnings, and the CPI. The increase in CPI means that the 'triple guarantee' costs £0.5 billion more in 2013-14, before reducing to around £0.1 billion in later years when the 'triple guarantee' is forecast to move to average earnings, which has fallen since March.

**4.106** The forecast has also increased as a result of the new 2010 based population projections released by the Office for National Statistics in October. The new projections include higher fertility rates which increase statutory maternity pay and child benefit, and this is partly offset by a small decrease in pension payments as a result of higher mortality rates.

**4.107** The forecast has decreased by around £0.4 billion by 2015-16 as we have included savings assumed from two key fraud and error programmes, both of



which have demonstrated through pilots the potential to deliver significant savings on benefit expenditure.<sup>10</sup>

**4.108** The most significant changes from caseload assumptions are on housing benefit and employment and support allowances (ESA) mainly reflecting the use of latest benefit administration and related survey data:

- ESA changes have resulted in an increase in expenditure of £1 billion by 2015-16. The latest administrative data suggests that fewer people than previously assumed will be judged 'fit for work' as a result of the initial ESA work capability assessment and the reassessment of incapacity benefit cases, and more will be placed in the support group. This accounts for around four-fifths of the increase. Other changes arise from a change in assumptions about the composition of the ESA caseload, which results in higher average benefit payments per person, and higher inflows; and
- housing benefit caseload changes have resulted in a £0.6 billion increase to the forecast in 2015-16. This is mainly due to changes in the population eligible for housing benefit. Recent survey information suggests that the proportion of people likely to be eligible for housing benefit continues to grow and we have reflected this in our assumptions about caseload growth.

### Tax credits

**4.109** Tax credits expenditure continues to rise through the forecast horizon, although by less than whole economy earnings in every year. That reflects the decision to raise elements by CPI inflation in the medium term and also a number of other recent policy announcements that reduce spending in the coming years. In particular, the Autumn Statement has announced that the lone parent and couples element of working tax credit elements will be frozen in 2012-13 and the planned £110 above-indexation increase in the child element has also been removed.

**4.110** The figures in Table 4.22 include company tax credits as well as both the negative tax and AME spending items for child and working tax credits.<sup>11</sup> The latest measures reduce total expenditure by between £1.3 to £1.4 billion in each year, more than offsetting revisions to key economic determinants. Higher CPI inflation and lower average earnings growth in the near term go on to affect the

<sup>10</sup> ATLAS – Automated Transfer to Local Authority Systems is a new IT system that will automatically notify LAs when there is a change in benefit payments to housing benefit or council tax benefit claimants. CRA – Credit Reference Agency data will be used to match intelligence to review benefit claims.

<sup>11</sup> The breakdown between household and company tax credits is shown in the supplementary tables on our website, whilst the negative tax element is in Table 4.7 and the AME portion is shown in Table 4.18.

level of payments in later years. The new ONS population projections include more children than previously, also increasing spending in each year.

4.111 Higher unemployment reduces working tax credits payments, but the resulting lower income also increases child tax credit payments. On balance, an increase in unemployment raises total tax credits expenditure. We have revised the way we model the relationship between the two, which reduces the forecast in later years and we have incorporated a number of other modelling changes that are broadly neutral.

Table 4.22: Key changes to tax credits since March forecast

	£ billion				
	Forecast				
	2011-12	2012-13	2013-14	2014-15	2015-16
March forecast	31.6	32.7	33.0	33.2	33.8
November forecast	31.8	32.1	32.7	33.1	33.9
<b>Change</b> <sup>1, 2</sup>	<b>0.1</b>	<b>-0.6</b>	<b>-0.3</b>	<b>-0.1</b>	<b>0.1</b>
<i>of which:</i>					
Autumn Statement measures	0.0	-1.3	-1.3	-1.4	-1.3
CPI	0.0	0.3	0.4	0.5	0.5
Average earnings growth	0.0	0.0	0.2	0.3	0.3
Population projections	0.0	0.2	0.3	0.5	0.6
Unemployment	0.1	0.4	0.3	0.3	0.3
Other	0.0	-0.2	-0.2	-0.2	-0.1

<sup>1</sup> This table shows changes to total tax credits. Tax credits are split between current receipts (shown in table 4.7) and AME current spending (shown in table 4.18), and the changes are split as follows:

Changes to tax credits treated as AME spending	0.0	-0.6	-0.4	-0.2	0.1
Changes to tax credits treated as negative tax	0.1	0.0	0.0	0.1	0.1

<sup>2</sup> 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.

## Public service pensions

4.112 The net public service pensions expenditure forecast is measured 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 the locally administered police and fire-fighters' pension schemes.<sup>12</sup> It excludes the funded Local Government Pension Scheme. A breakdown for the major schemes covered is included in the supplementary fiscal tables available on our website.

<sup>12</sup> 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.

Table 4.23: Key changes to net CG unfunded pension schemes since March forecast

	£ billion				
	2011-12	2012-13	Forecast 2013-14	2014-15	2015-16
<b>Net public service pensions</b>					
March forecast	5.7	6.4	6.5	7.2	8.1
November forecast	7.0	8.4	8.9	10.0	11.0
<b>Change</b>	<b>1.3</b>	<b>2.0</b>	<b>2.4</b>	<b>2.8</b>	<b>2.8</b>
<b>Expenditure</b>					
March forecast	27.4	29.2	30.6	32.2	33.7
November forecast	28.2	30.4	32.2	33.8	35.4
<b>Change</b>	<b>0.8</b>	<b>1.2</b>	<b>1.5</b>	<b>1.6</b>	<b>1.6</b>
<i>of which:</i>					
CPI	0.0	0.2	0.3	0.3	0.4
Other	0.8	1.0	1.3	1.3	1.3
<b>Income</b>					
March forecast	-21.7	-22.8	-24.1	-25.0	-25.6
November forecast	-21.2	-22.0	-23.2	-23.8	-24.4
<b>Change</b>	<b>0.5</b>	<b>0.8</b>	<b>0.9</b>	<b>1.2</b>	<b>1.2</b>
<i>of which:</i>					
Paybill growth	0.3	0.5	0.6	0.8	0.8
Autumn Statement measures	0.0	0.0	0.1	0.2	0.2
Other	0.2	0.3	0.2	0.2	0.2

4.113 The gross expenditure forecast is based on the demographics of each individual pension scheme, both for existing pensioners and the current workforce. Gross expenditure rises steadily across the forecast period as the age profile of each scheme's membership changes and people live longer. The main economic determinant of gross expenditure on pensions is CPI inflation, which is used to uprate the level of benefits paid. Table 4.23 shows that the change in CPI accounts for around £0.4 billion per year by the end of the forecast period.

4.114 The remaining increase in expenditure since March is mostly caused by revised judgements about pension payments and lump sum payments in the NHS and teachers pension schemes. This reflects the latest in year data, which shows an increase in retirement and average lump sum payments, and higher than expected pension lump sum commutation rates over the last couple of years.

4.115 The income of each pension scheme is almost entirely made up of employer and employee pension contributions. The key forecasting assumption here is around the rate of growth in the total employee paybill, which directly determines changes in the level of pension contributions. Table 4.23 shows that reductions in paybill growth assumptions account for around £0.8 billion less income (and hence extra net spending) by the end of the forecast period. The forecast includes

a reduction in pension contributions to reflect the consequences of the pay restraint measure announced in the Autumn Statement.

- 4.116 The forecast also includes additional receipts from an assumed increase in current contribution rates from 2012-13 onwards. This was announced as part of the Spending Review, was included in our March forecast and is forecast to raise approximately £2.8 billion by 2014-15. The employee rates applicable for 2012-13 for each scheme are still under consultation, although this is in the final stages, and the rates for 2013-14 and 2014-15 are still to be consulted on. In this forecast we have continued to make a global adjustment to receipts, but we plan to review this costing and apply the new rates on a scheme-by scheme basis once the agreed rates for 2012-13 become available.
- 4.117 The forecast does not include any consequences of the potential reforms included in HM Treasury's recent paper *Public Service Pensions: good pensions that last*, which might come into effect from 2015-16, given they have not yet been finalised.

### EU contributions

- 4.118 The main components of the AME expenditure transfers to EU institutions are the UK's GNI-based 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 gross national income 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.<sup>13</sup>
- 4.119 The forecast for AME expenditure transfers to EU institutions in 2011-12 is £1.8 billion lower than forecast in March. The estimate for the surplus carried forward from the 2010 EU budget increased significantly, which reduces the UK contribution in 2011 by around £0.4 billion. In May the Commission revised upwards the 2010 abatement, which reduces the UK contributions in 2011 by around £0.7 billion. There has also been a downward revision to the UK's share of the VAT and GNI bases in 2011 and 2012, which has the effect of reducing the UK contribution in all years, and by 2016-17 is worth around £0.5 billion.
- 4.120 The EU Budget for 2012 was agreed on 19 November to be an increase of 2 per cent - lower than our forecast in March. Our assumption about the 2013 Budget remains unchanged from March. The forecast for 2014-15 onwards is much more uncertain as the new EU Budget envelope for 2014 to 2020 is not yet agreed. Certain member states, including the UK, have proposed that EU spending should grow by no more than inflation between 2014 and 2020. To

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<sup>13</sup> 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.

reflect this, our forecast for 2014-15 onwards assumes slower spending growth, but with an assumed increase in 2014 and 2015 to use up a backlog of funding that has been built-up over previous years.

### Locally financed expenditure

- 4.121 Locally financed expenditure consists mainly of local authority self-financed expenditure (LASFE) and Scottish Government spending financed by local taxation. The outturn for current LASFE in 2010-11 was almost £2 billion below our forecast in our March *EFO*, for reasons that are explained in our recent *Forecast Evaluation Report*. The first statistics for quarterly local authority current spending in England have now been published by the Department for Communities and Local Government (CLG), covering the first quarter of 2011-12. This is a very welcome development that should help to improve future forecasts of in-year local authority spending.
- 4.122 The forecast for current LASFE from 2012-13 to 2015-16 has been reduced by £1.5 to £1.9 billion. This includes a reduction of £0.8 to £0.9 billion to reflect the government announcement this autumn that the council tax freeze in England would be extended to cover 2012-13. The forecast also reflects the freeze announced for Scotland until the end of this Scottish parliament, and the 3.1 per cent increase in council tax in 2011-12 announced for Wales. After these periods, we assume that the council tax increase in each country reverts to the average increase over the three most recent years before any freeze. Changes to local authority spending which is financed by council tax are fiscally-neutral as they are offset by the reductions in the council tax included in current receipts.
- 4.123 We have reduced current LASFE by £0.5 billion in 2011-12, mainly to reflect the additional grant support that English councils will receive to fund the council tax freeze in 2012-13. Apart from that change, our forecast assumes that local authorities draw down from their current reserves as forecast in their budgets.
- 4.124 The forecast for capital LASFE in 2011-12 has been increased by £1 billion to reflect an increase in the forecast net transfer from local authorities to central government for Housing Revenue Account (HRA) reform. This was explained in more detail in paragraph 4.136 of the March *EFO*. The forecast now assumes that the net amount for this transfer will be £8.5 billion, which increases capital LASFE and reduces other PSGI items in departmental AME.
- 4.125 The forecast for capital LASFE for 2012-13 to 2015-16 has been reduced by up to £0.5 billion, mainly because we have reduced our forecast for local authorities' use of capital receipts. This reflects the latest information from the 2010-11 outturn, and also our latest profile for local authorities' asset sales.

## Debt interest

- 4.126 The key determinants of debt interest payments are: the existing stock of debt; the financing requirement; the mix of debt instruments used to meet the financing requirement; interest rates and RPI inflation.
- 4.127 Central government debt interest payments are forecast to be broadly flat between 2011-12 and 2012-13, before rising steadily as a share of GDP thereafter. The profile in the near term largely reflects lower RPI inflation, as well as the refinancing of existing debt at lower interest rates. Over the remainder of the forecast period, debt interest payments rise further, reflecting increasing interest rates over time, and a rising stock of debt, albeit at a declining rate.
- 4.128 Since March, we have revised up the central government net cash requirement (CGNCR), as shown in Table 4.26, and have taken on board the latest market expectations for interest rates. The effective gilt rate, which is a weighted average of short, medium and long-term gilt rates, is on average around 170 bps lower than in March. Implied interest rates for shorter maturities, affecting the forecast for debt interest payments on Treasury bills, are also significantly lower. Box 4.1 provides analysis of the overall impact of interest rate changes on the fiscal forecast. These revisions to interest rates more than offset the rise in CGNCR. The forecast for RPI inflation is also lower, which reduces the accrued uplift on index-linked gilts.
- 4.129 We have introduced a more transparent model for this forecast that provides better diagnostics. This has resulted in some small forecast changes. However, there remain elements of the forecast that are yet to be updated in a similar fashion. Forecasts for these are notably higher than in March. We have also corrected our approach to treating auction price effects over the recent past, which raises the forecast in later years. The impact of these changes is incorporated in the 'Other' line of Table 4.24. This also includes revisions to debt interest for other components such as National Savings & Investment products.
- 4.130 A breakdown of the AME debt interest forecast by financing component is shown in the supplementary fiscal tables on our website, including a distinction between debt interest on conventional gilts for new and existing debt. Debt interest payments on the existing stock of conventional gilts are fixed for the lifetime of those gilts. With an average maturity for UK conventional gilt of around 13½ years, approximately half of the debt interest forecast consists of static debt interest costs on existing conventional gilts. We also include a separate ready-reckoner table showing the approximate effect of movements in interest rates, RPI inflation and the CGNCR.

Table 4.24: Key changes to debt interest since March forecast

	£ billion				
	2011-12	2012-13	Forecast 2013-14	2014-15	2015-16
March forecast	48.6	50.9	56.6	62.4	66.8
November forecast	47.6	47.1	50.5	56.1	61.7
<b>Change</b>	<b>-1.0</b>	<b>-3.7</b>	<b>-6.2</b>	<b>-6.2</b>	<b>-5.1</b>
<i>of which:</i>					
CGNCR	0.1	0.5	1.4	2.8	4.4
Gilt rates	-0.2	-2.5	-5.1	-7.3	-9.0
Short rates	-0.4	-1.5	-2.1	-2.2	-2.2
Inflation	0.1	-1.1	-1.6	-1.2	-0.7
Other	-0.5	0.8	1.2	1.7	2.4

### Fees associated with the financial interventions

4.131 Estimates of transactions related to the previous Government's interventions to stabilise the financial sector are included in the fiscal projections where they can be quantified with reasonable certainty. So the projections include estimates of fee income from the Asset Protection Scheme (APS), the Credit Guarantee Scheme (CGS) and the Contingent Capital Commitment, which score as negative AME, and other interest and loan repayments which can be forecast. The projections do not include estimates of components that cannot be quantified at the current time, such as: the sale of shares in Royal Bank of Scotland and Lloyds Banking Group; any potential loss payouts on the schemes; or the final net profit or loss position of the Special Liquidity Scheme.

4.132 The main change from the March forecast is that current spending has been reduced by £0.2 to £0.3 billion over the four years from 2011-12 to 2014-15 mostly as a result of the inclusion of fees charged for the Contingent Capital Commitment.

### Public corporations capital expenditure

4.133 Public corporation capital expenditure was £1.5 billion lower in 2010-11 than we expected at the time of the March *EFO*, mainly reflecting revisions to the data available at the time, which affect every year of the forecast.

4.134 We generally look to include ONS classification decisions that have been announced, but which have yet to be implemented, where it is possible to quantify their impact on the forecast. In particular, the ONS announced in January this year that they had decided that British Energy Group Ltd should be reclassified as a private non-financial corporation. The ONS is also reviewing its use of data on capital spending by Transport for London (TfL) subsidiaries, to ensure that it correctly includes the capital spending by Rail for London and Crossrail as local authority capital spending, and the capital spending by all the

other TfL subsidiaries as public corporations capital expenditure. All these decisions and revisions are likely to be incorporated in time for the *2012 Blue Book*. We have used publically available information on TfL's capital spending plans to allow for these effects in this forecast.

### Other AME spending

- 4.135 Our forecast of **other PSCE items in departmental AME** since March has reduced by between £0.3 and £0.5 billion in each year from 2012-13. This is partly caused by the inclusion of the AME spending consequences of the National Loan Guarantee Scheme and the Business Finance Partnership, which have been announced in the Autumn Statement. It also includes the Housing Revenue Account (HRA) subsidy, Equitable Life payments, and spending of the Redundancy Payments Service.<sup>14</sup>
- 4.136 The main change to **other PSGI items in departmental AME** since the March forecast is a £1 billion reduction in capital spending in 2011-12 as a result of an increase in the value of the expected receipt for central government from local authorities as part of the reform of council house financing announced in the Spending Review. This is the offset to the £1 billion change to capital LASFE outlined above.
- 4.137 Expenditure from **National Lottery** grants has increased from 2012-13 onwards by around £0.1-0.2 billion each year. Expenditure by the **BBC** over the forecast period is unchanged compared with our March forecast apart from a small reprofiling of spending between 2013-14 and 2015-16.
- 4.138 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 remove this from CDEL and include it as a separate addition to PSCE within current AME expenditure.
- 4.139 **Environmental levies** include spending on DECC levy-funded policies such as the Renewables Obligation (RO), Feed-In Tariffs and the forthcoming Warm Homes Discount. These items are mainly fiscally-neutral as they are balanced by receipts, and the forecasts are explained in the receipts section above. Spending on the Renewable Heat Incentive policy is not balanced by receipts and is due to be launched in 2011-12, although there are still uncertainties on the spending.

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<sup>14</sup> A full breakdown of other PSCE and PSGI items in departmental AME are shown in the OBR supplementary tables published on our website.



## Accounting adjustments

- 4.140 The AME forecast includes forecasts for the other National Accounts adjustments which ONS include in the National Accounts aggregates for PSCE and PSGI. Further details of these other National Accounts adjustments are provided in the supplementary fiscal tables on our website.
- 4.141 Table 4.19 shows a decrease of £0.5-£0.8 billion in current accounting adjustments over the forecast period when compared with March. This reflects our review of local authority accounting adjustments following the lower 2010-11 outturn. Capital accounting adjustments have decreased by £1.7 billion by the end of the forecast period. This is mainly due to a large increase in the accounting adjustment which removes the capital spending by certain TfL subsidiaries from the local authority forecast. This corrects a long-standing error that meant that some of this spending was previously double-counted. Our revised methodology reflects recent work by ONS to ensure that the capital spending by TfL subsidiaries is correctly attributed between local authority and public corporations capital spending in the public finance statistics, as described in paragraph 4.129 above. Our forecast for this accounting adjustment is now based on information included in the latest published TfL investment plan.

## Financial transactions

- 4.142 The public sector net cash requirement (PSNCR) is the cash equivalent of public sector net borrowing. The difference between the two is captured in financial transactions. PSNCR is important for the fiscal projections as it drives the forecast of public sector net debt (PSND), which is a cash measure of the public sector's stock of net debt. The other important cash measure is the central government net cash requirement (CGNCR). This measures the cash required by central government to fund its operations, and forms the basis for the Government's net financing requirement.<sup>15</sup>
- 4.143 The profile for PSNCR broadly mirrors public sector net borrowing. But it is generally higher, in large part reflecting student loan reforms – higher loans are being issued upfront, with repayments over a more prolonged period.
- 4.144 Table 4.25 shows the steps required to move from PSNB to the PSNCR and CGNCR and Table 4.26 highlights the changes since our March *EFO*. The detailed financial transactions forecast is provided in the supplementary fiscal tables on our website.

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<sup>15</sup> The Government is publishing a revised financing remit for 2011-12 alongside the *EFO*. 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 4.25: Reconciliation of PSNB and CGNCR

	£ billion						
	Outturn			Forecast			
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
<b>Public sector net borrowing</b>	<b>137.1</b>	<b>127</b>	<b>120</b>	<b>100</b>	<b>79</b>	<b>53</b>	<b>24</b>
Financial transactions	5.9	8	11	13	13	14	15
Accruals adjustments	-4.0	1	-1	4	-5	-8	1
<b>Public sector net cash requirement</b>	<b>138.9</b>	<b>136</b>	<b>130</b>	<b>116</b>	<b>86</b>	<b>60</b>	<b>40</b>
<i>minus</i> Local authorities net cash requirement	0.8	9	-2	-3	-4	-5	-6
<i>minus</i> Public corporations net cash requirement	0.4	2	4	4	7	4	5
<b>Central government net cash requirement own account</b>	<b>137.7</b>	<b>125</b>	<b>128</b>	<b>115</b>	<b>83</b>	<b>60</b>	<b>42</b>
Net lending within the public sector	1.9	10	2	2	2	2	2
<b>Central government net cash requirement</b>	<b>139.7</b>	<b>135</b>	<b>130</b>	<b>117</b>	<b>85</b>	<b>62</b>	<b>43</b>

Table 4.26: Changes in the reconciliation of PSNB and CGNCR since March forecast

	£ billion					
	Outturn		Forecast			
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<b>Public sector net borrowing</b>	<b>-8.8</b>	<b>5</b>	<b>20</b>	<b>30</b>	<b>33</b>	<b>24</b>
Financial transactions	1.6	1	2	2	2	5
Accruals adjustments	0.9	0	0	1	0	-1
<b>Public sector net cash requirement</b>	<b>-6.3</b>	<b>6</b>	<b>21</b>	<b>33</b>	<b>34</b>	<b>28</b>
<i>minus</i> Local authorities net cash requirement	-2.8	-3	-5	-5	-5	-5
<i>minus</i> Public corporations net cash requirement	-2.6	1	1	1	1	4
<b>Central government net cash requirement own account</b>	<b>-1.0</b>	<b>8</b>	<b>25</b>	<b>37</b>	<b>39</b>	<b>29</b>
Net lending within the public sector	-0.6	6	0	0	0	0
<b>Central government net cash requirement</b>	<b>-1.6</b>	<b>15</b>	<b>25</b>	<b>37</b>	<b>39</b>	<b>29</b>

4.145 The major changes to the forecast of financial transactions since March can be described as follows:

- the sale of Northern Rock plc reduces the net cash requirement in 2011-12;
- measures announced in the Autumn Statement, including the Business Finance Partnership, raise the net cash requirement from 2012-13;
- higher net cash payments relating to student loans, discussed further below;
- incorporating the ONS' recent classification decision to recognise proceeds from spectrum auctions at the point of sale removes the need to adjust for accrued rents, which amounted to around £1 billion a year. This ensures the net effect on the cash requirement remains zero;
- changes to the forecasts for RPI, which affects the accruals uplift on index linked gilts. Lower RPI inflation implies a smaller accruals adjustment, ensuring that the net effect on the cash requirement is zero except when a gilt redeems;
- a lower net cash requirement for local authorities, partly due to lower spending, which reduces PSNB and PSNCR, but not CGNCR. We have also revised our judgements on intra-public sector grants, which have no effect on PSNCR, but reduce LANCR and increase CGNCR.
- we now expect that local authorities will borrow all they need to finance their one-off net payment of £8.5 billion to central government in 2011-12 as part of the HRA reforms from the PWLB. We had previously assumed that £5 billion of a required £7.5 billion would be funded through the private market. This gives an overall change to CGNCR since March of £6 billion; and
- correcting for an error in 2015-16, where we previously scored repayment of loans to central government from wholly owned banks as reducing PSNCR.

4.146 We include estimates of the net cash requirement as a consequence of the Government's announcements on higher education funding, and the legacy effects from previously agreed student loans. Student loan repayments are expected to be lower than we forecast in March, due to our forecast of lower average earnings in the economy. The revisions also reflect moving to a new repayments model, which is better able to take on board data from the Student Loans Company.

4.147 We have also raised our forecast of the payments that the Government will make under the new fee arrangements. In July the Office for Fair Access (OFFA) released figures for the average tuition fee for the 2012-13 academic year, which after deductions is £8,161. This number is likely to fall slightly as a number of institutions are seeking to revise down their agreements with OFFA, so at this stage we have assumed the average fee will be £8,100. We then need to make an assumption on the average loan per student, given that some students will choose not to take a loan and some will take out less than the full amount. For this forecast, we have assumed the initial average loan per student for tuition fees will be £7,000, up from £6,800 in our March forecast. This implies that students will on average request loans to cover around 86 per cent of total fees. There continues to be significant uncertainty over the eventual average loan per student.

## The key fiscal aggregates

4.148 Our central forecast for the key fiscal aggregates is presented in Table 4.27. These reflect the forecasts we have set out for receipts, expenditure and financial transactions earlier in this chapter. In this section we explain the changes in four key fiscal aggregates:

- **public sector net borrowing**, which represents 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 **surplus on the current budget**, which is the difference between public sector current expenditure and receipts each year. In other words it is public sector net borrowing excluding borrowing to finance investment;
- the **cyclically-adjusted current budget**, which is the surplus on the current budget adjusted to remove the estimated effect of the economic cycle. It therefore represents an estimate of the underlying or 'structural' surplus on the current budget, in other words the surplus 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**, which is a stock measure of the public sector's net liability position i.e. its liabilities minus 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 the fiscal measure used for the Government's supplementary fiscal target.

Table 4.27: Fiscal aggregates

	Per cent of GDP						
	Outturn	Forecast					
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
<b>Receipts and expenditure</b>							
Public sector current receipts (a)	37.3	37.8	37.7	37.7	37.7	37.7	37.8
Total managed expenditure (b)	46.6	46.2	45.3	43.7	42.2	40.5	39.0
of which: PSCE (c)	42.6	42.9	42.3	41.0	39.6	38.1	36.6
PSNI (d)	2.6	1.9	1.6	1.3	1.3	1.1	1.1
Depreciation (e)	1.4	1.4	1.4	1.4	1.4	1.4	1.3
<b>Deficit</b>							
Public sector net borrowing (b-a)	9.3	8.4	7.6	6.0	4.5	2.9	1.2
Surplus on current budget (a-c-e)	-6.7	-6.5	-6.0	-4.7	-3.3	-1.8	-0.1
Cyclically-adjusted net borrowing	7.1	6.4	5.5	4.0	2.8	1.7	0.6
Primary balance	-6.5	-5.4	-4.9	-3.2	-1.7	0.0	1.6
<b>Fiscal mandate and supplementary target</b>							
Cyclically-adjusted surplus on current budget	-4.5	-4.6	-3.9	-2.7	-1.6	-0.6	0.5
Public sector net debt <sup>1</sup>	60.5	67.5	73.3	76.6	78.0	77.7	75.8
<b>Financing</b>							
Central government net cash requirement	9.5	8.9	8.2	7.1	4.9	3.4	2.2
Public sector net cash requirement	9.4	8.9	8.3	7.0	5.0	3.2	2.1
<b>Stability and Growth Pact</b>							
Treaty deficit <sup>3</sup>	9.5	8.4	7.6	6.1	4.6	3.0	1.3
Cyclically-adjusted Treaty deficit <sup>2</sup>	7.3	6.4	5.5	4.0	2.9	1.8	0.7
Treaty debt ratio <sup>3</sup>	76.5	84.2	90.1	93.1	93.9	92.6	89.7
£ billion							
Surplus on current budget	-98.4	-99	-95	-78	-57	-33	-3
Net investment	38.6	29	25	22	22	20	21
Public sector net borrowing	137.1	127	120	100	79	53	24
Central government net cash requirement	139.7	135	130	117	85	62	43
Public sector net debt	905.3	1044	1182	1300	1397	1470	1515
Memo: Output gap (per cent of GDP)	-2.8	-2.8	-3.1	-2.8	-2.3	-1.5	-0.7
<sup>1</sup> Debt at end March; GDP centred on end March							
<sup>2</sup> General government net borrowing on a Maastricht basis							
<sup>3</sup> General government gross debt on a Maastricht basis							

## Public sector net borrowing

### Public sector net borrowing in 2011-12

4.149 Our new forecast for PSNB in 2011-12 is £127 billion or 8.4 per cent of GDP. This is £5 billion above the estimate we made in the March *EFO*. In cash terms, this reflects a significant reduction in our forecast of receipts which is only partially offset by lower forecast expenditure:

- we expect around £13 billion less receipts than we forecast in March due to the significantly lower corporation tax receipts from the financial and oil sectors received so far in 2011-12, and a reduction in our forecast for VAT receipts and interest receipts; and
- partially offsetting this is a reduction in our forecast of expenditure in 2011-12, which reflects changes to a number of items including transfers to the EU, debt interest payments and capital expenditure.

4.150 There are a number of risks to our in-year estimate of public sector net borrowing. In particular, local authority expenditure is often revised significantly after the end of the year as fuller data becomes available. January to March is also an important part of the year for receipts from self-assessed income tax, capital gains tax, and from income tax and NICS related to bonus payments, which have been very volatile in recent years.

### Public sector net borrowing from 2012-13

4.151 Table 4.27 shows that we expect PSNB to decline from 8.4 per cent of GDP this year to 1.2 per cent in 2016-17. As shown in Chart 4.3, the decline in PSNB over the forecast period is driven mainly by a fall in spending as a share of GDP due to the Government's fiscal consolidation.

4.152 Compared to our March forecast, the pace of the decline in PSNB is less rapid and PSNB is higher in every year of the forecast. Including the policy measures announced in the Autumn Statement, by 2015-16 we forecast PSNB to be £24 billion or 1.4 per cent of GDP higher than we expected in March. Public sector receipts are £41 billion or 0.7 per cent of GDP lower in 2015-16 than we forecast in March, of which the key drivers are:

- lower forecast growth in the key economic drivers of tax receipts – labour income, household consumption and company profits – which feed through to lower forecasts for income tax, VAT and corporation tax;

- falls in oil prices, equity prices and interest rates compared to March, leading to lower oil and gas revenues, stamp duty, and interest receipts; and
- the sharp fall in financial sector corporation tax receipts seen so far this year, which we assume is not recovered over the forecast period.

4.153 Total managed expenditure (TME) is forecast to be 0.7 per cent of GDP higher by 2015-16 than we expected in March (despite being lower in cash terms). The most significant changes here are:

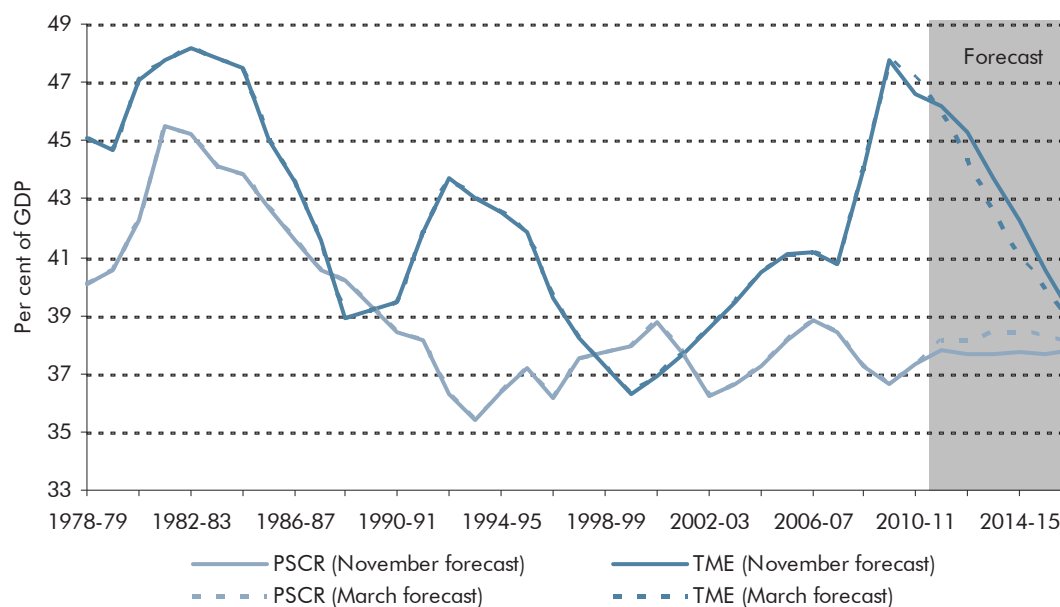
- departmental spending over the spending review period is generally fixed in cash terms. Our forecast of lower nominal GDP therefore means this spending is higher as a share of GDP;
- our forecast of social security benefits and public sector pension payments has increased largely due to higher CPI and claimant count unemployment forecasts;
- this is partly offset by reduced government debt interest payments due to lower expected interest rates and lower RPI inflation; and
- in 2015-16 and 2016-17, the Government's additional discretionary fiscal tightening reduces total expenditure as a share of GDP by 0.5 percentage points.

Table 4.28: Components of net borrowing

	£ billion						
	Outturn		Forecast				
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
<b>Current budget</b>							
Current receipts	551.4	575	594	624	657	693	735
Current expenditure	629.5	652	667	678	690	701	712
Depreciation	20.4	22	23	24	24	25	26
<b>Surplus on current budget</b>	<b>-98.4</b>	<b>-99</b>	<b>-95</b>	<b>-78</b>	<b>-57</b>	<b>-33</b>	<b>-3</b>
<b>Capital budget</b>							
Gross investment <sup>1</sup>	59.0	50	48	45	46	46	47
Less Depreciation	-20.4	-22	-23	-24	-24	-25	-26
<b>Net investment</b>	<b>38.6</b>	<b>29</b>	<b>25</b>	<b>22</b>	<b>22</b>	<b>20</b>	<b>21</b>
<b>Net borrowing</b>	<b>137.1</b>	<b>127</b>	<b>120</b>	<b>100</b>	<b>79</b>	<b>53</b>	<b>24</b>

<sup>1</sup> Net of asset sales

Chart 4.3: Total public sector spending and receipts



Source: ONS, OBR

Table 4.29: Changes to public sector net borrowing since March forecast

	Per cent of GDP				
	Outturn 2011-12	2012-13	Forecast		
			2013-14	2014-15	2015-16
PSNB March	7.9	6.2	4.1	2.5	1.5
PSNB November	8.4	7.6	6.0	4.5	2.9
<b>Change</b>	<b>0.5</b>	<b>1.4</b>	<b>1.9</b>	<b>2.0</b>	<b>1.4</b>
<i>of which:</i>					
Tax	-0.3	-0.5	-0.8	-0.7	-0.7
of which: policy	0.0	0.0	0.0	0.0	0.0
Spending	0.2	1.0	1.2	1.2	0.7
of which: policy	0.0	0.0	0.0	0.0	-0.5

## Current budget

4.154 The current budget is forecast to move from a deficit of £99 billion or 6.5 per cent of GDP in 2011-12 to a deficit of £3 billion or 0.1 per cent of GDP in 2016-17. The improvement is less sharp than for PSNB as it excludes the reduction in capital spending over the period. Compared to our March forecast, the deterioration in the current budget is marginally greater than in PSNB. This is because we are forecasting lower capital expenditure than we expected in March, which improves PSNB but does not affect the current budget. In all other respects the changes in PSNB explained in the previous section also feed through to changes in the current budget.



## Cyclically-adjusted current budget

4.155 The cyclically-adjusted current budget (CACB) is the current budget adjusted to remove the estimated effect of the economic cycle. It therefore represents an estimate of the 'structural' current deficit. It is used as the target measure for the deficit on the Government's fiscal mandate. Our latest forecast is for the CACB to be broadly flat at 4.5 per cent of GDP between 2010-11 and 4.6 per cent of GDP in 2011-12 before improving to a surplus of 0.5 per cent of GDP in 2016-17.

4.156 Compared to March, there has been a deterioration in the CACB in each year of the forecast. As discussed in Chapter 3, our judgements on the amount of spare capacity in the economy and its potential growth rate imply that potential output is lower than in March throughout our forecast. As a result, more of the current budget deficit is assumed to be structural rather than cyclical, because it will not shrink automatically as the economy recovers toward its potential level of output. Table 4.30 breaks down the reasons for changes to the CACB since March:

- the revision to the level of potential output in our economy forecast leads to a deterioration in the CACB in 2015-16 of 2.1 per cent of GDP;
- in the Autumn Statement the Government announced an additional discretionary fiscal tightening of £8.3 billion in 2015-16, which improves the CACB in 2015-16 by 0.5 per cent of GDP;
- this is in addition to the Government's previously stated policy of increasing total spending in line with general inflation in the economy beyond the current Spending Review. We have revised down our estimate of general inflation as defined by the GDP deflator by 0.2 percentage points, due to the ONS methodological changes explained in Chapter 2. This means that the increase in cash spending required to keep total spending rising in line with general inflation is smaller than previously. This improves the CACB in 2015-16 by 0.1 per cent of GDP; and
- the impact of other changes to receipts and spending on the CACB are generally small, except in 2010-11 and 2011-12 where reductions in current expenditure compared to our March forecast improve the CACB by 0.5 per cent of GDP and 0.4 per cent of GDP, respectively.

4.157 Further discussion of the change to the CACB in 2015-16 and 2016-17 is provided in Chapter 5. In our March forecast we expected the CACB to improve by 1.4 per cent of GDP between 2010-11 and 2011-12. We now expect the CACB to remain broadly flat between these two years. Our reassessment of the level of potential output leads to greater deterioration in the CACB in 2011-12

than in 2010-11. In addition, there are one-off factors that reduced spending and increased receipts compared to our March forecast to a greater extent in 2010-11 than in 2011-12.

Table 4.30: Revisions to the cyclically-adjusted current budget balance since Budget 2011

	Per cent of GDP					
	Outturn	Forecast				
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
CACB March	-4.6	-3.2	-2.0	-0.6	0.4	0.8
CACB November	-4.5	-4.6	-3.9	-2.7	-1.6	-0.6
<b>Change</b>	<b>0.1</b>	<b>-1.4</b>	<b>-1.9</b>	<b>-2.1</b>	<b>-2.0</b>	<b>-1.4</b>
<i>of which:</i>						
Change to potential output	-0.6	-1.8	-2.2	-2.2	-2.1	-2.1
Other receipts	0.2	0.0	0.0	-0.2	-0.1	-0.1
Other spending	0.5	0.4	0.2	0.2	0.2	0.3
Direct effect of policy	0.0	0.0	0.0	0.1	0.1	0.5

## Net debt

4.158 The Government's supplementary fiscal target is for PSND to be falling as a share of GDP at a fixed date of 2015-16. In our latest forecast, PSND rises from 67.5 per cent in 2011-12 to 78.0 per cent of GDP in 2014-15 before falling back to 77.7 per cent of GDP in 2015-17 and then to 75.8 percent of GDP in 2016-17.

4.159 Compared to our March *EFO*, PSND is now expected to be significantly higher across the forecast period. By 2015-16, PSND is 8.6 per cent of GDP or £112 billion higher than in our March forecast. This is a result of the significant additional borrowing over the forecast period and our lower forecast for nominal GDP. In addition, PSND is affected by the changes to financial transactions set out in the earlier section of this chapter.

4.160 Table 4.31 shows that as a share of GDP in 2015-16, around two-thirds of the change in PSND is due to higher debt level driven by higher borrowing and financial transactions, while one third of the change is due to lower nominal GDP.

Table 4.31: Key changes to net debt since March forecast

	£ billion					
	Outturn	Forecast				
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
March forecast	909	1046	1164	1251	1314	1359
November forecast	905	1044	1182	1300	1397	1470
<b>Change</b>	<b>-4</b>	<b>-2</b>	<b>18</b>	<b>49</b>	<b>83</b>	<b>112</b>
<i>of which:</i>						
Cumulative change in net borrowing	-9	-3	16	46	79	102
Cumulative change in financial transactions	2	4	5	8	10	14
Other	2	-2	-3	-5	-5	-5
	Per cent of GDP					
March forecast	60.3	66.1	69.7	70.9	70.5	69.1
November forecast	60.5	67.5	73.3	76.6	78.0	77.7
<b>Change</b>	<b>0.2</b>	<b>1.4</b>	<b>3.6</b>	<b>5.7</b>	<b>7.5</b>	<b>8.6</b>
<i>of which:</i>						
Change in net debt (£ billion)	-0.3	-0.1	1.1	2.9	4.6	5.9
Change in nominal GDP	0.5	1.5	2.5	2.8	2.8	2.7

Table 4.32: Changes to the fiscal forecast

	£ billion					
	Outturn		Forecast			
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
<b>Surplus on current budget</b>						
June 2010 forecast	-110.2	-88	-65	-40	-17	0
March 2011 forecast	-104.8	-90	-73	-46	-22	-5
Change	6.4	-9	-22	-32	-35	-28
November 2011 forecast	-98.4	-99	-95	-78	-57	-33
<b>Net investment</b>						
June 2010 forecast	38.9	27	24	20	21	21
March 2011 forecast	41.1	32	28	24	24	25
Change	-2.4	-3	-3	-2	-2	-4
November 2011 forecast	38.6	29	25	22	22	20
<b>Net borrowing</b>						
June 2010 forecast	149.1	116	89	60	37	20
March 2011 forecast	145.9	122	101	70	46	29
Change	-8.8	5	20	30	33	24
November 2011 forecast	137.1	127	120	100	79	53
Per cent of GDP						
<b>Net borrowing</b>						
June 2010 forecast	10.1	7.5	5.5	3.5	2.1	1.1
March 2011 forecast	9.9	7.9	6.2	4.1	2.5	1.5
Change	-0.6	0.5	1.4	1.9	2.0	1.4
November 2011 forecast	9.3	8.4	7.6	6.0	4.5	2.9
<b>Cyclically-adjusted surplus on current budget</b>						
June 2010 forecast	-4.8	-3.2	-1.9	-0.7	0.3	0.8
March 2011 forecast	-4.6	-3.2	-2.0	-0.6	0.4	0.8
Change	0.1	-1.4	-1.9	-2.1	-2.0	-1.4
November 2011 forecast	-4.5	-4.6	-3.9	-2.7	-1.6	-0.6
<b>Cyclically-adjusted net borrowing</b>						
June 2010 forecast	7.4	5.0	3.4	1.8	0.8	0.3
March 2011 forecast	7.4	5.3	3.7	2.0	1.0	0.5
Change	-0.3	1.2	1.8	2.0	1.9	1.2
November 2011 forecast	7.1	6.4	5.5	4.0	2.8	1.7
<b>Net debt<sup>1</sup></b>						
June 2010 forecast	61.9	67.2	69.8	70.3	69.4	67.4
March 2011 forecast	60.3	66.1	69.7	70.9	70.5	69.1
Change	0.2	1.4	3.6	5.7	7.5	8.6
November 2011 forecast	60.5	67.5	73.3	76.6	78.0	77.7

<sup>1</sup> Debt at end March; GDP centred on end March.

#### Box 4.4: International comparisons

This box looks at how the government borrowing and debt levels of the UK compare with other countries. The government's preferred measures are public sector net borrowing (PSNB) and public sector net debt (PSND), both excluding financial interventions. In line with the Government's financial and budgeting frameworks, these are shown on a financial year basis.

International organisations such as the European Commission, the IMF and the OECD all provide comparisons of deficit and debt levels. These are on a general government basis i.e. they exclude public corporations. They are also on a calendar year basis.

- European Commission: Treaty deficit (general government net borrowing) and Treaty debt (general government gross debt);
- IMF: general government measures of net borrowing, gross and net debt; and
- OECD: general government gross and net financial liabilities. This is a wider concept with a larger coverage of liabilities and assets.

To facilitate international comparisons, we provide projections in this box for Treaty debt and deficit on a calendar year basis. The UK will continue to be assessed on a financial year basis for the Maastricht Treaty debt and deficit targets. We have also produced a general government net debt projection on the same basis as the IMF, based on subtracting estimates of liquid assets from the general government gross debt forecast. Our intention is to generate a forecast on the OECD basis for Budget 2012. With both modelling and reporting of much tax and spending done primarily on a financial year only, the calendar year forecasts are illustrative and have been generated simply by weighting the financial year forecasts appropriately (i.e. the 2012 forecast would be three-quarters of the 2012-13 forecast and one-quarter of the 2011-12 forecast).

Table A looks at our latest forecasts for Treaty deficit and debt against the Autumn 2011 forecasts from the European Commission for 2011 to 2013. Relative to the main European countries, the UK deficit remains high in 2013. The UK's Treaty debt levels are now close to the euro area average.

Table A: Comparison with European Commission Forecasts

	Per cent of GDP					
	Treaty Deficit			Treaty Debt		
	2011	2012	2013	2011	2012	2013
UK (Nov EFO)	8.8	7.9	6.5	82.4	88.8	92.5
UK (EC)	9.4	7.8	5.8	84.0	88.8	91.3
Germany	1.3	1.0	0.7	81.7	81.2	79.9
France	5.8	5.3	5.1	85.4	89.2	91.7
Italy	4.0	2.3	1.2	120.5	120.5	118.7
Spain	6.6	5.9	5.3	69.6	73.8	78.0
Euro area	4.1	3.4	3.0	88.0	90.4	90.9

Table B looks at our latest forecasts for general government net borrowing and general government net debt against the IMF's World Economic Outlook forecasts from September 2011. The debt level is also markedly above the IMF's latest forecast. By 2016, government borrowing in the UK is expected to be similar to a number of European countries, but well below the projected deficits of the US and Japan.

Table B: Comparison with IMF Forecasts

	Per cent of GDP					
	General Government Net Borrowing			General Government Net Debt		
	2011	2012	2016	2011	2012	2016
UK (Nov EFO)	8.8	7.9	1.7	75.1	81.1	83.5
UK (IMF)	8.5	7.0	1.7	72.9	76.9	72.5
Germany	1.7	1.1	-0.4	57.2	57.0	55.3
France	5.9	4.6	1.4	81.0	83.5	81.9
Italy	4.0	2.4	1.1	100.4	100.7	94.8
Japan	10.3	9.1	7.3	130.6	139.0	166.9
U.S.	9.6	7.9	6.0	72.6	78.4	88.7

# 5 Performance against the Government's fiscal targets

## Summary

- 5.1 On taking office in 2010 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 2016-17; and
  - to see public sector net debt (PSND) falling in 2015-16.
- 5.2 In the absence of additional policy measures in the 2011 Autumn Statement, we believe that the Government would have had a less than 50 per cent chance of achieving these targets. Our central forecast would have shown a deficit on the CACB of £6 billion or 0.3 per cent of GDP in 2016-17 and an increase in PSND of 0.2 per cent of GDP between 2014-15 and 2015-16.
- 5.3 The Government has put itself back on course to meet its targets by announcing specific new policy measures that reduce the CACB by £8 billion or 0.5 per cent of GDP in 2015-16 and £15 billion or 0.8 per cent of GDP in 2016-17. The 'unchanged policy' baseline against which these policies are measured extends the real freeze in total spending that the Government had previously announced for 2015-16 into 2016-17. This reduces structural non-investment spending and the CACB in that year by a further £15 billion or 0.8 per cent of GDP. This gives a total discretionary cut in non-investment spending and in the CACB of £30 billion or 1.5 per cent of GDP in 2016-17, compared to a counterfactual assuming structural spending growing in line with GDP.
- 5.4 Taking the policy measures and the baseline tightening into account, our central forecast now shows a surplus on the CACB of over £9 billion or 0.5 per cent in 2016-17 and a fall in PSND of 0.3 per cent of GDP in 2015-16. This implies that the Government has a better than 50 per cent chance of hitting its targets. It has slightly less margin for error than it did in March, when we were forecasting the CACB would be in surplus by £15 billion or 0.8 per cent of GDP at the then five year horizon of 2015-16 and that PSND would fall by 1.4 per cent of GDP in 2015-16.

5.5 In March we estimated not only that the Government was on course to meet the mandate at the then five-year horizon of 2015-16, but that the CACB would also be in surplus a year earlier in 2014-15. In this forecast the CACB is no longer in surplus in these years, primarily because we have revised down the expected level of output by around 3.5 per cent from 2014-15 onwards, and the revision is structural rather than cyclical. This worsens the CACB by just over 2 per cent of GDP in each year thereafter. The Autumn Statement measures and baseline tightening offset about 5 per cent of this structural deterioration in 2014-15, 30 per cent in 2015-16 and 80 per cent in 2016-17. This is sufficient to keep the CACB in surplus in 2016-17, but not in the previous two years.

5.6 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 60 per cent probability that the CACB will be in balance or surplus in 2016-17 (as the mandate requires) and a roughly 40 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  $\frac{3}{4}$  per cent of potential GDP narrower, or rather the level of potential output  $\frac{3}{4}$  per cent lower, then in our central forecast the Government would no longer be on course to balance the cyclically-adjusted current budget in 2016-17; and
- third, by looking at alternative economic scenarios. We examine three illustrative scenarios: first, one in which banks' funding costs remain elevated and these are passed on to the wider economy; second, one in which the financial crisis had no effect on the level of potential output; and third, a scenario where structural unemployment is higher, but the productive potential of the economy remains unchanged. The first reduces the Government's chances of meeting the mandate, the second significantly increases the chances, and the third has little net impact.

## Introduction

5.7 This chapter:

- sets out the Government's medium-term fiscal targets (from paragraph 5.8);



- examines whether the Government has a better than 50 per cent chance of meeting them, given our central forecast for the public finances (from paragraph 5.11); 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 5.17).

## The fiscal mandate and supplementary target

- 5.8 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 than 50 per cent probability of hitting these targets under existing policy.
- 5.9 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 exceed total public sector spending (minus spending on net investment) in five years time, after adjusting for the impact on receipts and spending of any remaining spare capacity in the economy. For the purposes of this and the spring 2012 *EFO*, the five-year horizon ends in 2016-17.
- 5.10 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 the measure of public sector net debt (PSND) that excludes the temporary effects of financial interventions.

## The implications of our central forecast

- 5.11 Table 5.1 shows our central forecasts for the cyclically-adjusted current budget (CACB) and PSND in each year to 2016-17, 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						
		2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
	March forecast	-4.6	-3.2	-2.0	-0.6	0.4	0.8	
CACB	November pre-measures forecast <sup>1</sup>	-4.5	-4.5	-3.9	-2.7	-1.7	-1.1	-0.3
	November forecast	-4.5	-4.6	-3.9	-2.7	-1.6	-0.6	0.5
	March forecast	60.3	66.1	69.7	70.9	70.5	69.1	
PSND	November pre-measures forecast <sup>1</sup>	60.5	67.5	73.2	76.5	77.9	78.1	77.0
	November forecast	60.5	67.5	73.3	76.6	78.0	77.7	75.8

<sup>1</sup> These remove the direct effect of measures announced in the Autumn Statement, but not the implied baseline tightening in spending beyond the current Spending Review period. No account is taken of the effect of measures on debt interest payments, nor any indirect effects via their impact on the economic forecast.

- 5.12 Table 5.1 shows that in our central forecast the CACB is expected to be in surplus by 0.5 per cent of GDP in 2016-17 on current policies, once the policy measures announced in the Autumn Statement have been taken into account. This means that there is greater than a 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.
- 5.13 In our March *EFO*, the relevant year for assessing the fiscal mandate was 2015-16. On the basis of our forecasts at the time, policy was set to meet the fiscal mandate for that year, and to achieve a surplus on the CACB a year earlier in 2014-15. But our latest central forecast shows that the CACB is now expected to be in deficit by 1.6 per cent of GDP in 2014-15 and by 0.6 per cent of GDP in 2015-16.
- 5.14 So why is the Government no longer on course to achieve a surplus on the CACB in 2014-15 and 2015-16, and why is it nonetheless on course to do so in the current mandate year of 2016-17?
- 5.15 Chart 5.1 decomposes the changes in our forecasts of the CACB since March. The figures for 2016-17 are produced by assuming a baseline CACB in 2016-17

equal to the 2015-16 CACB that we had forecast in March.<sup>1</sup> The chart applies ready reckoners, discussed further below, to capture the impact of changes in actual and potential GDP. Any outstanding revisions not explained by policy measures can then be attributed to either receipts or spending. This decomposition shows that:

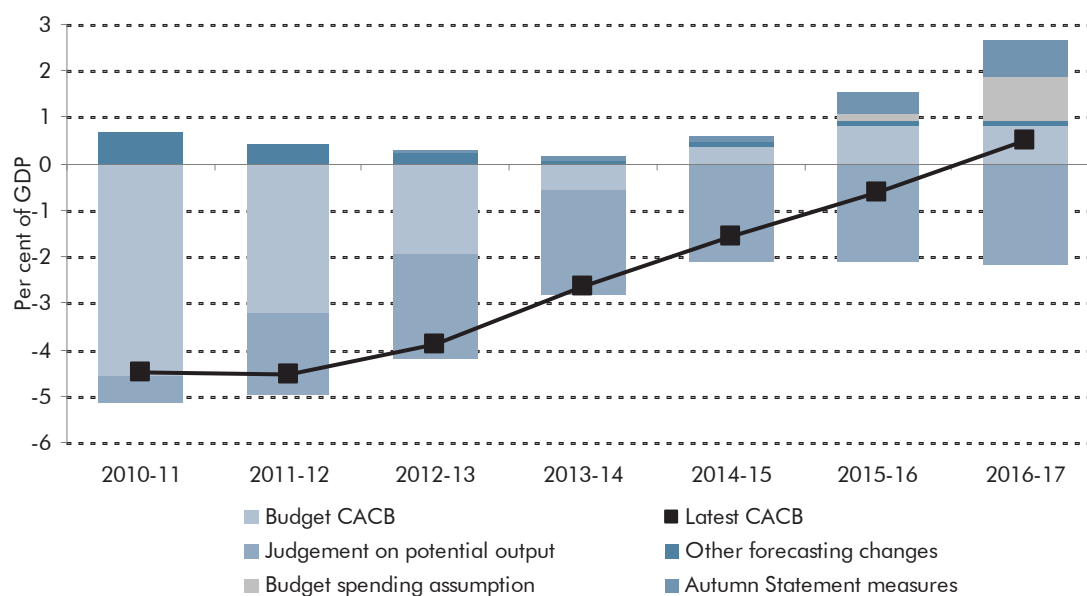
- our downward revision to the level of potential output has worsened the CACB by just over 2 per cent of GDP in 2014-15, 2015-16 and 2016-17, relative to our forecast in March. Because the downward revision to output in our forecast is all structural rather than cyclical by then, the impact on revenues and spending feeds through directly to the CACB rather than showing up as higher cyclical borrowing. This on its own would have been sufficient to put the CACB in deficit in each of these three years;
- other forecasting changes to receipts and spending have little net effect on the CACB in these three years;
- the Government's stated policy in March that it would hold total public spending constant in real terms in 2015-16 now delivers a slightly bigger fiscal tightening in 2015-16 than it did in March. This is because of the ONS methodological change that results in more of a given change in nominal GDP being attributed to a rise in output rather than a rise in prices. Holding spending constant in real terms in 2015-16 now improves the CACB in that year by 0.8 per cent of GDP rather than 0.7 per cent as in March;
- extending the previously planned real freeze on total spending in 2015-16 into 2016-17 (which the Treasury treats as 'unchanged policy' and which does not therefore appear in its scorecard of policy measures) reduces structural non-investment spending by a further 0.8 per cent of GDP in that year and improves the CACB by the same amount; and
- the additional measures that appear in the Treasury's policy costings table further reduce spending and improve the CACB by 0.5 per cent of GDP in 2015-16 and 0.8 per cent of GDP in 2016-17. This is sufficient to push the

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<sup>1</sup> It is not unreasonable to assume a flat CACB baseline at this time horizon. The structural improvement in receipts that one might expect from 'fiscal drag' (more of people's incomes being taxed at higher rates as earnings rise faster than tax thresholds and allowances) is likely to be offset by falling revenue from sources that we know are declining in the medium term, such as North Sea oil production. Table 4.6 shows that public sector receipts as a share of GDP are broadly flat across the later years of our forecast. Although we would expect headline expenditure to continue to fall as a share of GDP, reflecting a continued cyclical improvement, there are no clear reasons to expect a structural change over such a short time horizon.

final forecast level of the CACB into surplus by 0.5 per cent of GDP in 2016-17, but leaves it in deficit by 0.6 per cent of GDP in 2015-16.

Chart 5.1: Revisions to the cyclically-adjusted current budget balance since Budget 2011



Source: OBR

5.16 The supplementary target requires PSND to fall between 2014-15 and 2015-16, and this target year remains fixed. As Table 5.1 shows, back in March we forecast that PSND would drop by 1.4 per cent of GDP in 2015-16. In the absence of policy measures in the Autumn Statement, we estimate that it would have been on course to rise by 0.2 per cent of GDP, breaching the target. This is because public sector net borrowing is now expected to be higher in 2015-16, reflecting the lower level of activity. The additional policy tightening of 0.5 per cent of GDP in 2015-16 announced in the Autumn Statement puts the Government back on course to achieve the target, with PSND set to fall by 0.3 per cent of GDP in the year.

## Recognising uncertainty

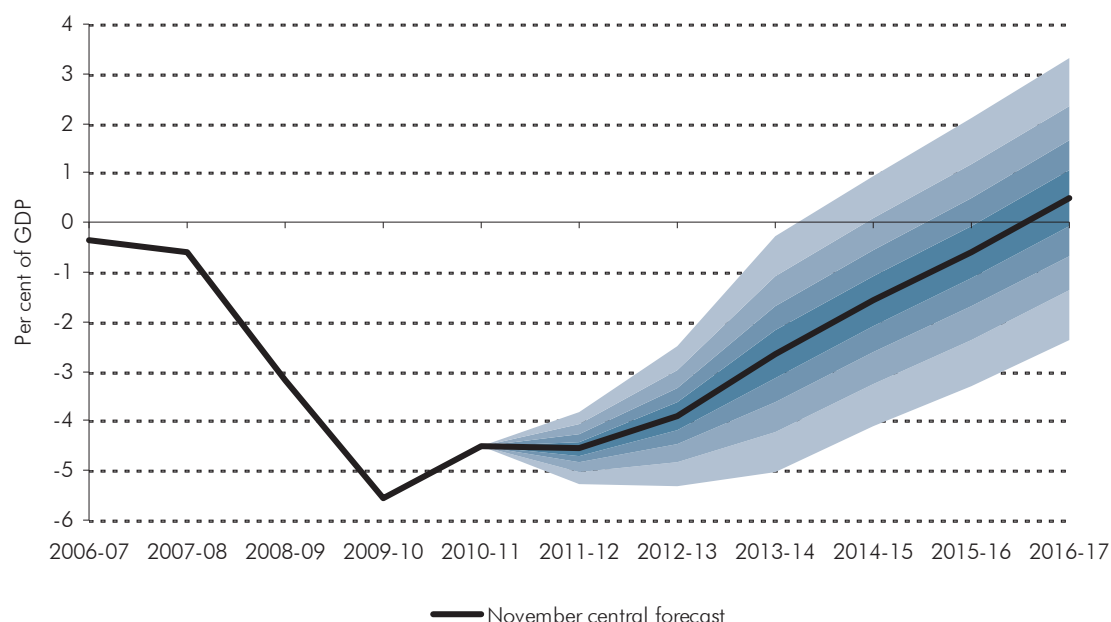
5.17 Past experience and common sense suggest that there will be significant upside and downside risks to our central forecasts for the public finances. These reflect uncertainty both about the outlook for the economy and about the level of receipts and spending that the Government would record in any given state of the economy.

- 5.18 Given these uncertainties, it is important to stress-test our judgement that the Government is on course to meet the mandate in 2016-17 and 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 forecast performance

- 5.19 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 our central forecast was likely to be as accurate as previous official forecasts have been in the past.
- 5.20 In this spirit, Chart 5.2 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 10 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 5.2: Cyclically-adjusted current budget fan chart



- 5.21 We can see from the chart that, given past forecasting performance, the margin between the Government meeting and missing its fiscal mandate is dwarfed by the uncertainty that surrounds the public finance forecast over that time horizon. A direct reading of the chart would imply that on the basis of the policy measures set out in the Autumn Statement the Government currently has a roughly 60 per cent probability of achieving a surplus on the cyclically-adjusted current budget in 2016-17 and thereby meeting the mandate.
- 5.22 The probability of achieving a cyclically-adjusted surplus a year earlier in 2015-16 is lower at around 40 per cent. This compares to the 70 per cent probability implied by our previous forecast in March. The current probability would have been lower still at around 30 per cent had the Government not introduced further policy measures.
- 5.23 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 falling as a percentage of GDP in 2015-16.

### Sensitivity analysis

- 5.24 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.

- 5.25 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.
- 5.26 Our central forecast is based on a judgement that the economy was running around 2½ per cent below potential in the third quarter of 2011, that the output gap will continue to widen until mid-2012, and that there will be above-trend GDP growth thereafter.
- 5.27 The output gap appears to have been more than 1 percentage point narrower in the third quarter than we had assumed in March. We are also now expecting the potential growth rate of the economy to be slower over the next two years, with a gradual return to the long-run average by the start of 2014. Taking these two factors in combination, we now expect that the level of potential output will be around 3.5 per cent lower in 2015-16 than in our March forecast.
- 5.28 Our assumptions on the potential level of the economy and headline growth rate forecasts continue to imply that the negative output gap will close in 2017-18. But neither the potential level, 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?
- 5.29 Tables 5.2 and 5.3 present illustrative estimates of the impact of these variants on:
- the level of the cyclically-adjusted current budget balance in 2016-17; and
  - the change in PSND between 2014-15 and 2015-16.

- 5.30 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. Adjusting the mix between the two does not alter the results.
- 5.31 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 surplus after two years. The actual change in the public finances would also depend on the composition of any change to GDP. For this reason we also assume that the composition of growth remains as in our central forecast. While we recognise the limitations of these ready-reckoners, applying them yields the results shown in the tables below.

Table 5.2: Cyclically-adjusted current balance in 2016-17

Per cent of GDP	Output gap closes					
	2013-14	2015-16	2017-18	2019-20	2021-22	
<b>Output gap in 2011 Q3</b>	<b>-0.5</b>	-0.9	-0.9	-0.9	-0.9	-1.0
	<b>-1.5</b>	-0.2	-0.2	-0.2	-0.2	-0.2
	<b>-2.5</b>	0.5	0.5	0.5	0.5	0.5
	<b>-3.5</b>	1.2	1.2	1.2	1.2	1.2
	<b>-4.5</b>	2.0	2.0	2.0	1.9	1.9

Table 5.3: Change in PSND between 2014-15 and 2015-16

Per cent of GDP	Output gap closes					
	2013-14	2015-16	2017-18	2019-20	2021-22	
<b>Output gap in 2011 Q3</b>	<b>-0.5</b>	0.6	0.4	0.8	1.0	1.3
	<b>-1.5</b>	0.0	-0.5	0.3	0.7	0.7
	<b>-2.5</b>	-0.7	-1.1	-0.3	0.4	0.5
	<b>-3.5</b>	-1.3	-1.9	-0.9	-0.2	0.2
	<b>-4.5</b>	-1.9	-2.8	-1.4	-0.8	-0.3

- 5.32 Table 5.2 shows that the level of potential output has a strong effect on the size of the cyclically-adjusted current budget balance in 2016-17. The lower is potential, 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.



- 5.33 Closing the output gap at a different pace will result in a change in cyclical borrowing, but has 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.
- 5.34 Roughly speaking, the output gap would have to be about  $\frac{3}{4}$  per cent of potential output narrower than our central estimate (or rather the level of potential output would need to be  $\frac{3}{4}$  per cent lower in 2016-17 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.
- 5.35 Table 5.3 shows that the Government would miss its supplementary target if the output gap was marginally narrower than our central forecast, or closed fractionally later. The former would imply more structural borrowing, whereas the latter would suggest further cyclical borrowing. In both cases PSNB would be higher as a per cent of GDP in 2015-16, leading PSND to continue to rise.
- 5.36 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 2012-13 and does not affect any other part of the forecast, including exchange rates and shorter-term interest rates. Table 5.4 shows the level of the cyclically-adjusted current budget balance in 2016-17 and the change in PSND between 2014-15 and 2015-16 under these variants, constructed using a ready-reckoner.

Table 5.4: Fiscal target variables under different gilt rate assumptions

	Per cent of GDP				
	r-50	r	r+50	r+100	r+150
<b>Cyclically-adjusted current budget balance in 2016–17</b>	0.7	0.5	0.3	0.1	-0.2
<b>Change in public sector net debt between 2014–15 and 2015–16</b>	-0.5	-0.3	-0.1	0.0	0.2

- 5.37 Table 5.4 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 of 13½ years, 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.

- 5.38 But the upward revision to our borrowing projections since March does lead to the forecast being more sensitive to gilt rate movements. Given the margin for error against the fiscal targets is also smaller since March, all else equal, a sustained shock of 100-150 basis points would make it more likely than not that the Government would miss both its fiscal targets. However, as discussed in Box 4.1, if short-term interest rates moved in line with gilt rates, there would be a direct offsetting impact on the public finances through an increase in receipts.
- 5.39 Our last sensitivity analysis concerns the uncertainty around our cyclical adjustment coefficients. As noted above, 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.<sup>2</sup> As set out in Chapter 4, we have used the Treasury's approach to cyclical adjustment, presented in *Public finances and the cycle*.<sup>3</sup> The coefficients we have used are therefore 0.2 for the previous year's output gap, and 0.5 for the current year's gap.
- 5.40 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.

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<sup>2</sup> For example, the cyclically-adjusted current budget is calculated as:  $CACB = CB - \alpha \cdot (OG_{t-1}) - \beta \cdot (OG_t)$ , where  $OG$  is the output gap in a given fiscal year  $t$  and  $\alpha$  and  $\beta$  are cyclical adjustment coefficients, and the current budget is expressed as a percentage of GDP.

<sup>3</sup> HM Treasury, 2008, *Public finances and the cycle: Treasury Economic Working Paper No. 5*

- 5.41 We have published a working paper exploring methods of estimating a historical output gap series alongside this report.<sup>4</sup> This will enable us to reassess the size of the cyclical adjustment coefficients. In the meantime, however, it is useful to consider how sensitive our central forecast is to variations in the coefficients.
- 5.42 If the coefficient on the current year's output gap was 0.4, rather than the Treasury's estimate of 0.5, the cyclically-adjusted current budget would be 0.07 per cent of GDP lower in 2016-17. If the coefficient on the previous year's output gap was also 0.1 rather than 0.2, the cyclically-adjusted current budget would be 0.21 per cent of GDP lower in 2016-17. Equally, higher coefficients would result in a smaller deficit/larger surplus on the current budget and lower net borrowing, on a cyclically-adjusted basis.
- 5.43 This analysis should be seen in the context of the uncertainty surrounding the size of the coefficients. The Treasury's 2008 paper included a comparison with alternative estimates, looking at the European Central Bank's (ECB) coefficient of 0.65 and the OECD figure of 0.45. Compared with the Treasury's estimate, the lower ECB and OECD coefficients would imply reductions in the cyclically-adjusted current budget in 2016-17 of 0.19 and 0.32 per cent of GDP respectively.<sup>5</sup> So using these coefficients the fiscal mandate would still be met, but with less margin for error than in our central forecast.

## Scenario analysis

- 5.44 The variants discussed in the previous section all assume that the composition of actual GDP growth and the rate at which the potential output of the economy increases are the same as in our central forecast. In this section we set out the fiscal implications of three 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. They are:
- a 'persistent tight credit conditions' scenario, in which banks' funding costs remain elevated, perhaps because of events in the euro area;

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<sup>4</sup> OBR, 2011, Working Paper No. 1: *Estimating the UK's historical output gap*

<sup>5</sup> 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.

- a 'no structural impairment' scenario, in which we assume that the financial crisis and recession had no effect on the level of potential output or its growth rate; and
- a 'higher structural unemployment' scenario, in which the productive potential of the economy is unchanged relative to the central forecast but its composition is different.

### Scenario one: Persistent tight credit conditions

5.45 Our central forecast is predicated on the euro area finding a way through its current difficulties, with the effect on confidence, credit conditions and economic activity taking some time to unwind, but with the financial sector returning to a stable position by the start of 2014. In this scenario we consider the implications of the financial sector taking longer to normalise (for reasons either to do with events in the euro area or with domestic factors). We make three assumptions:

- funding spreads remain elevated for around a year longer than in our central projection, as shown in Chart 5.3;
- the Bank of England cannot offset the higher funding costs, which are therefore passed on to the wider economy; and
- the price and availability of credit holds back innovation and the expansion of productive activity (we discuss this possibility in Box 3.1), extending the period over which potential output growth returns to rates consistent with long-term trends.

5.46 Tables 5.5 further below summarises the key implications of this scenario compared to our central forecast, and more specifically:

- elevated funding costs mean that household interest payments would account for around 1½ per cent more of disposable income than in our central forecast. Disposable incomes are also reduced by lower employment, while tighter credit delays a pickup in property transactions and the housing market more generally;
- the gradual recovery in underlying GDP growth through 2012 is delayed, with GDP lower than in our central forecast and in particular in 2013 and

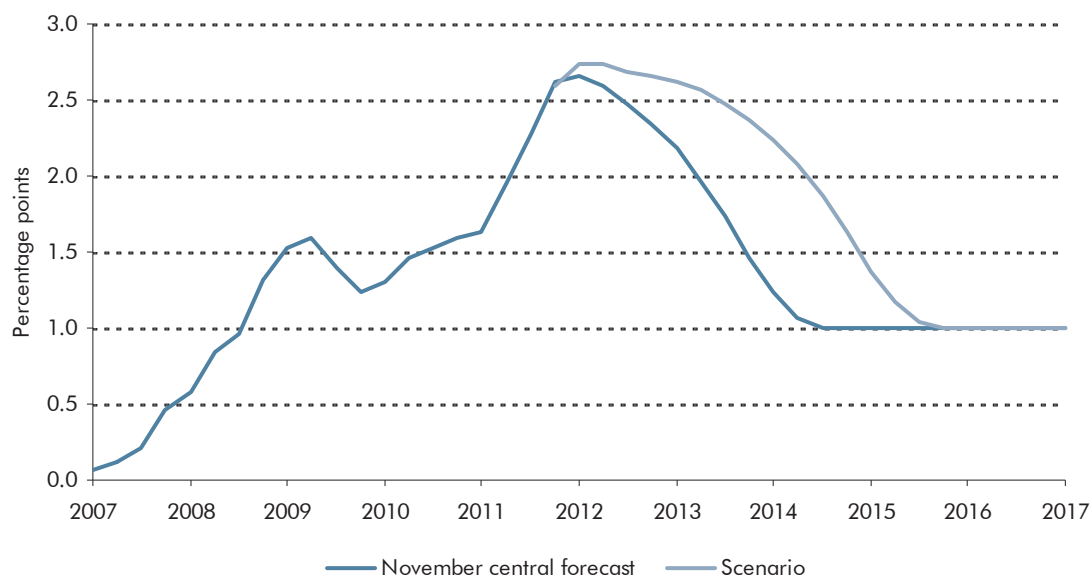
2014. Overall, the level of real output in the medium term is around 1½ per cent lower than in our central projection;<sup>6</sup>

- these factors lead to a significant fall in tax receipts, building over time, consistent with the alternative growth path. This is generated by lower consumption, labour income, company profits and housing transactions. Higher RPI inflation, reflecting higher mortgage interest payments, has a more immediate one-off effect on debt interest payments on index-linked gilts. Government expenditure also rises over the period because of additional spending on benefits. As a consequence, public sector net borrowing is significantly higher than in our central forecast; and
- because we assume the productive potential of the economy is constrained, the level of potential output is 1½ per cent lower in 2016-17. This means that the additional borrowing is largely structural rather than cyclical, leading to a deterioration in the cyclically-adjusted current balance. Under this scenario, absent further policy announcements, the Government would fail to meet either its fiscal mandate or supplementary target.

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<sup>6</sup> In this scenario each of the demand components is affected proportionately by the weaker outlook although government consumption and investment are consistent with the central forecast. This is a simplifying assumption that allows us to isolate particular fiscal implications. For a more detailed assessment of the compositional impact on the public finances see the 'delayed rebalancing' scenario in our November 2010 *EFO*.

Chart 5.3: Term funding premium<sup>7</sup>



Source: OBR <sup>7</sup> Weighted average of banks' 5-year credit default swap rates, smoothed over 3 quarters.

### Scenario two: No structural impairment

5.47 Our central forecast assumes a permanent loss of output following the financial crisis and an output gap currently around 2.5 per cent. Some outside commentators question whether the financial crisis would have had such a strong effect on potential output. They therefore believe that the loss of output has been cyclical and the output gap is currently much wider. In this scenario we consider the implications of this viewpoint, by assuming that:

- the potential growth rate of the economy was unaffected by the crisis. Given the path of actual GDP since 2009, this implies an output gap of around 11 per cent in 2011;
- inflation falls sharply in early 2012, reflecting the wide margin of spare capacity, to which the Bank of England reacts with a substantial expansion of quantitative easing (QE);
- there are limits to the effectiveness of QE of this magnitude, so the output gap closes more slowly than we typically assume in our scenarios and there

remains a significant amount of spare capacity in the economy by the end of the forecast period; and

- stronger growth solely reflects improved productivity growth. With the output gap closing at a similar pace to our central forecast, we assume that the path of employment remains largely unchanged.

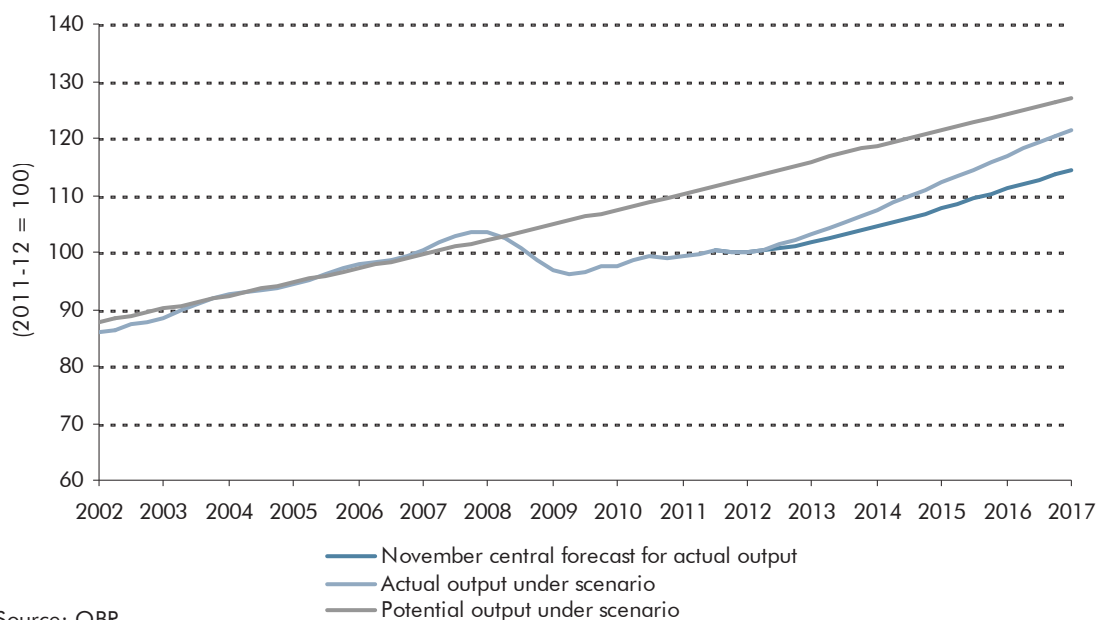
**5.48** Chart 5.4 shows the path of actual and potential output assumed in this scenario. This has been constructed in a stylised way, based on outturn GDP data and extrapolating the pre-crisis long term growth rate forward. The key implications compared to our central economic and fiscal forecast are:

- the width of the output gap permits very strong annual GDP growth rates, with output expanding in total by around 17 per cent between 2012 and 2016. Such rates do not seem plausible in the current circumstances, although they are not without historical precedent;<sup>8</sup>
- although inflation is lower, nominal GDP growth remains much stronger than in our central forecast, leading to significant growth in tax receipts and (with much of departmental spending fixed in nominal terms over the Spending Review period and linked to general economy inflation thereafter) a fall in government expenditure as a share of national income. This leads to a sharp fall in public sector borrowing and debt compared to our central forecast; and
- the wider output gap would imply that the cyclically-adjusted current budget is already in surplus and that additional borrowing since the onset of the financial crisis is purely cyclical (with measures having improved the structural position). The structural fiscal position continues to improve significantly over the forecast period.

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<sup>8</sup> Historical comparisons are difficult because the revisions to real GDP arising from the ONS deflation methodology changes discussed in Chapter 2 only go back to 1997. Mechanically adding 0.2 percentage points to the annual growth rates gives comparable expansions of 19.3 per cent between 1984 and 1988 and 15.2 per cent between 1993 and 1997, when the economy was recovering from recession.

Chart 5.4: Actual and potential output



### Scenario three: Higher structural unemployment

5.49 In our central forecast, we assume that the recent weakness in potential output growth is explained by slow potential productivity growth rather than weak labour supply. While unemployment has risen sharply since the crisis, the labour market has been stronger than might be expected given the size of the fall in output.

5.50 One possible explanation used by some outside commentators is that firms have been engaging in labour hoarding – retaining employees despite subdued demand until such a time when the economic prospects improve. A related concern is that, with the expected pick-up in demand failing to materialise, firms may now shed excess workers leading to an associated rise in structural unemployment that might weigh on potential output growth. To consider the implications in this scenario we assume that the:

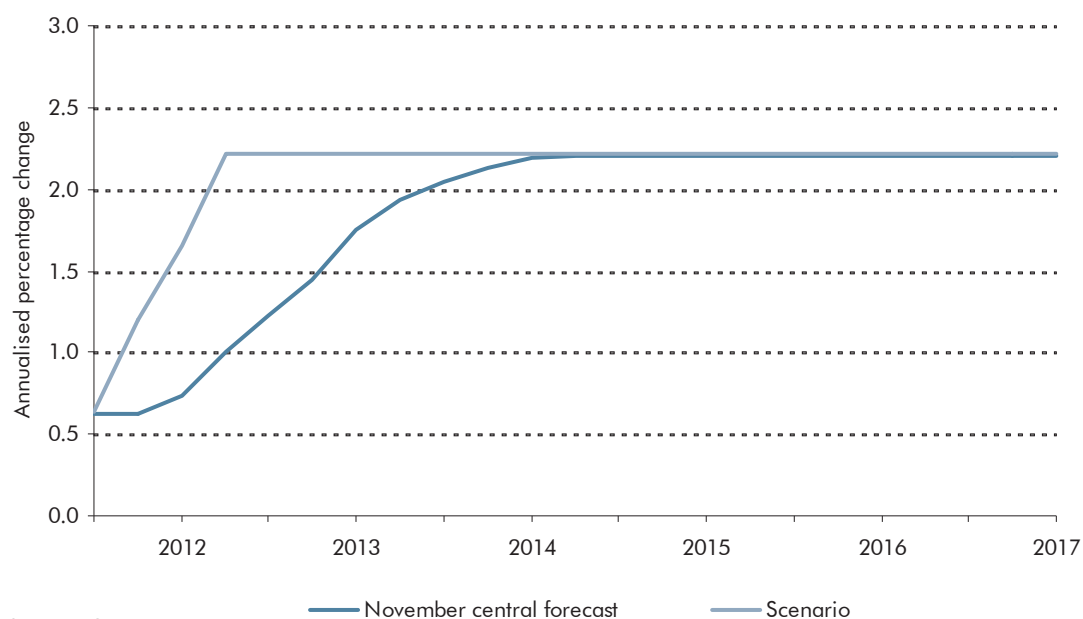
- the path of actual and potential GDP is identical to our central forecast; and
- the structural rate of unemployment rises to  $6\frac{3}{4}$  per cent over the next 2 years compared to the assumption in our central forecast of a constant rate of around  $5\frac{1}{4}$  per cent. As a consequence, productivity growth is stronger than in our central forecast. Total wages and salaries are unaffected, with equal offsetting effects from lower employment growth and stronger earnings growth.



5.51 Chart 5.5 illustrates the faster potential productivity growth assumed in this scenario relative to forecast. The consequences for our fiscal forecast are that:

- income tax receipts are higher, as these are more geared towards earnings than employment, given staggered income tax thresholds. National insurance contributions are also marginally higher;
- this is more than offset by higher social security and tax credits payments given higher unemployment; and
- the net effect of these is relatively small. PSNB is only around 0.1 per cent higher in 2016-17, with the Government continuing to meet both its fiscal mandate and supplementary target.

Chart 5.5: Potential productivity



5.52 Table 5.5 summarises the economic assumptions we have made, as well as the fiscal consequences of these alternative scenarios.

5.53 In principle, one obvious scenario with which to stress our judgements would be that of a disorderly outcome to the sovereign debt crisis in the euro area. But, as we discuss in Chapter 3, this is impossible to quantify in a meaningful way given the range of potential outcomes. (The Bank of England took a similar view in its August and November 2011 *Inflation Reports*.) In Box 3.3 we discuss the four main channels through which a further deterioration in the euro area might affect the economy (and one of them is reflected in our first scenario above). Clearly

## Performance against the Government's fiscal targets

the potential effect is significant and this would have knock-effects on the fiscal position.

Table 5.5: Key economic and fiscal aggregates under alternative scenarios

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
<b>Central forecast</b>						
<b>Economic assumptions</b>						
GDP (percentage change)	0.6	0.9	2.4	2.8	3.1	3.0
CPI inflation (Q3)	4.7	2.5	2.1	2.0	2.0	2.0
ILO unemployment (% rate)	8.3	8.7	8.5	7.9	6.9	6.0
Output gap	-2.8	-3.1	-2.8	-2.3	-1.5	-0.7
<b>Fiscal impact (per cent of GDP)</b>						
Public sector net borrowing	8.4	7.6	6.0	4.5	2.9	1.2
CACB	-4.6	-3.9	-2.7	-1.6	-0.6	0.5
Public sector net debt	67.5	73.3	76.6	78.0	77.7	75.8
<b>Persistent tight credit conditions<sup>1</sup></b>						
<b>Economic assumptions</b>						
GDP (percentage change)	0.6	0.9	1.6	2.3	3.0	3.0
CPI inflation (Q3)	4.7	2.5	2.1	2.0	2.0	2.0
ILO unemployment (% rate)	8.3	8.7	8.3	8.0	7.3	6.2
Output gap	-2.7	-3.1	-2.5	-2.6	-2.2	-1.0
<b>Fiscal impact (per cent of GDP)</b>						
Public sector net borrowing	8.4	7.7	6.5	5.4	4.0	2.2
CACB	-4.6	-4.0	-3.4	-2.5	-1.4	-0.4
Public sector net debt	67.5	73.4	77.6	80.2	80.9	79.9
<b>No structural impairment<sup>1</sup></b>						
<b>Economic assumptions</b>						
GDP (percentage change)	0.6	1.9	3.9	4.1	4.2	4.0
CPI inflation (Q3)	4.7	1.6	1.0	1.0	1.1	1.3
ILO unemployment (% rate)	8.3	8.7	8.5	7.9	6.9	6.0
Output gap	-10.8	-11.3	-10.0	-8.4	-6.6	-5.0
<b>Fiscal impact (per cent of GDP)</b>						
Public sector net borrowing	8.4	7.3	5.0	3.0	1.0	-1.1
CACB	0.8	2.2	3.6	4.4	5.1	5.9
Public sector net debt	67.5	72.8	74.5	74.0	71.5	67.4
<b>Higher structural unemployment<sup>1</sup></b>						
<b>Economic assumptions</b>						
GDP (percentage change)	0.6	0.9	2.4	2.8	3.1	3.0
CPI inflation (Q3)	4.7	2.5	2.1	2.0	2.0	2.0
ILO unemployment (% rate)	8.4	9.6	9.7	9.1	8.2	7.4
Output gap	-2.8	-3.1	-2.8	-2.3	-1.5	-0.7
<b>Fiscal impact (per cent of GDP)</b>						
Public sector net borrowing	8.4	7.7	6.1	4.6	3.0	1.3
CACB	-4.6	-4.0	-2.8	-1.7	-0.7	0.4
Public sector net debt	67.5	73.4	76.8	78.3	78.1	76.3

# A Autumn Statement 2011 policy measures

The *Economic and fiscal outlook* incorporates the Government's costings for policy decisions in the Autumn Statement or announced since the March Budget. The OBR has certified all of the tax and AME expenditure costings as being reasonable and central estimates. Chapter 4 of this report and the OBR's Annex in the Treasury's Autumn Statement 2011 policy costings document sets out further details.

Table A.1: Autumn Statement 2011 policy measures table

	Head	£ million						
		2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	
<b>Measures announced since Budget 2011</b>								
1	VAT: low value consignment relief	Tax	0	+90	+95	+95	+100	+110
2	Manufactured overseas dividends	Tax	0	+30	+40	+40	+40	+40
3	North Sea oil and gas	Tax	0	0	-5	-5	-50	-10
4	APD: Northern Ireland	Tax	*	*	-5	-5	-5	-5
5	Housing benefit changes	Spend	*	-10	-15	-15	-15	-15
6	JSA training	Spend	*	-5	-5	-5	-5	-5
<b>Tax Measures</b>								
7	Fuel duty: delay January 2012 increase to August and cancel August 2012 increase	Tax	-375	-975	-825	-850	-875	-925
8	Asset-backed pension contributions: tax	Tax	+340	+450	+450	+450	+450	+450
9	Bank levy	Tax	0	+280	+310	+310	+315	+325
10	CGT: freeze annual exempt amount	Tax	0	0	+25	+25	+25	+30
12	APD: business jets	Tax	0	0	+5	+5	+5	+5
13	Small Business Rate Relief: extend holiday	Tax	0	-210	+5	0	0	0
14	Business rates: deferral of payments	Tax	0	-85	+45	+40	0	0
15	CCL: increase electricity relief to 90%	Tax	0	0	-15	-20	-20	-20
16	Seed Enterprise Investment Scheme: scheme and 2012 CGT holiday	Tax	0	0	-50	-25	-20	-20
17	VAT cost sharing exemption	Tax	0	-25	-50	-75	-100	-125
18	Capital Allowances: Enterprise Zones	Tax	0	-25	-40	-25	-5	*
19	Gifts of pre-eminent objects	Tax	0	-15	-15	-15	-15	-15
<b>Total tax policy decisions<sup>2</sup></b>			<b>-35</b>	<b>-305</b>	<b>+145</b>	<b>+130</b>	<b>+20</b>	<b>+15</b>

Table continued overleaf

## Autumn Statement 2011 policy measures

<b>Spending Measures</b>								
20	Changes to current spending	Spend	0	+910	+1,175	+1,735	+8,290	+15,105
21	Changes to capital spending	Spend	0	-660	-1,455	-1,645	0	0
<b>Total spending policy decisions</b>			<b>0</b>	<b>+250</b>	<b>-280</b>	<b>+90</b>	<b>+8,290</b>	<b>+15,105</b>
<b>Of which current spending savings</b>								
21	Child Tax Credit: remove over indexation	Spend	0	+975	+955	+1,020	+995	+995
22	Working Tax Credit: freeze	Spend	0	+265	+290	+275	+275	+280
23	Public sector pay restraint	Spend	0	+75	+600	+1,075	-	-
24	Official Development Assistance: adjusting to meet 0.7% GNI target	Spend	0	+380	+265	+525	-	-
<b>Of which additional current spending</b>								
25	Youth Contract	Spend	0	-365	-310	-265	-	-
26	Early years childcare	Spend	0	-85	-240	-455	-	-
27	Rail fares	Spend	0	-105	-105	-135	-	-
28	Carbon price floor: energy intensive industries	Spend	0	0	-40	-60	-	-
29	Science	Spend	0	-30	-30	-30	-	-
30	Pension Credit: changes	Spend	0	*	*	*	*	*
<b>Of which capital spending</b>								
31	New funding for infrastructure <sup>3</sup>	Spend	0	-760	-1,785	-2,145	-	-
32	Reserve reprofiling	Spend	0	+100	+330	+500	-	-
<b>TOTAL POLICY DECISIONS</b>			<b>-35</b>	<b>-55</b>	<b>-135</b>	<b>+220</b>	<b>+8,310</b>	<b>+15,120</b>

\* Negligible.

- Spending measures do not affect borrowing in 2015-16 and 2016-17 as they fall within the Total Managed Expenditure assumption.

<sup>1</sup> Costings reflect the OBR's latest economic and fiscal determinants.

<sup>2</sup> Includes the negative tax element of Tax Credits measures - breakdown included in Autumn Statement 2011 policy costings document.

<sup>3</sup> Details set out in table 2.3 in HM Treasury's Autumn Statement 2011 document





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