2. The UK economic outlook¹

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Summary

- The UK economy flatlined in 2012, with a poor trade performance offsetting more encouraging trends in consumer spending and business investment. However, near-term prospects look brighter. The export environment is likely to improve this year, led by the US and emerging markets, reducing the drag on growth from net trade. At the same time, the domestic economy should continue to strengthen and GDP is forecast to grow by around 1% this year.
- Growth should gather pace in the later part of 2013 and average 2.1% in 2014. Key to this pickup in activity is a further substantial fall in inflation, which boosts consumers' purchasing power. In addition, the robust financial position of UK firms is expected to underpin a pickup in business investment.
- We judge that there is currently a significant amount of spare capacity in the UK economy, with the output gap estimated to have been 5% of potential output in 2012. The financial crisis is likely to have caused substantial permanent damage to potential output, but the vast bulk of this damage has already occurred and we expect potential output growth to average 1.9% over the period from 2013 to 2017. Such a large output gap will provide the conditions for the recovery to gain momentum over the medium term, with GDP growth expected to accelerate from 1% in 2013 to 2.9% in 2017. Our forecasts are not dissimilar from those of the Office for Budget Responsibility, but are above the market consensus over the longer term.
- The risks around our central forecast are more balanced now than they were for most of 2012, though domestic risks do remain skewed slightly to the downside. The most significant domestic risk remains the high level of consumer indebtedness, which may weigh more heavily on the upturn. On the upside, a more aggressive recovery in business investment remains a plausible alternative, though it would likely be dependent on policymakers surprising us with faster and more decisive solutions to the eurozone's problems. The UK's biggest downside risk also relates to the eurozone: a scenario where multiple countries leave the eurozone would likely cause another deep recession in the UK.

2.1 Introduction

The year 2012 was another challenging one for the UK economy, with the economy sinking back into a technical recession over the first half. The economy was badly hindered by external developments, with the long-awaited trade recovery remaining elusive, though there were some more encouraging trends in the domestic economy, particularly from nascent recoveries in consumer spending and business investment. In this chapter, we discuss the outlook for the UK economy, beginning in Section 2.2 with short-term prospects, where we assess the likelihood that growth will begin to pick up

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this year. We then explain why we think that the recovery will gain momentum through 2014 (Section 2.3).

Moving our focus beyond the short term, we consider prospects for the 2013–17 period as a whole. As part of this, we analyse the amount of spare capacity in the economy by considering the degree to which the economy has suffered permanent damage to potential output growth, before moving on to discuss the extent to which potential output will recover over the next five years (Section 2.4). Having set out our baseline forecast, we then assess how this compares with the most recent forecast from the Office for Budget Responsibility (OBR) and those of other independent forecasters (Section 2.5).

Section 2.6 analyses the risks around the baseline forecast and looks in detail at the potential impact of alternative global scenarios on the UK economy, including an upside scenario 'corporate reawakening' and a severe downside scenario involving a break-up of the eurozone. Section 2.7 concludes.

2.2 Will the recovery gain momentum in 2013?

2012 was a lost year for the UK economy

The UK economy dropped back into recession over the first half of 2012 and growth averaged zero over the year as a whole. The quarterly profile of the GDP data was badly distorted by several one-off factors through the year. Activity in the second quarter was dampened by the loss of a working day caused by the additional bank holiday for the Queen's Diamond Jubilee; this was estimated to have reduced growth in Q2 by as much as 0.5 percentage points (ppts). Conversely, growth in Q3 was flattered by the comparison with Q2 and also by the inclusion of all of the revenues from ticket sales and the television rights from London hosting the Olympic and Paralympic Games, regardless of when the tickets were actually purchased. The Office for National Statistics (ONS) estimates that around 0.2ppts of the Q3 growth came from this source. With the Olympics boost then unwinding, the figures for Q4 – when GDP contracted by 0.3% – looked weaker than underlying trends suggest.

The January snow increases the likelihood of further volatility in the data for 2013H1, with activity in Q1 potentially being damaged because travel problems prevented some people from getting into work or going shopping for several days. However, the fact that the disruption has come early in the quarter, in contrast to previous episodes, means there is more scope to catch up this time around.

Throughout the year, the business survey results and other ONS indicators – notably labour market and retail sales data – pointed to slightly stronger underlying trends than the GDP data and there has been a tendency towards upward revisions to the early estimates of GDP. This is not uncommon at this stage of the cycle; at the time, the recession of the 1990s was also estimated to have seen a double dip followed by a relatively weak recovery, but the double dip was subsequently revised away and the pace of the recovery is now shown as being much firmer. It would be no surprise were the 2012 GDP data to be revised upwards over the coming years as more data become available and the Blue Book balancing of the National Accounts is undertaken.

Looking at the expenditure breakdown, it is clear that the main factor behind the poor performance of the UK economy has been net trade, which we estimate wiped almost 1ppt off GDP growth in 2012 (see Figure 2.1). The poor export performance has largely

been a function of the descent of the eurozone back into recession; exports of goods (excluding oil and erratics²) to EU countries fell by 5% in 2012, while exports to non-EU destinations rose by 6.5% (see Figure 2.2). However, even allowing for the influence of weak demand from the eurozone, it appears that UK exports have underperformed; we estimate that world trade, weighted by UK export shares, grew by 1.7% in 2012, in contrast to the UK's decline in exports of 0.4%. This shortfall reflects a loss of competitiveness, with sterling having appreciated by 4% on a trade-weighted basis in 2012, the bulk of which reflects strengthening against the euro.

Had net trade not detracted from growth, GDP would have increased by almost 1% last year, as the poor trade performance offset some more encouraging trends in the domestic





Source: Haver Analytics.





Notes: Monthly level data. Growth calculated as percentage change on same month in previous year.

² Erratics are defined as ships, aircraft, precious stones and silver.

Source: Haver Analytics.

economy. Having fallen by more than 1% in 2011, consumer spending began to recover in reaction to a significant slowdown in inflationary pressures. Business investment also continued to recover, growing by around 4%, despite corporate confidence being undermined by concerns over the fragility of the domestic recovery and the possibility of a break-up of the eurozone. Government consumption also contributed positively to GDP growth in 2012, which looks odd in the context of the government's austerity programme. However, we think this is largely due to measurement issues, with the impact of spending restraint being shown in the unusually low deflator rather than in the real-terms data.

Export environment should steadily improve this year

The export environment is likely to improve this year, led by the US and emerging markets (see Chapter 1). The eurozone, the UK's main export destination, is forecast to pull out of recession by mid-year, although any subsequent recovery will likely be slow. Nevertheless, we expect growth in world trade, weighted by UK export shares, to accelerate to 3.8% in 2013 (see Figure 2.3), which would represent a substantial improvement on 2012 although it is still some way below the average of 6% a year seen over the past thirty years. We do not anticipate any major movements in competitiveness this year; sterling is expected to decline against the dollar, reflecting the US's better relative growth prospects, but this is likely to be balanced by the euro continuing to weaken and by eurozone economies, particularly in the periphery, making further reductions in unit labour costs. Our forecast shows exports growing by 2.1% this year, after falling by 0.4% in 2012. With imports continuing to grow, net trade will again be a drag on GDP growth, though that drag should be reduced from 0.9ppts in 2012 to 0.3ppts in 2013.

External developments are important not only for export prospects but also for their influence on corporate sentiment and business investment. The recovery in business investment has been disappointing thus far; having fallen by 24% from peak to trough



Figure 2.3. UK exports and world trade

Note: World trade weighted by UK export shares. Source: Haver Analytics, Oxford Economics. during the recession, three years on from the low point it remains more than 12% short of previous peaks. By contrast, the US, which endured a similarly large decline during the recession, has reported a much stronger recovery and is now less than 7% below its previous high point.

Anecdotal evidence suggests that small firms continue to report problems accessing finance, which may go some way to explaining the poor performance. However, it does not appear that financing problems are the decisive factor; investment is typically dominated by large firms, which have good access to external funding, both from banks and from other sources, and have also accumulated large cash surpluses in recent years (see Figure 2.4). Rather, the slow recovery in business investment appears to be more related to fragile business confidence. This is partly a function of the persistently poor domestic growth performance, but it also reflects the heightened uncertainty during 2012 around issues such as the eurozone sovereign debt crisis, the US 'fiscal cliff' and the possibility of a Chinese hard landing. These factors have been leading firms to conclude that it would be better to sit on their cash rather than to commit it to lengthy, difficult-to-reverse investment projects where the future level of returns was particularly uncertain.



Figure 2.4. Private non-financial corporations' financial balance

Source: Haver Analytics.

However, key global risks – mostly notably of a eurozone break-up, the US falling over the 'fiscal cliff' and a Chinese hard landing – have diminished substantially. What's more, these event risks that dominated 2012 are now being replaced by a more normal pattern of macroeconomic risks – and a more balanced one. Indeed, upside risks to growth are starting to emerge, especially in the US. This shift in the balance of risks has already been reflected in a rally in equity prices and we also expect it to underpin an improvement in sentiment, particularly amongst corporates. This, in turn, should encourage firms to begin investing their large accumulated cash surpluses.

The consumer recovery should continue to gain momentum

Though inflation has continued to run ahead of earnings growth, the gap closed significantly through 2012 and the combination of strong employment growth and the April 2012 uprating of many social security benefits by the September 2011 consumer price index (CPI) rate of 5.2% meant that real household disposable income rose by

around 1.8% in 2012. This improvement in households' purchasing power was sufficient to kick-start a gradual recovery in consumer demand, and household consumption rose by around 0.9% in 2012. Nevertheless, the pickup in spending lagged the strengthening in real incomes, leading the household saving ratio to rise further to 7.3%, the highest level for fifteen years.

Fuel prices fell by more than 5% over the latter months of 2012 and we expect falling oil prices to cause them to slip further in the early part of this year. However, this downward pressure on inflation will initially be offset by the feed through of higher food prices, due to harvests ruined by the US drought and the UK floods, and the increases in domestic energy prices, which range from 6% to 11% across the largest six providers. As such, inflation is likely to remain close to current rates in the short term. However, underlying inflationary pressures look weak, with retailers continuing to discount heavily and earnings growth subdued, which means that inflation should ease once these temporary pressures have abated, with the CPI measure set to fall back below the 2% target by the end of 2013.

On the flip side, we think it unlikely that the recent strong rates of private sector job creation are sustainable given weak output trends and the likelihood that some of the recent slump in productivity will begin to unwind. We estimate that both output per worker (see Figure 2.5) and output per hour are running around 14% below the level that they would have been had the pre-financial-crisis trend continued.

Some commentators – including the OBR³ – suggest that a significant proportion of this shortfall will be permanent, arguing that tight credit conditions have reduced investment and innovation. We think there is merit in this argument and estimate that this may account for up to two-thirds of the drop in productivity.



Figure 2.5. Output per worker

Note: The pre-crisis trend was calculated over the period 1995–2007 and was calculated to be 2.2% a year. Source: Haver Analytics, Oxford Economics.

³ Office for Budget Responsibility, *Economic and Fiscal Outlook*, December 2012 (http://budgetresponsibility.independent.gov.uk/economic-and-fiscal-outlook-december-2012/).

As suggested earlier in this chapter, it is possible that the GDP data may currently be understated and might subsequently be revised upwards, thus reducing the scale of the decline in productivity. A range of other indicators have suggested stronger levels of activity, particularly over the last couple of years, and there are precedents for such revisions at this stage of the cycle, although this is only likely to account for, at most, a couple of percentage points of the gap to the pre-crisis trend.

The remainder of the gap is likely to reflect cyclical factors. One explanation could be that firms have been hoarding labour. This argument is usually associated with skilled labour and reflects the idea that, were they to lay off staff, firms might find it difficult and potentially costly to hire again once demand began to pick up. The lengthy period of time that has passed since the beginning of the financial crisis would appear to suggest that the effects through this channel are unlikely to be large. However, it does appear that the very uncertain operating environment of the past year may have encouraged some firms to cater for higher demand by increasing hours worked and hiring, while remaining wary of committing to capital spending until the strength and shape of the recovery became clearer. That labour was relatively cheap because earnings growth remains so weak would have made this strategy more attractive. Regardless, it does mean that, in the short term at least, firms' hiring requirements will be lower than they would normally be, suggesting the scope for some productivity catchup. For a further discussion of the recent trends in labour productivity, see Chapter 3.

As such, though output is expected to accelerate this year, our forecast shows employment levels remaining broadly flat. This will dampen the extent to which household incomes grow, but lower inflation and the large increase in the income tax personal allowance, which is due to rise by £1,335 to £9,440 in April, should still enable consumer spending growth to accelerate from 0.9% in 2012 to 1.2% in 2013.

Fiscal policy continues to exert a sizeable drag

Set against the more promising signs from the private sector, the austerity programme will remain a drag on growth prospects this year. The OBR's latest forecast implies that the financial year 2013–14 will see fiscal tightening of around 1.4% of GDP (as measured by the change in the forecast structural deficit between 2012–13 and 2013–14). However, year-to-year comparisons of this type must be treated with caution, both because estimates of the output gap and its impact on the public finances are surrounded by uncertainty and because the repatriation of the proceeds from the Asset Purchase Facility (APF) to the exchequer and the transfer of the Royal Mail pension scheme into the public sector have caused distortions to the public finances data. Fiscal multipliers are probably larger at the current time⁴ because of the limited scope for monetary offset, the effect of household and corporate deleveraging, and weak global demand; there is evidence of all three factors in the UK, suggesting that the austerity programme may have had a larger dampening effect on output than originally thought.

That a major chunk of the UK's tightening to date has come from large cuts to capital spending,⁵ which typically have larger multipliers than either tax rises or cuts to current

⁴ See, for example, box 1.1 of IMF, *World Economic Outlook*, October 2012 (<u>http://www.imf.org/external/pubs/ft/weo/2012/02/pdf/text.pdf</u>) and O. Blanchard and D. Leigh, 'Growth forecast errors and fiscal multipliers', IMF Working Paper WP/13/1, January 2013 (<u>http://www.imf.org/external/pubs/ft/wp/2013/wp1301.pdf</u>).

⁵ See Chapter 5 for more details of the planned fiscal consolidation.

spending, has arguably increased the damaging effects on output relative to spending cuts that were not disproportionately on capital spending. To that end, the Chancellor's decision to try to increase capital spending by £5 billion across the next two financial years represents a positive step. However, the size of the boost is relatively small and it will be funded through lower current spending, so our modelling suggests that the net effect will be negligible.

Simulations run on the Oxford Economics Global Model suggest that it would have been possible to boost short-term growth prospects through higher capital spending: an additional £10 billion of capital spending in both 2013–14 and 2014–15 would increase the level of GDP by almost 1% by the end of 2014 (see Figure 2.6) and, with stronger growth yielding higher tax receipts, the impact on the deficit would have been relatively small. We feel that this would be an appropriate level of stimulus – sufficient to yield a noticeable improvement in activity, but not so large that it damages the credibility of the government's austerity plan (although our scenario does show an increase in gilt yields, which offsets some of the positive impact on growth from the increased infrastructure spending).





* Scenario includes £10 billion of additional capital spending in both 2013–14 and 2014–15, funded by additional borrowing. It also assumes there is no attempt to offset with tighter monetary policy. Source: Oxford Economics.

Monetary policy is very loose but could offer more support

In 2012, the Monetary Policy Committee (MPC) expanded the amount of assets held under the APF from £250 billion at the start of the year to £375 billion at the end. Furthermore, the MPC stated that it believed the repatriation of the cash surpluses from the APF to the exchequer, which is expected to amount to £35 billion by March 2013, is equivalent to further monetary easing, implying that the true value of quantitative easing (QE) is around £410 billion or 27% of one year's GDP.

Our research suggests that QE has a significant impact on longer-term interest rates. We estimate that QE equivalent to 10% of GDP depresses 10-year government bond yields by

around 1 percentage point (100 basis points, bps), which is similar to the Bank of England's (BoE's) own estimates.⁶ The BoE's programme has therefore been a key factor contributing to the historically low levels of 10-year UK gilt yields, which were below 2% for most of 2012. In addition, UK gilts have benefited from a safe haven status, with investors shunning what are seen as riskier government bond markets, in particular the peripheral eurozone countries. Such low levels of gilt yields have helped to keep long-term household and corporate borrowing rates low, providing significant support to the economy, as well as keeping the government's debt financing costs down despite rising debt levels.

With the risks around the global economy becoming more balanced, there are signs that investors' appetite for riskier assets may be bottoming out and could start to increase. This would suggest that UK bond markets may start to look less attractive, though this is likely to be a gradual process and one that could reverse were the eurozone situation to worsen once more. Our forecast shows yields on 10-year UK gilts nudging up to 2.2% by the end of this year, but this remains very low by historical standards and will continue to hold down the debt interest payments of the government, households and firms.

This forecast assumes that the UK is able to maintain its AAA credit rating. However, with all three rating agencies having placed the UK on negative outlook, there is a risk of a downgrade. A simulation run on the Oxford Economics Global Model suggests that a downgrade by one notch would increase 10-year gilt yields by around 20bps in the first year, though this would drop back to 10bps in subsequent years. The impact on GDP would be less than 0.1ppt. Such a small effect is consistent with the experience of recent downgrades of major economies, such as the US and France.

However, while QE has helped to keep gilt yields low, its success in other areas is more open for debate. There is some evidence that it has supported asset prices, notably equities, but the impact on the real economy has been harder to identify. This was one of the reasons that the Bank of England launched the Funding for Lending Scheme. FLS is designed to reduce funding costs for banks and building societies so that, in turn, they can reduce the costs of their loans to businesses and households. The scheme effectively incentivises banks to lend by linking their access to FLS and the rate at which it can borrow to their lending levels. The Bank's Credit Conditions Survey suggests that this has led to significant increases in the availability of mortgage credit and, to a lesser extent, credit for corporates, but so far the impact on lending flows has been much more muted. It is still too early to conclude one way or another on the success of FLS, but we fear that the impact will be muted, partly because there will not be sufficient demand to soak up much of the additional availability of credit and partly because much of the extra credit that is made available will not be on sufficiently attractive terms to interest potential borrowers.

In the absence of a significant fiscal stimulus, which currently looks unlikely, we believe there is a strong case for the Bank to do more in terms of stimulating demand. This is not a view that the majority of the MPC share. The minutes of recent meetings have suggested that the MPC appears to have greater confidence than we do that the FLS will be a success and, with the exception of one member, felt that sufficient monetary stimulus had already been applied to support the recovery and meet the inflation target in the medium term.

⁶ M. Joyce, M. Tong and R. Woods, 'The United Kingdom's quantitative easing policy: design, operation and impact', *Bank of England Quarterly Bulletin*, 2011Q3.

While we share the MPC's concerns that the efficiency of QE may be weakening, there is plenty that the MPC can still do and we believe that the Federal Reserve provides a good template to follow. The Fed has purchased a much wider range of assets, set explicit targets to gauge the success of its policies and provided guidance on the likely path of policy. These policies have enabled the Fed to bolster its credibility that it will do whatever it takes to ensure the recovery becomes firmly entrenched. By contrast, the MPC has reacted more slowly to stimulate the UK economy and has been wary on moving beyond its narrow focus on buying gilts. The Governor, Sir Mervyn King, has also been at pains to avoid giving guidance on the likely future path of policy. Given that several MPC members had voted to raise interest rates in 2011, it creates an element of doubt over the Committee's commitment to provide sufficient support.

2.3 More favourable factors to accelerate the pace of recovery next year

We expect growth to accelerate from the latter part of 2013 as the supportive factors discussed in the previous section become increasingly influential.

Inflationary pressures are likely to weaken substantially ...

By the end of 2013, the trajectory of inflation rates should be firmly downward, as the temporary upward forces abate. Thereafter, inflation rates could fall back sharply, with the ample amounts of slack in the economy (see Section 2.4) continuing to put downward pressure on profit margins and prices. Meanwhile, high levels of unemployment will continue to bear down on pay settlements.

Our forecast assumes that the reaction of commodity prices to rising global demand is relatively muted, particularly for oil. This reflects our view that there is already plenty of spare capacity in oil production and, with more capacity due to come on stream over the next couple of years, there should be plenty of scope to cater for an increase in demand. The US 'shale gas revolution' also has the potential to change the dynamics of global energy markets, reducing OPEC's pricing power.



Figure 2.7. CPI inflation

Source: Haver Analytics, Oxford Economics.

Our forecast shows CPI inflation moving below the 2% target towards the end of this year and then averaging just 1.6% in 2014 and 1.5% in 2015 (see Figure 2.7).

... boosting incomes and confidence

Lower inflation will raise consumers' purchasing power, accelerating the recovery that began in 2012. We expect real household disposable income growth to dip to 0.8% in 2013, but then to accelerate to 1.4% in 2014 and 1.8% in 2015. At the same time, improving sentiment will encourage consumers to reduce their levels of precautionary saving, though ongoing deleveraging will keep the saving ratio above its long-term average and prevent a more significant revival in consumer spending. We expect a steady acceleration in household consumption growth from 1.2% in 2013 to 2.0% in 2014 and 2.4% in 2015. But this would represent a very slow recovery by historical standards, with consumer spending not regaining its pre-recession peak until mid-2015 (see Figure 2.8).



Figure 2.8. Consumer spending across cycles

Sentiment should be further supported by a gradual strengthening in the housing market. The Bank of England's Credit Conditions Survey reported an increase in mortgage availability through the second half of 2012, supported by FLS, while regulators have begun to take a more relaxed attitude to liquidity requirements, which should also give the banks greater leeway to expand lending. As we have already stated, we are sceptical as to whether there will be sufficient demand to enable these factors to have much impact in the short term. However, over a longer time frame, as real incomes strengthen, unemployment drops back and confidence improves, mortgage demand should begin to pick up, triggering an increase in housing activity.

Activity and property prices are closely correlated, so this should then translate into a pickup in prices. Some commentators have suggested that prices still have a lot further to fall, but we do not think that this is the case. Though house prices have been relatively resilient in nominal terms over the past couple of years, the correction in real terms has been large, with prices now around 24% below their mid-2007 peak. This has taken real house prices below their long-term trend (see Figure 2.9), suggesting that prices are no

Source: Haver Analytics, Oxford Economics.

longer heavily overvalued. House price to income ratios are still somewhat higher than their long-run average. However, they are in line with their average since the NICE⁷ period of low interest rates began, suggesting they may be sustainable unless there is a sharp rise in interest rates. With inflation set to be below the 2% target for a prolonged period and the recovery in output likely to be gradual, such an increase in rates looks unlikely, particularly given that the MPC will be conscious of the potential damage that a rapid normalisation of interest rates could have on heavily indebted households. Our forecast assumes that the Bank Rate will remain at 0.5% until mid-2016 and that the Bank will continue to reinvest the principal of any APF-held gilts that mature in this period.

The pickup in house prices may lag the recovery in transactions, but we still expect to see prices begin to rise again in 2014 before growing by 2.2% in 2015.



Figure 2.9. Real house prices

Notes: Real house prices are the Nationwide house price index deflated by the retail price index (RPI). The trend was calculated over the period 1970–2011 and was calculated to be 2.66% a year. Source: Haver Analytics, Oxford Economics.

Businesses have the means to support growth

We also expect business investment to strengthen next year, as the downside risks – in particular, the threat of a eurozone break-up – continue to recede and stronger global growth steadily restores confidence.

In that environment, companies should be able to use large profits and cash balances to finance investment spending. Corporate profits have not fallen sharply as a share of GDP in this cycle, in marked contrast to the recession of the early 1990s, while private nonfinancial corporations have been running large surpluses for a number of years. The accumulated financial surpluses have led to UK companies building up a considerable level of cash deposits over the past few years: as of 2012Q3, private non-financial corporations (PNFCs) were holding £672 billion in currency or on deposit, equivalent to around 43% of GDP. Though a little lower than in the previous two years, this still

⁷ NICE – non-inflationary continuous expansion. This phrase was coined by Sir Mervyn King to describe the decade of strong economic growth and low inflation that the UK experienced between 1995 and 2005.

represents a significant increase on the level that might previously have been considered as 'normal': for the period from 1990 to 2002, the level was reasonably stable at 20–25% of GDP. To hold such large sums in cash is highly unusual, particularly given the very low returns available on cash holdings over the past four years. We think it is partly a reflection of tight credit conditions, with smaller firms in particular having to keep larger amounts of cash available to replace credit lines that are no longer accessible. However, even allowing for this, the levels of cash holdings look very high and we would expect firms increasingly to release these funds for investment as confidence strengthens. We therefore expect growth in business investment to accelerate from 3.6% this year to 5.2% in 2014 and 6.9% in 2015. Even so, our forecast implies that the level of business investment will not return to its pre-crisis peak before 2015.

After falling sharply over the past couple of years, investment in dwellings is also likely to pick up strongly. A recovery in housing activity and prices will be the prime motivation, but further public sector support is also likely to be needed if rates of house building are to be increased substantially in order to keep pace with demographics.

The small temporary stimulus announced in the Autumn Statement should lead to a short-lived increase in government investment in 2014, but otherwise it will continue to decline until 2016. Nevertheless, the strength of business and housing investment is expected to drive an acceleration in total investment growth from 2.8% in 2013, to 5.6% in both 2014 and 2015.

Net trade should start to provide greater support

After restarting in 2013, the export recovery should gain momentum through next year as the eurozone economy gradually strengthens and the US and emerging economies grow robustly. We expect growth in world trade (weighted by UK export shares) to accelerate from 3.8% this year to 6.2% in 2014 and 6.5% in 2015. And while further modest losses in competitiveness – caused by sterling's continued appreciation against the euro – are likely to ensure that export growth is a little softer, we still expect net trade to make a progressively larger contribution to GDP growth, adding 0.2ppts in 2014 and 0.3ppts in 2015 (see Figure 2.10).



Figure 2.10. Contribution of net trade to GDP growth

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2.4 Medium-term recovery slower than usual

Over the medium term, we expect a steady economic recovery to continue. The combination of estimates of the output gap that currently exists and of potential growth going forwards drives our forecast for medium-term GDP growth.

How much damage has the financial crisis done to potential output?

The question of the size of the output gap and forecasts for growth in potential output have taken on added importance since the Chancellor adopted a cyclically-adjusted target for the public finances (see Chapter 4 for more discussion). Indeed, the importance of these estimates has been demonstrated in the past two Autumn Statements. In November 2011, the OBR's decision to reduce both its estimate of the size of the output gap and its forecasts for potential output growth increased its projection for the size of the structural deficit. These revisions required the Chancellor to announce further fiscal tightening in order for the OBR to judge that the government was still complying with its fiscal mandate. Conversely, in December 2012, the OBR's decision to adapt its previous methodology for calculating the size of the output gap meant that more of the additional borrowing was classed as cyclical than would otherwise have been the case, thus limiting the degree of extra tightening required.

However, the size of the output gap and the strength of potential output, or its growth, cannot be measured. As such, most commentators agree that the best approach is to use a range of different indicators to try to proxy the level of spare capacity. But these indicators do not always corroborate one another. For example, labour market data suggest that the UK has a significant amount of spare capacity, with the unemployment rate around 3ppts higher than pre-recession levels and earnings growth very muted despite inflation having been persistently high. Yet business survey results appear to tell a markedly different story, with respondents reporting levels of capacity utilisation in the production industries that are above long-term average.

Therefore, a high degree of judgement is required on behalf of the forecaster. Furthermore, economic data can often be subject to revision for many years after the event, which makes 'real-time' estimates of the output gap particularly difficult. Indeed, a recent working paper⁸ from the External MPC Unit of the Bank of England found that estimates of the output gap have become progressively more prone to revision and 'unreliable' over time, with the authors citing the difficulty of separating the trend from the cycle in economic data as being the cause. This presents a significant challenge for both the producers and the users of economic and fiscal forecasts, including policymakers.

The depth of the recession and the slow pace of the subsequent recovery make estimating the size of the output gap even harder at the current time. GDP fell by 6.3% from peak to trough during the recession and remains around 3% short of previous peaks. Were we to assume that potential output has continued to grow at historic rates in the past five years,

⁸ A. Chiu and T. Wieladek, 'Did output gap measurement improve over time?', Bank of England, External MPC Unit, Discussion Paper 36, 2012

⁽http://www.bankofengland.co.uk/publications/Documents/externalmpcpapers/extmpcpaper0036.pdf).



Figure 2.11. GDP relative to potential output*

* Potential output series shows OE estimates from 1970 to 2006. Potential output is then grown in line with the long-term average (2.7% a year) from 2007 to 2012. Source: Haver Analytics, Oxford Economics.

it would suggest an output gap in the region of 14% of potential output (see Figure 2.11). This experience is by no means uncommon and a number of the advanced economies would have double-digit output gaps if this were the case.

However, as commentators analyse the causes of the financial crisis and its implications, some have concluded that it has inflicted structural damage to potential output which will never be reversed, implying much smaller output gaps. There is a substantial literature on previous crises and, while the evidence generally leans in favour of this argument, the estimates of the degree to which potential output has been affected tend to vary widely across crises. The main findings of four prominent studies by Reinhart and Rogoff, NIESR, OECD and IMF are summarised in Table 2.1.

There is a range of views on how best to estimate potential output. We use a production function approach,⁹ which provides a framework that relates the level of potential output to contributions from factor inputs – labour and capital – and the efficiency with which those inputs are used (so-called 'total factor productivity'). It also provides a consistent method for forecasting future growth in potential output, taking into account important changes such as demographic trends. For the economy to have suffered a permanent loss of potential output, the financial crisis and subsequent recession would have to have wreaked permanent damage to one, or more, of the size of the labour force, the level of capital they have to work with and total factor productivity.

⁹ In the Oxford Economics UK Model, we use a Cobb–Douglas production function, $Y^* = A + L^{\alpha} + K^{(1-\alpha)}$, where: Y^* is potential output; L is potential labour supply, which is equal to the labour supply at the NAIRU; K is the capital stock; and A is total factor productivity (TFP). This is rewritten in natural logs, with α equal to 0.65: $\ln(Y^*) = \ln(A) + 0.65 \ln(L) + 0.35 \ln(K)$.

Authors	Countries / crises	Dates covered	Results
Reinhart and Rogoff, 2008	18	1977–95	The average drop in real output per capita is over 2% and it takes two years to return to trend. For the five most catastrophic cases, the drop in annual output growth from peak to trough is over 5% and growth remained well below the pre-crisis trend after three years.
NIESR – Barrell, Davis, Karim and Liadze, 2010	13	1980–2008	On average, banking crises reduce the level of potential output by 2.5%. But crises that were 'systemic' in nature were associated with a 4% decline in potential output. Some crises did not affect trend output and some, e.g. Canada in the early 1980s, were not even associated with a subsequent recession.
OECD – Furceri and Mourougane, 2009	30	1960–2009	On average, banking crises reduce the level of potential output by 2.4% and it takes five years for the full effects to be felt. But for 'severe' crises, the average effect was 3.8%. The 99% confidence intervals were very wide – from just under 1% to just under 5% for average crises and from just under 1% to over 7% for a severe crisis.
IMF – Balakrishnan, Brooks, Leigh, Tytel and Abiad, 2009	88	1970–2002	On average, banking crises reduce the level of potential output by 10%, with the maximum impact being felt after four to five years. The impact varies across countries depending upon their demand and supply structures.

Table 2.1. Selected literature on the impact of financial crises on potential output

Sources: C. Reinhart and K. Rogoff, 'Is the 2007 U.S. sub-prime financial crisis so different? An international historical comparison', National Bureau of Economic Research (NBER), Working Paper 13761, 2008; R. Barrell, E.P. Davis, D. Karim and I. Liadze, 'The effects of banking crises on potential output in OECD countries', National Institute of Economic and Social Research (NIESR), Discussion Paper 358, 2010; D. Furceri and A. Mourougane, 'The effect of financial crises on potential output: new empirical evidence from OECD countries', OECD Economics Department, Working Paper 699, 2009; R. Balakrishnan, P. Brooks, D. Leigh, I. Tytel and A. Abiad, 'What's the damage? Medium-term output dynamics after financial crises', chapter 4 of IMF, *World Economic Outlook: Sustaining the Recovery*, October 2009.

Capital stock

The collapse in business investment during the recession could also be a potential cause of a permanent loss. From the late-2007 peak, business investment fell by 24% due to a need to conserve cash, a shortage of external funding and a reassessment of how attractive the UK was as a place to produce. In effect, firms were forced to invest only on a 'care and maintenance' basis, with little investment in new capital equipment; investment in machinery and equipment fell by around 25% in 2008–09 and has barely increased since then (see Figure 2.12).

Verifying this argument is always challenging because the ONS usually only publishes estimates of the size of the capital stock after a lengthy lag. In recent years, it has been rendered virtually impossible by the ONS having decided not to publish estimates of the capital stock at all because of concerns over data quality. However, applying data on business investment to those data on the capital stock that have been published suggests that the period since the beginning of the financial crisis has seen the capital stock





Source: Haver Analytics.

contribute around 1ppt a year to potential output growth, down slightly from the 1.2ppt a year over the period from 1996 to 2006.

Labour supply

The contribution of the size of the labour supply to potential output is dependent upon three factors – growth in the population of working age, participation rates and the level of the NAIRU.¹⁰ We find that there is little evidence to suggest that the financial crisis has caused any significant damage to any of these.

The strength of inward migration flows has been a constant source of surprise given the depth of the UK recession and the extent to which unemployment has increased. Migrants typically tend to be of working age, so relative employment prospects are a key driver of migration flows, yet the UK has become an increasingly popular destination, with net inflows of 247,000 in the year to mid-2011 being only marginally short of the record inflows of 2005 when the A8¹¹ countries joined the European Union. This has ensured that the period since the beginning of the financial crisis has actually seen faster growth in the working-age population than the decade before.

Labour market participation has fallen back (see Figure 2.13), though to a much lesser extent than in previous cycles (see Chapter 3). This is because the downward pressures from poorer employment prospects have been offset by a series of longer-term structural shifts. These include greater female participation, as well as both older workers delaying their retirement and pensioners returning to part-time work. Over the past couple of years, the combination of strong employment growth, some welfare reforms such as increased job search requirements for lone parents, and the staged increase in the State Pension Age for women has helped to encourage a recovery in participation rates.

¹⁰ NAIRU – non-accelerating inflation rate of unemployment. Even when the economy is operating at its longrun potential, there will still be some level of frictional unemployment – this is known as the NAIRU.

¹¹ The A8 countries are those that joined the European Union in May 2004. They are the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia.



Figure 2.13. Economic activity rates

Note: Economic activity rate defined as 1 minus the economic inactive rate for all aged 16 ϖ over (ONS series YBTC).

Source: Haver Analytics.

Empirical evidence – notably Blanchard and Summers (1986)¹² and Ball (2009)¹³ – suggests that significant shifts in aggregate demand can lead to changes in the NAIRU through hysteresis. High levels of long-term unemployment are likely to cause a rise in the NAIRU as those out of work for a prolonged period may see the value of their skills eroded and become detached from the labour market. Ball argues that the degree to which hysteresis occurs is a function of the time it takes for output to return to its previous trend, with longer periods of weak growth in aggregate demand yielding larger increases in the NAIRU. In this context, the protracted period of weak or negative growth in the UK is a cause for concern. It is very difficult to measure the NAIRU in real time, but we think it unlikely that the UK has seen any significant impact through this channel thus far given the need for a period of time to pass in order for these unemployed workers to become detached from the labour market. Also, while unemployment is high, it is, at least, not as high as we might have expected given the drop in GDP, which suggests that any hysteresis effects may be smaller than might otherwise have been the case.

Total factor productivity

The OBR's analysis of the UK economy¹⁴ has consistently identified total factor productivity as being the most important source of any permanent loss of potential output, an argument that is also advanced by Dicks (2010).¹⁵ The arguments in favour of this theory generally centre on lower levels of innovation and research & development (R&D), which reduce the rate at which the quality of the capital stock improves; ONS data

¹² O.J. Blanchard and L.H. Summers, 'Hysteresis and the European unemployment problem', *NBER Macroeconomics Annual*, Volume 1, 1986.

¹³ L.M. Ball, 'Hysteresis in unemployment: old and new evidence', NBER, Working Paper 14818, 1989.

¹⁴ See, for example, Office for Budget Responsibility, *Economic and Fiscal Outlook*, December 2012 (http://budgetresponsibility.independent.gov.uk/economic-and-fiscal-outlook-december-2012/).

¹⁵ M. Dicks, 'The UK's productive capacity: surveying the damage', in R. Chote, C. Emmerson and J. Shaw (eds), *The IFS Green Budget: February 2010*, IFS Commentary 112, 2010 (http://www.ifs.org.uk/budgets/gb2010/10chap1.pdf).

suggest that spending by UK businesses on R&D grew by just 0.3% a year in real terms from 2008 to 2011, compared with growth of 2.9% a year from 1997 to 2007.

This is likely to have been caused by a lack of bank funding, resulting from a reduction of risk appetite or from forbearance on outstanding lending. Forbearance is also thought to have created a misallocation of capital, keeping it in relatively low-productivity projects and preventing it from being reallocated to more productive activities. Balakrishnan et al. (2009)¹⁶ suggest that there is some evidence that the biggest effects are felt in those countries with a greater degree of financial development prior to the crisis.

The nature of total factor productivity makes this assertion virtually impossible to verify for the current cycle, but for countries such as the UK, which exhibits a high degree of financial development and where a significant proportion of the banking sector required a government bailout, there would appear to be a strong argument for some permanent damage to total factor productivity. There is certainly strong evidence of a funding crisis, with lending to the corporate sector having collapsed over the past four years (see Figure 2.14).



Figure 2.14. M4 lending to private non-financial corporations

The other way that the contribution of productivity growth could have been damaged would be if there had been a shift in employment towards low-productivity sectors. Those arguing that this has occurred¹⁷ cite the deep decline in output per worker as evidence of this phenomenon and point to the fact that several 'high-productivity' sectors – in particular, oil extraction and financial services – have experienced large declines in activity over the past five years.

There is some evidence in favour of this view, but it would appear to have had a relatively small effect on the UK thus far (see Figure 2.15). There has not been a discernible shift in

(http://webarchive.nationalarchives.gov.uk/20100407010852/http://www.hm-

Source: Haver Analytics.

¹⁶ R. Balakrishnan, P. Brooks, D. Leigh, I. Tytel and A. Abiad, 'What's the damage? Medium-term output dynamics after financial crises', chapter 4 of IMF, *World Economic Outlook: Sustaining the Recovery*, October 2009.

¹⁷ See, for example, HM Treasury, *Budget 2010: Securing the Recovery*, March 2010

treasury.gov.uk/budget2010.htm) and S. Dale, 'Productivity and monetary policy', speech given at the South Tyneside Manufacturing Forum, Bank of England, 21 September 2011.

the share of total employment accounted for by financial services. There has been a loss of share of manufacturing – a high-productivity sector – with gains for other (mainly public) services,¹⁸ a low-productivity sector, but the sectoral shifts appear relatively minor. Indeed, Martin and Rowthorn (2012)¹⁹ estimate that just a tenth of the UK productivity shortfall can be attributed to these shifts. (See also Section 3.3.)





Source: Haver Analytics.

Finally, previous studies have suggested that recessions tend to coincide with a rise in premature capital scrapping, caused by an increase in the number of firms going out of business. The literature also suggests that these effects are not captured particularly well in official data on the capital stock, which means that we also need to make allowance for these effects within our estimates of total factor productivity, though the unusually low rate of bankruptcies suggests that this allowance should be fairly small.

The output gap is likely to be very large

Drawing all of the various components of potential output together, we find that there is likely to have been a permanent loss of output in the UK, largely because of the systemic banking crisis which has hindered credit availability and damaged the contribution of total factor productivity. We also find that the magnitude of the damage to potential output is likely to be towards the higher end of the scale of those seen in previous financial crises because of the severity of this crisis.

Combining our estimates of potential output growth with actual GDP, we estimate that the output gap averaged 5% of potential GDP in 2012. This suggests that potential output is roughly 9% below the pre-recession trend shown in Figure 2.11. This implies a somewhat greater degree of spare capacity than that estimated by either the OBR (3.1% of potential output) or the consensus of independent forecasters (2.9% of potential

¹⁸ Other (mainly public) services are defined as SIC(2007) sections O–S.

¹⁹ B. Martin and R. Rowthorn, *Is the British Economy Supply Constrained II? A Renewed Critique of Productivity Pessimism*, UK-Innovation Research Centre, 2012 (http://www.ukirc.ac.uk/docs/2012_BM_UK_economy_report.pdf).

output²⁰). Some forecasters believe the output gap to be as low as 1% of potential output,²¹ but such a small output gap would imply permanent damage to potential output in the region of 11%, far in excess of those identified by the literature on past financial crises. Further details of the variation in estimates of the output gap, and the consequences for the size of the structural deficit, can be found in Chapter 5.

Potential output growth to accelerate over the next five years

Having estimated how much spare capacity we believe there is in the UK economy at present, we must make a judgement on how potential output will evolve, in order to determine the scope for actual GDP growth to recover. To do this, we again use the production function approach to consider how the contributions of the various factor inputs are likely to evolve.

Capital stock

Our forecast shows a steady recovery in business investment, as diminishing downside risks and stronger economic growth underpin a strengthening in confidence and encourage firms to begin to release their accumulated cash surpluses. Furthermore, firms that have got through the past five years by patching up old machinery will increasingly come under pressure to replace it with new equipment and will also need to invest to expand capacity. This means that the contribution of the capital stock to potential output growth is expected to accelerate through the forecast period, from 0.7ppts in 2012 to 1ppt by 2017. However, this is not sufficient to return to levels consistent with the pre-recession trend.

Labour supply

The most recent migration data report a slowdown in net inflows from 242,000 in the year to March 2011 to 183,000 in the year to March 2012. This has coincided with new visa rules that mean that foreign students cannot work on their student visas during or after their studies. This trend would suggest that the latest (2010-based) set of official population projections,²² which assume that net inward migration slows from 230,000 in the year to mid-2010, to 200,000 by 2016–17, are much too strong.

The OBR's forecast adopts the ONS low migration assumption of 140,000 per year. However, we would argue in favour of an assumption that is even lower still. Given that migrants are typically of working age, employment prospects tend to be the key driver of migration flows and with the scale of public sector job losses (see Chapter 6) likely to mean that unemployment only falls back slowly, the attractiveness of the UK is likely to wane.

We therefore expect net migration to drift downwards from current levels, eventually reaching 110,000 a year over the medium term. If we assume that, on average, 90% of migrants are of working age, this shortfall would reduce potential output growth by 0.1 percentage points per year over the 2013–17 period, relative to the OBR forecast.

²⁰ HM Treasury, *Forecasts for the UK Economy: A Comparison of Independent Forecasts*, December 2012 (http://www.hm-treasury.gov.uk/d/201212forecomp.pdf).

²¹ Office for Budget Responsibility, *Economic and Fiscal Outlook*, December 2012 (http://budgetresponsibility.independent.gov.uk/economic-and-fiscal-outlook-december-2012/).

²² ONS, '2010-based national population projections', 26 October 2011 (http://www.ons.gov.uk/ons/rel/npp/national-population-projections/2010-based-projections/index.html).

However, while growth in the working-age population may slow, we expect participation to increase. Improving employment prospects should gradually encourage some of the inactive to seek work, while the continued increase in the State Pension Age (SPA) for women will continue to have an effect. However, some of this boost will be dampened by the fact that the population itself is ageing, and labour market participation is still substantially lower amongst those close to the SPA than amongst younger individuals.

As we have established previously, there is empirical evidence to suggest that a prolonged period of weak activity can drive up the NAIRU through hysteresis. As a result, we assume that the NAIRU rises to around 6% throughout the forecast period, up from 5% ahead of the recession.

Though the overall rise in unemployment has been relatively muted, given the weakness of activity, there has been a substantial increase in the level of long-term unemployment, with the number of people unemployed for more than two years having more than doubled over the past five years. High levels of long-term unemployment are likely to cause a rise in the NAIRU, as those out of work for a prolonged period may see the value of their skills eroded and become detached from the labour market. This means that the pool of available and suitably-skilled workers is reduced. This process could be exacerbated by the shift in employment from the public to the private sector, which could lead to a mismatch between skills and opportunities as the likelihood is that the regional pattern of public sector job losses – and private sector opportunities – will be very uneven.

Previous cycles may not provide a good guide for the likely movements in the NAIRU because this time around the increase in unemployment has been much more highly concentrated on the younger age groups (Figure 2.16). Some argue that this may mean that the young miss out on the essential formative years of their career when they pick up many of their skills. However, we take the view that this should mean that the impact of a rising NAIRU is less marked than in previous cycles because we would expect that the younger unemployed would be better placed to retrain and re-enter the workforce than those from older age groups.



Figure 2.16. Increase in ILO unemployment rate by age, 2008Q1–2012Q3

Source: Haver Analytics.

Bringing together our forecasts for population growth, participation and the NAIRU, we find that the contribution of the labour supply to potential output growth should pick up from 0.2ppts a year from 2007 to 2012 to 0.3ppts a year over the period 2013–17. However, this is well down on the average contribution of 0.7ppts a year over 1996–2006, reflecting much lower levels of inward migration and a slower increase in participation rates.

Total factor productivity

As we have already established, the financial crisis is likely to have caused permanent damage to total factor productivity because of its impact on credit availability and the efficient allocation of resources. However, the literature would suggest that we have already seen the bulk of any permanent damage. Evidence of improving credit availability for firms in the most recent Bank of England Credit Conditions Survey would appear to lend credence to this argument, as would the fact that the CBI Industrial Trends Survey has reported a marked decline in the proportion of respondents citing an inability to raise external finance as a factor likely to limit capital spending over the next 12 months.

As such, we assume that the contribution of total factor productivity to potential output growth moves back towards historical norms over a relatively short period. Over the 2013–17 period as a whole, we assume that total factor productivity contributes 0.7ppts per year to potential output growth.

A forecast of potential output and the output gap

Bringing these factors together, we expect growth in potential output to accelerate through the forecast horizon. Our forecast shows potential output growing by 1.9% a year in 2013–17 (Table 2.2), with growth during that period accelerating from 1.4% in 2013 to 2.2% a year in 2017, as the negative legacy effects of the financial crisis fade.

	1996–2006	2007–12	2013–17
Employment at the NAIRU	0.7	0.2	0.3
Capital stock	1.2	1.0	0.9
Total factor productivity	1.1	0.2	0.7
Potential output	3.0	1.4	1.9

Table 2.2. Contributions to potential output growth (percentage points per annum)

Note: Columns may not sum exactly due to rounding. Source: Oxford Economics.

Our forecast is similar to that of the OBR for this period. However, because we estimate that the permanent damage to potential output during the financial crisis was smaller, our forecast starts from a point where the level of potential output is higher than that of the OBR. As such, by 2017, our estimate of the level of potential output is around 1.2ppts higher than that of the OBR (see Figure 2.17). Given the uncertain nature of forecasting potential output, it is perhaps no surprise that there is a wide range of views across forecasters. Our forecast is at the top end of the range, ahead of the OBR. The European Commission (EC) is markedly more downbeat, assuming that potential output will grow by just 1.3% a year from 2013 to 2017. This means that, by 2017, the EC estimates imply a cumulative shortfall of 5% of potential GDP compared with our forecast.



Figure 2.17. Forecasts of potential output

Note: Forecasts for OBR, IMF, EC and OECD calculated using data quoted in Office for Budget Responsibility, *Economic and Fiscal Outlook*, December 2012 (http://budgetresponsibility.independent.gov.uk/economicand-fiscal-outlook-december-2012/)

Source: Oxford Economics, OBR, IMF, European Commission, OECD.

Recovery to gain pace over medium term but still weaker than previous upturns

The existence of such a large output gap should keep inflation low and create the conditions for growth to pick up over the medium term. We expect GDP growth to accelerate from 1% this year to 2.9% in 2017. Our forecast for growth would have been even faster were it not for the drag inflicted by the planned deep cuts in government consumption: falling government consumption reduces our GDP forecast by 0.3ppts in 2015, 0.4ppts in 2016 and 0.5ppts in 2017.





Source: Haver Analytics, Oxford Economics.

	2011	2012	2013	2014	2015	2016	2017
Domestic demand	-0.6	1.0	1.3	1.8	2.1	2.3	2.4
Private consumption	–1.3	0.9	1.2	2.0	2.4	2.8	3.0
Fixed investment	-2.9	0.0	2.8	5.6	5.6	5.8	5.8
Stockbuilding (% of GDP)	0.4	0.1	0.3	0.3	0.3	0.3	0.3
Government consumption	-0.1	2.8	-0.3	-1.4	–1.3	-1.6	-2.2
Exports of goods and services	4.5	-0.4	2.1	4.8	4.9	5.4	5.6
Imports of goods and services	0.5	2.3	3.0	3.8	3.7	4.0	4.0
GDP	0.9	0.0	1.0	2.1	2.5	2.8	2.9
Industrial production	-0.8	-2.4	-1.0	1.2	1.1	1.3	1.4
CPI	4.5	2.8	2.4	1.6	1.5	1.6	1.7
Current balance (% of GDP)	–1.3	-3.6	-3.3	-3.1	-2.9	-2.4	-1.9
Short-term interest rates (%)	0.89	0.84	0.50	0.50	0.50	0.66	1.59
Long-term interest rates (%)	3.12	1.91	2.13	2.35	2.58	3.02	3.59
Exchange rate (US\$ per £)	1.60	1.58	1.58	1.53	1.53	1.54	1.54
Exchange rate (€ per £)	1.15	1.23	1.24	1.27	1.31	1.31	1.32
Output gap (% of potential GDP)	-2.9	-5.0	-5.4	-5.2	-4.6	-4.0	-3.2

Table 2.3. Oxford Economics UK forecast (annual % change unless stated)

Source: Oxford Economics.

Our expectations for the recovery phase are significantly weaker than previous recoveries, but this partly reflects the poor performance to date. As of end-2012, GDP was still around 3% below its 2008Q1 peak even though the recovery had been underway for three-and-a-half years. This means that it is a long way behind where it was at the corresponding point of either of the previous two cycles (Figure 2.18). Following the recession of the early 1990s, GDP was 8% above its previous peak by this stage, while the recovery of the early 1980s saw GDP almost 5% above its previous peak by this stage. Our forecast (Table 2.3) suggests that, this time around, GDP will not regain its previous peak until 2014Q4, a total of almost seven years. By comparison, the economy regained its pre-crisis peak within four years in the 1930s.

Slow growth in 2013 is forecast to cause the output gap to widen from 5% of potential output to 5.4%. However, thereafter it should begin to close as the pace of the recovery accelerates and, by the end of 2017, we expect it to have fallen to around 3% (see Figure 2.19). This forecast points to very subdued inflationary pressures over the next few years, meaning that the Bank of England will have plenty of scope to implement further monetary stimulus in the short term, should it choose to, and will be able to tighten policy at a measured pace once the recovery begins to gain momentum.

Our forecast shows a larger output gap than that of the OBR in 2012, to the tune of around 2ppts. This gap then falls to 1.4ppts by 2017, as our larger output gap creates the conditions for a faster recovery in GDP. Nevertheless, that our estimate for the size of the output gap is larger than that of the OBR implies a smaller structural deficit and that the degree to which fiscal policy eventually needs to be tightened would not be as great as the OBR suggests. Using the same method as the OBR for cyclically adjusting the public finances, our forecast would suggest that the degree of necessary fiscal tightening is 1% less than the OBR estimates.

Figure 2.19. Output gap



Source: Oxford Economics, OBR.

2.5 Comparison with other forecasts

Our short-term forecasts are similar to those of the OBR and the market consensus (Figure 2.20). Over the latter years of the forecast horizon, our forecast is a little stronger than that of the OBR, reflecting the influence of our larger output gap. The market consensus is much lower, although we consider the consensus forecast to be a less reliable indicator of longer-term forecasts, given that the sample size is considerably smaller than for the short-term forecasts.



Figure 2.20. Comparison of GDP growth forecasts

Source: Oxford Economics, OBR, HM Treasury.

2.6 Risks now more balanced: alternative scenarios for the UK economy

Throughout 2012, the risks to our central forecast had been skewed heavily to the downside, reflecting several important international 'event risks', such as the threat of a eurozone break-up or the US going over the 'fiscal cliff'. However, these risks have diminished substantially and have been replaced by a more normal – and more balanced – pattern of macroeconomic risks. We attach a probability of around 60% to an outcome similar to our baseline scenario and identify several areas of risk to the upside and downside.

The UK household sector has been repairing its balance sheets over the past five years, but the level of household debt remains high by historical standards (see Figure 2.21). Our forecast assumes that households continue to deleverage in a relatively orderly fashion, with the low interest rate environment giving them ample room to plot a path towards more sustainable debt levels. However, this outcome is far from certain; consumers may opt to use the anticipated acceleration in income growth to make more rapid inroads into their debts, or they may be forced into this action by earlier and more aggressive increases in interest rates. Such a scenario would dampen the pace of the UK recovery.



Figure 2.21. Household debt-to-income ratio

Source: Haver Analytics, Oxford Economics.

There is also considerable uncertainty surrounding future trends in productivity and, by extension, employment. Productivity has slumped in recent years and is now around 14% below where it would have been had the pre-recession trend continued. We assume that a portion of this decline is due to cyclical factors, which will unwind as economic growth recovers. However, some economists argue that almost all of the decline can be written off as being permanent and that the economy has moved to a new equilibrium some way below old levels. If this is the case, then it would imply that the economy would need to create more jobs to support a given level of output growth going forwards; in the short term, this may mean stronger employment trends than those shown in our forecast,

potentially providing some upside for consumer spending, though it would also imply poorer medium-term growth prospects.

On the upside, UK corporates remain in strong financial shape and there is some evidence that credit availability is beginning to improve. This could be the foundation of a robust recovery in business investment, if corporates feel sufficiently confident in the outlook to authorise these projects.

The balance of these domestic risks remains skewed slightly to the downside, with the risks around consumer balance sheets being the most important. In contrast, as we established in Chapter 1, the risks to the global outlook are more evenly balanced. In the rest of this section, we look at two of the alternative scenarios for the global economy set out in Chapter 1 and consider how they might affect the UK economy.

Corporate reawakening

Our baseline forecast assumes that the policy process in 2013 and beyond will be similar to what we have seen in recent years. In particular, in the eurozone, we expect piecemeal action on setting up a banking union and moving towards fiscal union. In the US, the most likely scenario is that no agreement is reached on a medium-term fiscal plan that brings public deficits and debt down. The lingering uncertainty would restrain any improvement in corporate sentiment.

But we could be positively surprised. For instance, eurozone policymakers have sometimes taken action that surpassed our expectations, such as the ECB's very strong commitment, made in July 2012, to 'do what it takes' to save the eurozone.

More decisive policy action in the eurozone would create the right environment for companies to decide to use large amounts of cash accumulated on their balance sheets more productively, by accelerating investment and recruitment. This would, in turn, enhance confidence, leading to a quick recovery in demand. We would expect to see such a scenario playing out across the major economies, so it would also boost trade. The UK would be at the forefront of such a scenario, given the extent to which UK firms have built up cash surpluses over the past five years.

Under this scenario, we would expect the UK economy to grow by 1.7% this year and by 3.3% in 2014. We would attach a probability of around 15% to a scenario where the recovery surprises on the upside in a way similar to this.

Eurozone break-up

Though we think that the risk of an imminent break-up is much lower now than it was during 2012, the future of the peripheral countries in the eurozone is not yet assured and we see the possibility that some countries exit the eurozone as the most significant downside risk to the global economy over the medium term.

We think there is a probability of around 15% that the eurozone will fracture in 2014, with up to six economies – Greece, Portugal, Ireland, Spain, Italy and Cyprus – being forced to leave. In such a scenario, the UK would be one of the countries hardest hit outside of the eurozone because of its strong reliance on the eurozone for trade – more than 40% of UK exports go to the eurozone – and the likely negative impacts on consumer and business confidence.

However, the strongest transmission would be through financial contagion and the credit crunch conditions that would ensue. The close links with their European counterparts would mean that UK banks would be vulnerable to spillovers from increased stress in the European banking sector. The UK's exposure to peripheral sovereign debt is relatively limited, but its exposure to bank and other private sector debt is much greater and disorderly sovereign defaults in the periphery would lead to defaults in other sectors of the economy, as well as other parts of the eurozone, which would hit the UK banking sector hard. Data from the Bank for International Settlements suggest that UK banks have exposure to around \$400 billion of debt in the Peripheral-4 (Greece, Spain, Portugal and Ireland) countries, more than half of which is to Ireland.

In a scenario where the eurozone breaks up, we would expect the UK to endure another deep recession, albeit not as dramatic as the 2008–09 recession because there is less scope for businesses to cut spending on inventories or business investment this time around. GDP would decline by 1% in 2014 and by a further 2.1% in 2015.

Figure 2.22 shows GDP forecasts for the UK economy, based upon these alternative scenarios. By the end of 2017, the level of GDP is around 2% higher than the baseline in the corporate reawakening scenario and 8% below the baseline in the eurozone breakup.



Figure 2.22. GDP forecasts for alternative scenarios for the UK economy

Source: Oxford Economics.

2.7 Conclusions

After a challenging 2012, prospects are beginning to brighten for the UK economy, with GDP expected to grow by 1% this year after being flat in 2012. Growth should then continue to accelerate steadily in future years, although the recovery will remain considerably weaker than in previous cycles. Faster growth will come from three main areas: first, through stronger consumer spending, as lower inflation boosts household purchasing power; second, through a reduction in downside risk supporting confidence and encouraging firms to begin to invest their accumulated cash surpluses; and third, via a recovery in world trade, which supports an improved export performance.

We think that there is currently a significant amount of spare capacity in the economy, with the output gap estimated to have averaged around 5% of potential output in 2012. Though the financial crisis is likely to have caused substantial permanent damage to potential output, we believe that the vast bulk of this damage has already occurred and expect potential output growth to average 1.9% over the period from 2013 to 2017. Such a large output gap provides the conditions for the recovery to gain momentum over the medium term, with GDP growth expected to accelerate from 1% in 2013 to 2.9% in 2017. But this would still leave the output gap at around 3% of GDP in 2017.

The risks around our forecast are more balanced now than they were for most of 2012, though the domestic risks do remain skewed slightly to the downside. Domestically, the main threat remains the high level of consumer indebtedness, which may weigh more heavily on the upturn. A further source of uncertainty is the labour market, where the collapse in productivity over the past five years makes future developments very uncertain. On the upside, a more aggressive recovery in business investment remains a plausible alternative, though this would likely be dependent on external developments, in particular policymakers surprising us with faster and more decisive solutions to the eurozone's problems. And the UK's biggest downside risk is also related to the eurozone: while the risk of an imminent break-up is much lower now than it was during 2012, there remains a possibility that some countries will be forced to exit the eurozone over the medium term. Such a scenario would have the potential to cause another deep recession in the UK.