

London's Economic Outlook: Spring 2014
The GLA's medium-term planning projections

May 2014



copyright

Greater London Authority
May 2014

Published by

Greater London Authority
City Hall
The Queens Walk
London SE1 2AA

www.london.gov.uk

Tel 020 7983 4922

Minicom 020 7983 4000

ISBN 978 1 84781 576 7

Cover photograph

© Ben Broomfield

For more information about this publication, please contact:

GLA Economics

Tel 020 7983 4922

Email glaeconomics@london.gov.uk

GLA Economics provides expert advice and analysis on London's economy and the economic issues facing the capital. Data and analysis from GLA Economics form a basis for the policy and investment decisions facing the Mayor of London and the GLA group. GLA Economics uses a wide range of information and data sourced from third party suppliers within its analysis and reports. GLA Economics cannot be held responsible for the accuracy or timeliness of this information and data. The GLA will not be liable for any losses suffered or liabilities incurred by a party as a result of that party relying in any way on the information contained in this report.

Contents

1. Executive summary	2
2. Introduction	4
3. Economic background: Recovery strengthening	5
4. Review of independent forecasts.....	25
5. The GLA Economics forecast	31
Appendix A: From SIC 2003 to SIC 2007	41
Appendix B: Explanation of terms and some sources.....	43
Appendix C: Glossary of acronyms	44
Appendix D: Bibliography	45

1. Executive summary

GLA Economics' twenty fourth London forecast¹ suggests that:

London's Gross Value Added (GVA) growth rate is forecast to be 3.8 per cent in 2014 with growth moderating to 3.2 per cent in 2015 and 2.6 per cent in 2016.

London is forecast to see rises in employment in 2014, 2015 and 2016.

London household income and spending are both forecast to increase over the next three years.

Table 1.1 summarises this report's forecasts and provides an average of independent forecasts.

Table 1.1: Summary of forecasts

Annual growth rates (per cent)	2013 ²	2014	2015	2016
London GVA (constant 2010 £ billion)	3.4	3.8	3.2	2.6
<i>Consensus (average of independent forecasts)</i>		3.2	3.0	2.9
London civilian workforce jobs	4.4	1.6	0.7	0.5
<i>Consensus (average of independent forecasts)</i>		1.9	1.2	1.1
London household spending (constant 2010 £ billion)	3.0	2.2	2.1	2.2
<i>Consensus (average of independent forecasts)</i>		3.1	2.7	2.9
London household income (constant 2010 £ billion)	0.7	2.2	2.3	2.5
<i>Memo: Projected UK RPI³ (Inflation rate)</i>	3.0	2.8	2.9	3.1
<i>Projected UK CPI⁴ (Inflation rate)</i>	2.6	1.9	1.9	2.0

Sources: GLA Economics' Spring 2014 forecast and consensus calculated by GLA Economics

The predominance of recent economic data suggests that London's economic recovery, along with that of the UK as a whole, continues, with London growing somewhat faster than the rest of the UK. Moreover, the majority of economic indicators suggest a continuing improvement in the London economy. For instance, business confidence and investment intentions⁵ have improved, while consumer confidence in London is nearly back to pre-recession levels and credit conditions continue to ease⁶. Employment growth in London has been very, and unexpectedly, strong over the past couple of years and while household incomes have been under significant pressure, with recent research by the Office for National Statistics (ONS) finding that "real

¹ The forecast is based on an in-house model built by Volterra Consulting Limited.

² All historic data for London GVA, workforce jobs, household spending and household income is from Experian Economics. It should be noted that the 2013 figures for London GVA, civilian workforce jobs, household spending and household income are estimates from Experian Economics.

³ RPI = Retail price index. Although not part of the GLA Economics forecast for London, for reader information HM Treasury Consensus Forecast, May 2014 of the UK RPI inflation rate are reported.

⁴ CPI = Consumer Price Index. Although not part of the GLA Economics forecast for London, for reader information HM Treasury Consensus Forecast, May 2014 of the UK CPI inflation rate are reported. Since December 2003 the Bank of England's symmetrical inflation target has been annual CPI inflation at 2 per cent.

⁵ The Financial Times, 'Small businesses raise hopes of investment upturn', 25 February 2014.

⁶ Bank of England, 'Credit Conditions Survey – Survey Results 2014 Q1', 3 April 2014.

wages have been falling consistently since 2010, the longest period since at least 1964⁷, there are some indications that this strain on real wages may be easing⁸. With inflation below the Bank of England's central symmetrical target and expected to stay relatively low for the coming year, it is likely that the Bank will be able to support further economic growth by maintaining its currently very loose monetary policy stance for the next year or so.

Downside risks to the economy continue to ease, however the possibility of another flare up of the sovereign debt crisis in the Eurozone remains a risk. The worst case scenario, which has been highlighted in a number of London's Economic Outlooks (LEOs) since the beginning of the Eurozone's problems, would see disorganised sovereign debt defaults or a messy exit from the Eurozone of member states; with the best case (downside risk) scenario seeing low growth in the Eurozone for the next few years, which will act as a drag on UK trade.

Despite a poor first quarter, due in part to exceptional weather conditions, the US economy continues to grow. However the decline in the labour force participation rate amongst US prime-age workers since 2007 has caused some concern⁹. Still, the possibility that the US government will default on its debt has receded for the time being¹⁰, along with the threat of another government shutdown and the damage this could do to the US economy. Emerging market economies have, however, seen a bumpy start to the year¹¹, while a number have also experienced shocks due to fallout from the US taper¹², both of which may slightly slow global growth.

With the economy forecast to grow relatively strongly this year, likely reducing the amount of spare capacity in the economy, and with concerns mounting about the potential negative effects of a long period of loose monetary policy, it is likely that the period of extraordinarily accommodating monetary policy in the UK will come to an end over the next year or so. Tighter monetary policy will act as a break on economic growth in the later years of the forecast period. In addition, the government's fiscal retrenchment, which is likely to continue after the 2015 election, will also dampen economic growth as the fiscal stimulus provided by a still large fiscal deficit is reduced over time. A self-sustaining recovery in the economy in the longer run will most likely have to be supported more from net trade and private sector investment than by public sector and household consumption. However, so far evidence of an export-led recovery remains weak¹³. Still the overall prospects for the London economy over the short to medium term continue to improve, although it may still take some time for this to be felt by households.

⁷ Office for National Statistics, 'An Examination of Falling Real Wages, 2010 – 2013', 31 January 2014.

⁸ Office for National Statistics, 'Statistical bulletin: Labour Productivity, Q4 2013', 1 April 2014.

⁹ The Financial Times, 'US loses edge as employment powerhouse', 24 March 2014.

¹⁰ The Financial Times, 'US Congress agrees \$1tn spending deal', 14 January 2014.

¹¹ BBC, 'World Bank cuts China growth forecast', 7 April 2014.

¹² The Financial Times, 'EMs increasingly unstable amid US Fed taper fallout', 3 April 2014.

¹³ BBC, 'UK current account deficit near record high at £22.4bn', 28 March 2014.

2. Introduction

The spring 2014 edition of *London's Economic Outlook* (LEO) is GLA Economics' twenty fourth London forecast. The forecasts are issued every six months to assist those preparing planning projections for London in the medium term. The report contains the following:

- An overview of recent economic conditions in London, the UK and the world economies with analysis of important events, trends and risks to short and medium-term growth (Section 3).
- The 'consensus forecast' – a review of independent forecasts indicating the range of views about London's economy and the possible upside and downside risk (Section 4). In this document, 'consensus forecast' refers to the average of the independent forecasters listed under Section 2.1.
- The GLA Economics forecast for output, employment, household expenditure and household income in London (Section 5).

2.1 Note on the forecast

Any economic forecast is what the forecaster views as the economy's most likely future path and as such is inherently uncertain. Both model and data uncertainty as well as unpredictable events contribute to the potential for forecast error. GLA Economics' forecast is based on an in-house model built by Volterra Consulting Limited. GLA Economics' review of independent forecasts provides an overview of the range of alternative opinions. Independent forecasts are supplied to the GLA for the main macroeconomic variables by the following organisations:

- Cambridge Econometrics (CE)
- The Centre for Economic and Business Research (CEBR)¹⁴
- Experian Economics (EE)
- Oxford Economics (OE)

Only the most likely outcomes, which the different forecasting organisations provide, are recorded. Each forecaster may also prepare scenarios they consider less likely but these are not shown here. The low and high forecasts combine the lowest and highest forecasts respectively taken from each year separately and which, may therefore, come from different forecasters. High and low estimates therefore may not represent the view of any one forecaster over the whole of the forecast period.

Economic forecasting is not a precise science. These projections provide an indication of what is, in GLA Economics' view, most *likely* to happen, not what will *definitely* happen.

¹⁴ CEBR does not provide a forecast for employment in the sectors of the London economy or for household expenditure in London.

3. Economic background: Recovery strengthening

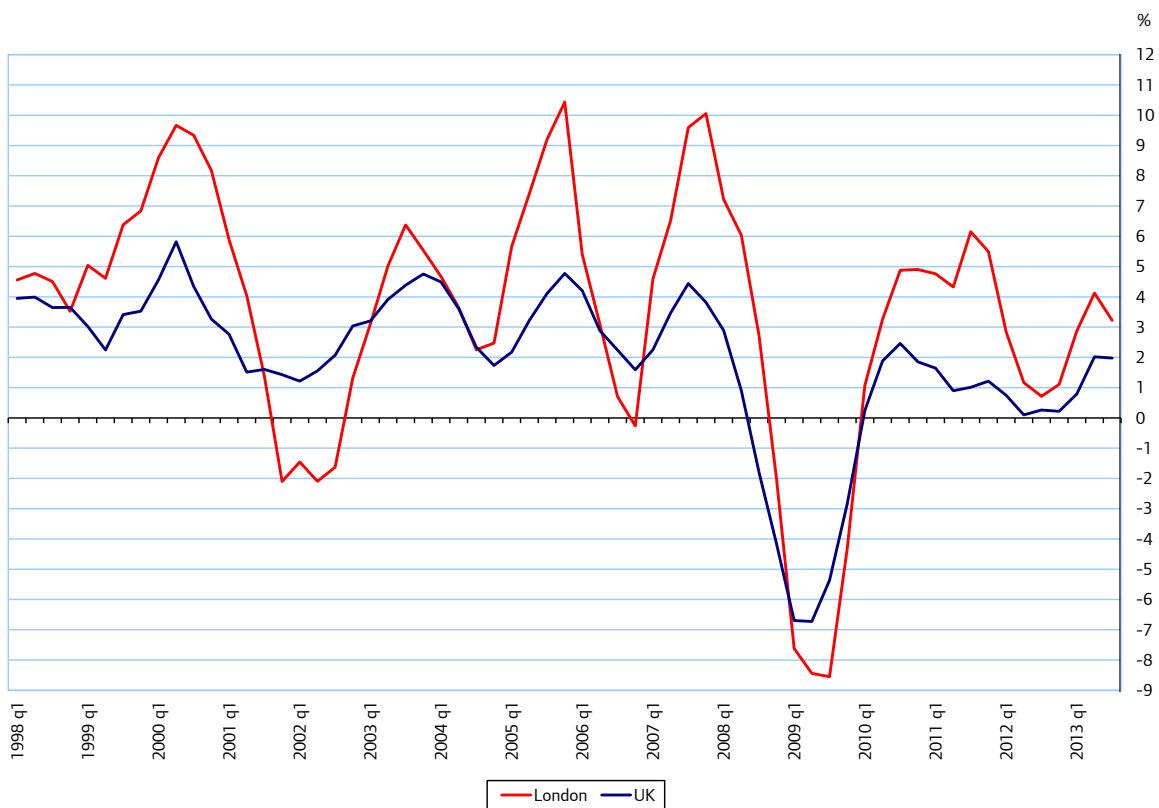
This section provides an overview of recent developments in the London, UK and world economies.

3.1 The London economy

London's annual growth in output stood at 3.2 per cent in the third quarter of 2013 compared to 2.0 per cent in the UK (see Figure 3.1). London's economic recovery is continuing with economic indicators suggesting that the London economy performed better than the UK economy in 2013, with this continuing in the first few months of 2014.

Figure 3.1: Output growth – London and UK

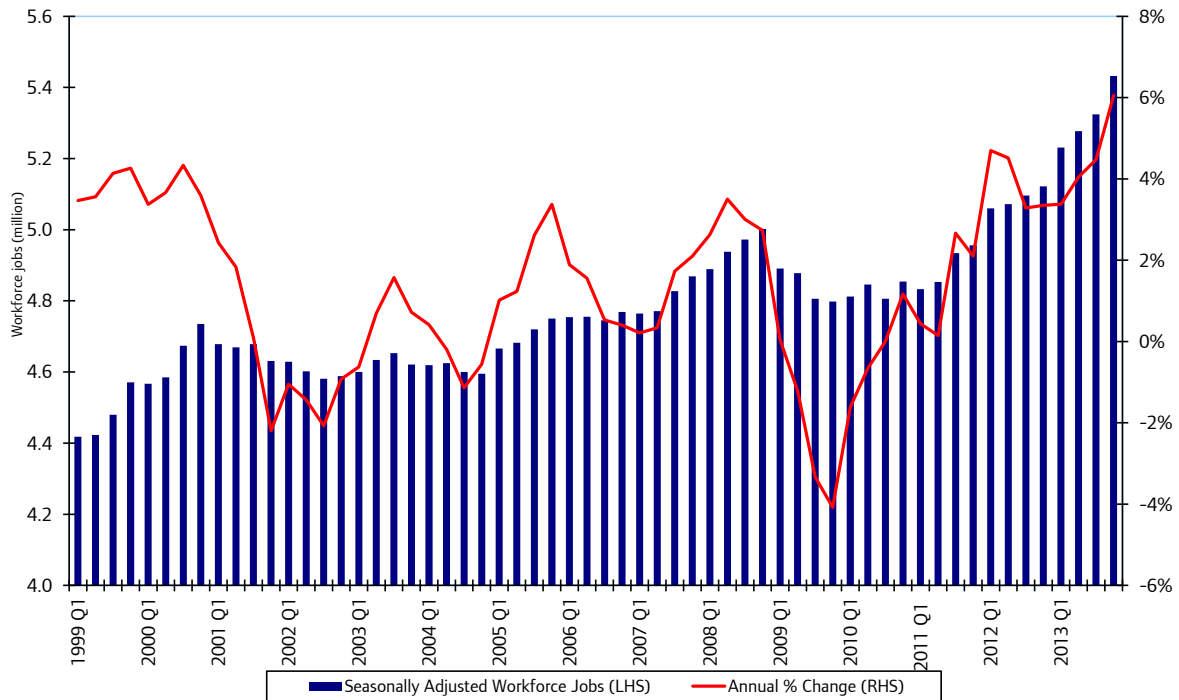
Real GVA, annual % change, last data point is Q3 2013



Source: Experian Economics

Annual employment growth in London was exceptionally strong in Q4 2013 at 6.1 per cent (the largest percentage annual increase since the series began in 1996). The total number of workforce jobs in London was just over 5.4 million in Q4 2013 (see Figure 3.2).

Figure 3.2: London civilian workforce jobs
Level and annual % change, last data point is Q4 2013

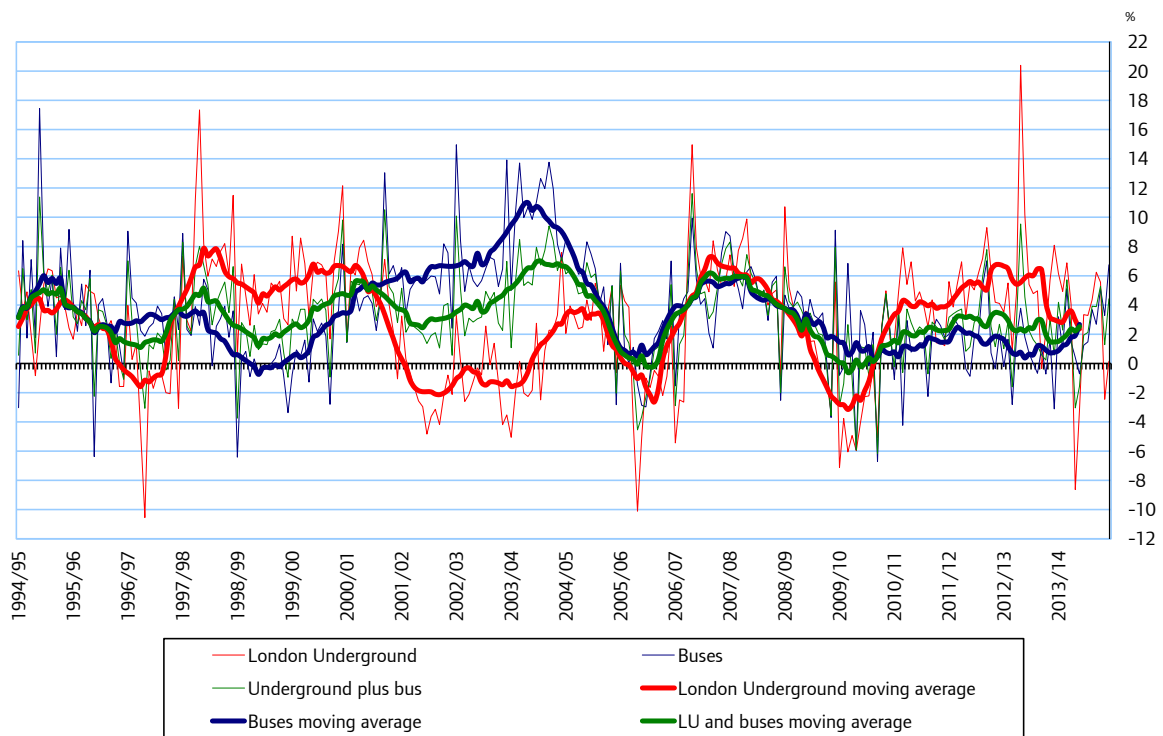


Source: Office for National Statistics

Public transport usage is a useful and timely indicator of economic activity in London. Figure 3.3 shows that there is positive annual growth in both the moving average of bus travel and underground usage. Annual growth in underground usage is currently just weaker than that for bus travel, although this in part is due to it having fallen back as the impact of the boost in passenger numbers caused by the Olympics drops out of the data and therefore implies continuing strong underlying growth in passenger numbers.

Figure 3.3: London public transport usage

Annual % change in passengers using London Underground and buses (adjusted for odd days). Last data point is the 28-day period ending 31/3/14



Source: Transport for London

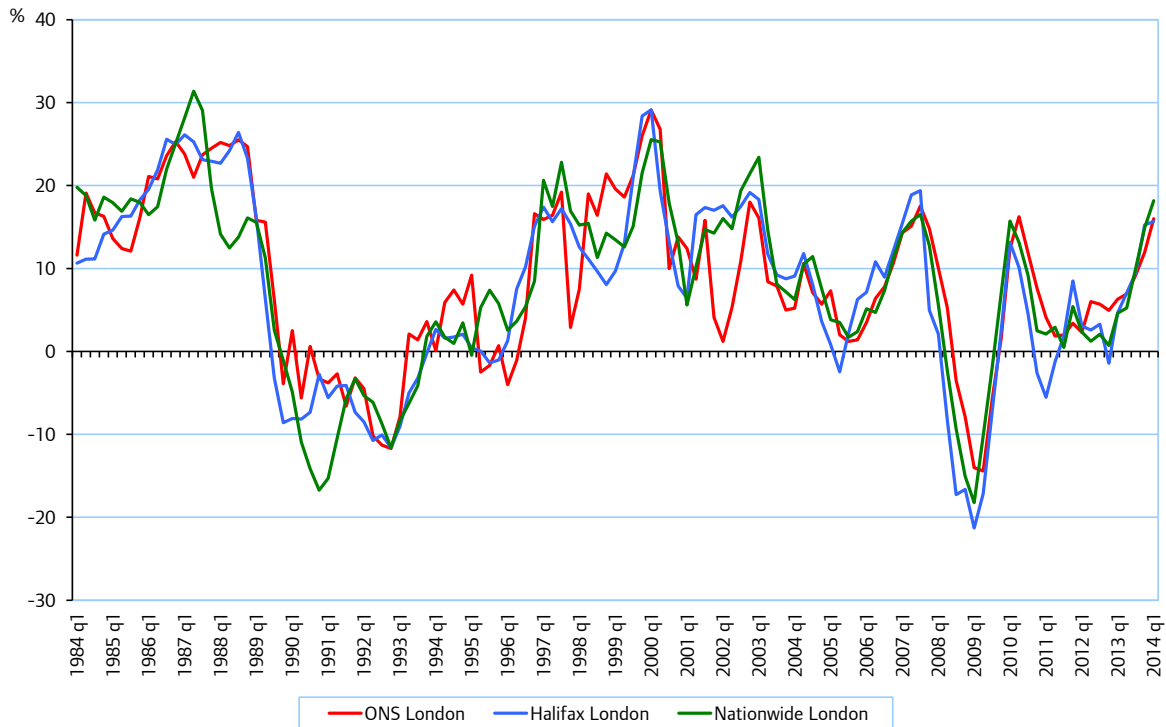
Annual house prices in London, as reported by the ONS and Nationwide, have been increasing since the final quarter of 2009; the Halifax measure has however shown periods of negative annual growth between Q4 2010 to Q2 2011 and Q4 2012. Nevertheless, in 2013 all house price measures showed an increase in annual house prices in London with this growth continuing into 2014. Such has been the strength of growth in house prices that concerns have been expressed about the sustainability of the growth¹⁵ with some worry that a housing bubble may be developing in London¹⁶. Annual house price inflation in London as measured by the Halifax, Nationwide, and the ONS was positive and rising, with all indicators suggesting annual house price inflation in London in Q1 2014 was around 15 per cent (see Figure 3.4).

¹⁵ The Financial Times, 'UK corporate credit flows begin to improve', 3 April 2014.

¹⁶ OECD, 'Economic Outlook', 6 May 2014.

Figure 3.4: House price inflation in London

Annual % change, last data point is Q1 2014



Sources: ONS, Halifax house price index, Nationwide

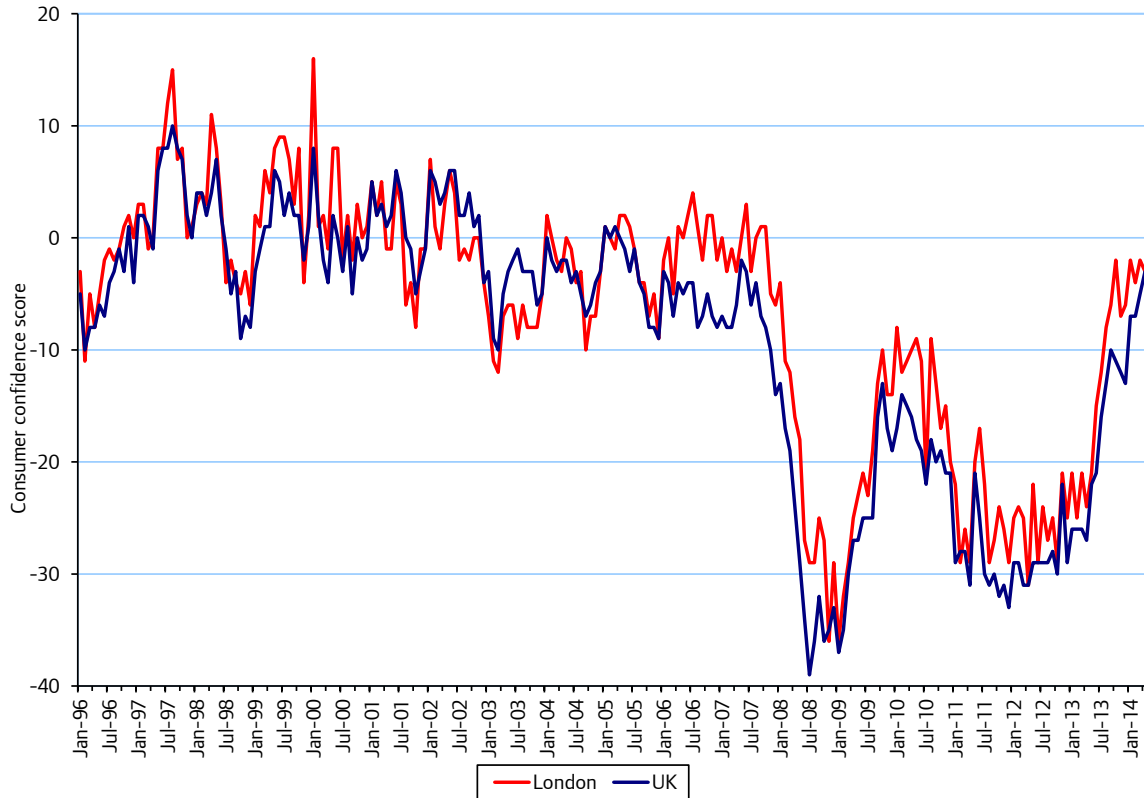
Knight Frank's Q1 'Central London Quarterly' for commercial property showed that "given the strong level of take-up seen in the period Q2 to Q4 2013, it was a near certainty that Q1 2014 would see a lower level of office demand as the market paused for breath. In this context, the 3.2 m sq ft of take-up recorded in Q1 appears robust, given this is marginally higher than the long-term average, albeit down on Q4's figure of 3.7 m sq ft. However, take-up in Q1 2013 was 2.6 m sq ft, and this annual comparison highlights the significant change we have seen in demand levels". Meanwhile "supply in central London rose to 16.7 m sq ft in Q1, up from 16.1 m sq ft in Q4. This was driven by an increase in second hand grade A availability – possibly space vacated by tenants who signed leasing deals in previous quarters returning to the market". While, "after the record £8.1 bn of purchases seen in Q4, a fall in investment volume for Q1 was widely expected. Transactions in Q1 totalled £2.2 bn, which is down on both quarterly and annual comparisons as a shortage of stock constrained activity. Yields remained steady in the West End, and hardened 25 basis points in the City; while 75% of stock on the market in the City is under offer at the time of writing. This shows the lower Q1 volume figure does not mark a change in sentiment in the market"¹⁷.

GfK NOP's regional consumer confidence index (Figure 3.5) shows that consumer confidence in London improved significantly in 2013 and is now at similar levels to that seen before the 2008/09 recession. Consumer confidence is the same in London as in the UK as a whole. The index reflects people's views on their financial position and the general economic situation over the past year and their expectations for the next 12 months.

¹⁷ Knight Frank, Central London Quarterly - Offices, Q1 2014.

Figure 3.5: GfK NOP's regional consumer confidence index

Consumer confidence score, last data point is April 2014



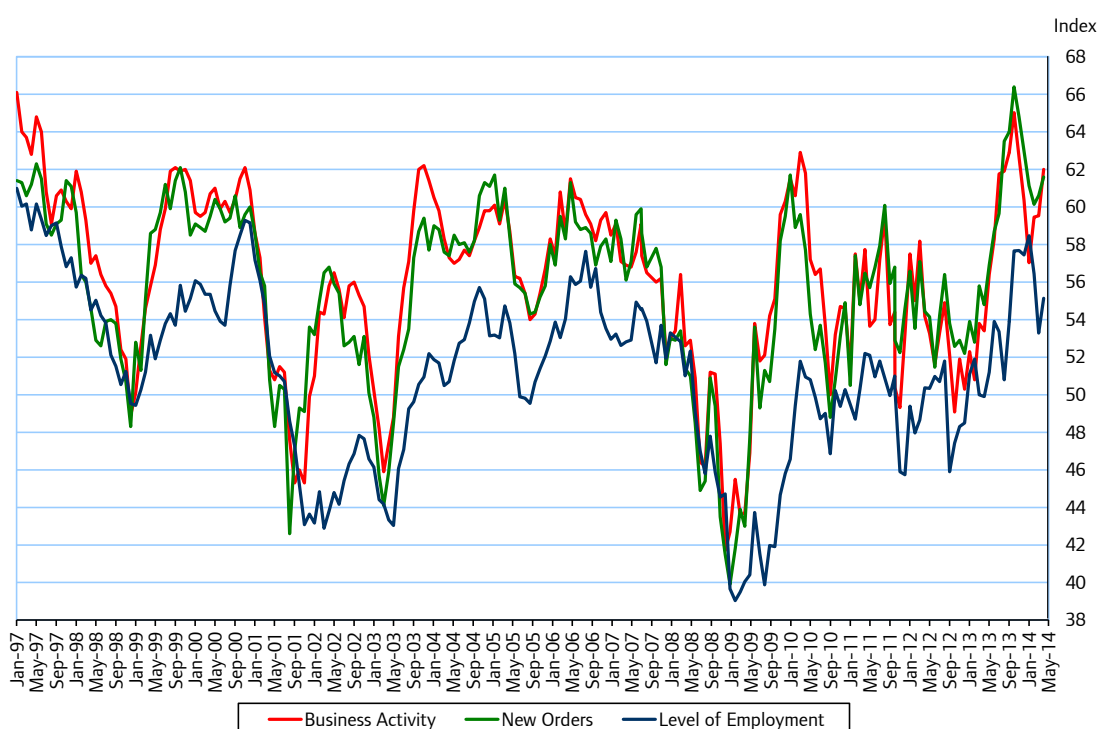
Sources: GfK NOP on behalf of the European Commission

The Purchasing Manager's Index (PMI) business survey indicates that business activity has been expanding since May 2009 (apart from the months of August 2010, November 2011 and October 2012) and new orders are increasing strongly. Employment in London firms, after falling in April 2013, has been rising consistently since then (see Figure 3.6).

Figure 3.6: Recent survey evidence on London's economic climate

Purchasing Manager's Index (PMI) survey, last data point April 2014

Seasonally adjusted index (above 50 indicates increase, below 50 indicates decrease)



Sources: Markit Economics

3.2 The UK economy

The Office for National Statistics (ONS) estimates that the UK economy continued its recovery in the first quarter of 2014. Having grown by 0.7 per cent in Q4 2013, output rose by 0.8 per cent in Q1 2014, the fifth consecutive quarter of rising UK output and the longest running rise in output since the financial crisis¹⁸. UK output was 3.1 per cent higher in Q1 2014 than in Q1 2013. UK GDP is now estimated to be 0.6 per cent below its pre 2008/09 recession peak¹⁹. The IMF has forecast that the UK economy will grow by 2.9 per cent in 2014 and by 2.5 per cent in 2015²⁰, while the OECD forecasts that the UK economy will grow by 3.2 per cent in 2014 and 2.7 per cent in 2015²¹. UK unemployment has also fallen faster than was expected at the start of 2013, with ILO unemployment standing at 6.8 per cent in the three months to March 2014 (down 1.0 per cent on a year earlier); there has however been some concern that UK productivity growth has been subdued (see Box 3.1).

¹⁸ BBC, 'UK economy grows by 0.8% in first quarter', 29 April 2014.

¹⁹ Office for National Statistics, 'Gross Domestic Product Second Estimate of GDP, Q1 2014', 22 May 2014.

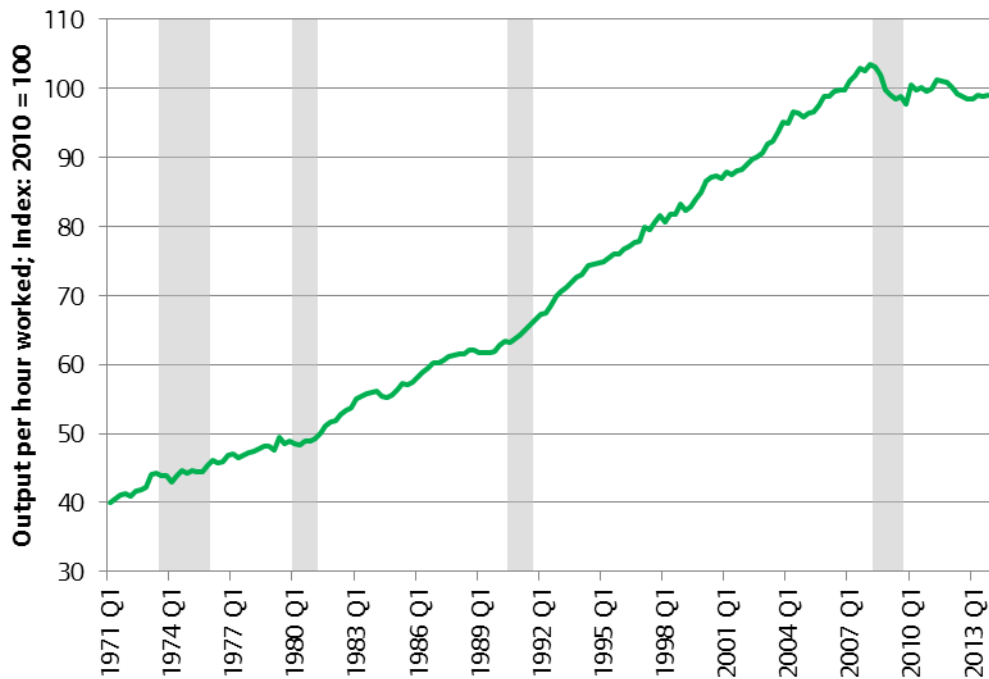
²⁰ The IMF, 'World Economic Outlook: Recovery Strengthens, Remains Uneven', April 2014.

²¹ OECD, 'Economic Outlook', 6 May 2014.

Box 3.1: The UK productivity puzzle

A well-documented feature of the recovery from the 2008/09 recession has centred on the recorded falls in productivity, a term coined as the 'Productivity Puzzle'. This refers to the fact that the UK's labour market has been remarkably resilient despite the significant loss in output recorded in this downturn, with the result that productivity has fallen. Figure 3.7 gives a historical overview of UK productivity growth in terms of output per hour worked.

Figure 3.7: Output per hour worked (Index 2010 = 100), UK, 1971 – 2013



Source: *Labour Productivity, Q4 2013*, Office for National Statistics. Grey bars indicate recession periods²².

Figure 3.7 shows that the recent downturn saw a large fall in productivity and little subsequent increase. This contrasts with previous recessionary periods where productivity recovered relatively quickly, most usually as output recovered and employment lagged behind.

A lot of work has been done to explore the reasons behind the current trend in productivity. For instance, GLA Economics published a paper looking at the reasons why the London labour market might have held up as well as it did during the downturn period in 2010²³. Over the course of the recovery many different reasons have been put forward for the lack of strong productivity growth; GLA Economics considers some of those reasons.

Some commentators have questioned whether there is a problem with the statistics used to report productivity. For instance, there have been questions as to whether output growth has been recorded accurately, at least in part given the strength of some other economic indicators over the period of the recovery. The ONS have looked into this issue and believe that the GDP

²² Recession periods are defined as two consecutive quarters of falling output, which end once output growth is observed; exception for the 1970's where two separate occasions of falling output are treated as a separate recession. (Source: Bank of England Inflation Report – February 2014).

²³ GLA Economics, 'Working Paper 44: London's labour market in the recent recession', December 2010.

figures are not inconsistent with other economic indicators (like tax receipts and business surveys for example). Indeed the ONS states that "it would require implausibly large revisions to current estimates of GDP growth to explain a significant fraction of the productivity puzzle"²⁴.

A lot of analysis has looked at the change in the composition of the workforce over the period of the recovery, suggesting that growth in part-time work, for example, may have impacted on levels of productivity. While such factors can help explain changes in output per worker, they are not as useful at explaining the trend in output per hour (which is the focus of this analysis²⁵ and shown in Figure 3.7).

Arguably one of the more compelling arguments for the observed trend in productivity is the flexibility of the labour market – particularly as evidenced through changes in real wages over the recovery period. It has been argued that 'greater labour market flexibility' and 'subdued' real earnings growth made it "cheaper than otherwise for employers to retain workforce which might have been shed, perhaps in anticipation of an eventual upturn"²⁶. Indeed the Institute for Fiscal Studies (IFS) states that among other factors, low real wages have enabled firms to "employ more workers than they would otherwise have done"²⁷.

While reductions in real wages will have helped to reduce the costs facing firms during the downturn and recovery, the extremely loose monetary policy seen during (and since) the recession will also have helped a greater proportion of struggling firms to survive this recession compared to previous ones. The Bank of England states that "the number of company liquidations has remained unusually low this recession given developments in output" and "...is likely to have materially lowered measured labour productivity"²⁸.

Indeed using firm level data from the Annual Business Survey and the Inter-Departmental Business Register, the Bank of England found that "a large part of the persistent weakness in productivity can be accounted for by the fact that the proportion of firms with shrinking output and flat employment doubled from 11% in 2005–07 to 22% in 2011"²⁹. Such examples of these businesses have been referred to in the literature as 'zombie firms'. Zombie firms have been described as those that are "only able to service interest on its debt but not the debt itself, or one that is able to survive because of favourable credit terms"³⁰. In reference to the 'Productivity Puzzle', research from the Adam Smith Institute finds that "productivity growth of zombie firms tends to be very low at best, and even negative for many years. Thus an economy that exhibited a high level of zombiism would be expected to show low or negative productivity

²⁴ "The Productivity Conundrum, Explanations and Preliminary Analysis", Grice, J. Office for National Statistics, (2012).

²⁵ There are a wide range of ways in which productivity can be measured including output per work, productivity by sector (e.g. manufacturing, services), and measures of total factor productivity. More information is available in the ONS Productivity Handbook, (2007).

²⁶ "The Productivity Conundrum, Interpreting the Recent Behaviour of the Economy", Grice, J., Office for National Statistics, (2012).

²⁷ Pre-Released Chapter from The IFS Green Budget: February 2013 (Institute for Fiscal Studies), Press Release at http://www.ifs.org.uk/pr/productivity_puzzle.pdf; main chapter "3. The productivity puzzles" at http://www.ifs.org.uk/budgets/gb2013/GB2013_Ch3.pdf

²⁸ "The productivity puzzle: a firm level investigation into employment behaviour and resource allocation over the crisis", Bank of England Working Paper No. 495, available at <http://www.bankofengland.co.uk/research/Documents/workingpapers/2014/wp495.pdf>; (2014), page 3.

²⁹ "The productivity puzzle: a firm level investigation into employment behaviour and resource allocation over the crisis", Bank of England Working Paper No. 495, available at <http://www.bankofengland.co.uk/research/Documents/workingpapers/2014/wp495.pdf>; (2014), page 25.

³⁰ "The Trading Dead: The zombie firms plaguing Britain's economy, and what to do about them", Papworth, P., The Adam Smith Institute, (2013), page 12.

growth. Evidence for the UK supports such a hypothesis³¹. Linked to this, the IFS argues that a “low level of firm turnover (ie, low-productivity firms exiting and high-productivity ones entering) could be particularly damaging for the economic recovery if new firms are key to introducing new ideas and technologies”³² – potentially negatively impacting on productivity.

A further argument that has been used to explain the fall in productivity has been around those effects that are more structural. For example, the Bank of England refers to “negative shocks to the availability of credit to UK companies”³³, citing that financial crises reduce long-run levels of productivity. Arguably linked to this, the IFS argues that sharp falls in business investment can explain the fall in productivity – on account of a theoretical approach that “workers will have less, and less good, capital to work with”³⁴.

With no single piece of research seemingly able to explain completely the change in productivity over recent years, it is likely that a combination of these factors is at play. Nevertheless, the focus on productivity is not likely to diminish in the near future especially as the question of the extent of spare capacity in the economy becomes more important in the setting of monetary policy.

Table 3.1: Office for Budget Responsibility and HM Treasury consensus forecasts for the UK economy

Annual % change, unless otherwise indicated

	Average of Independent Forecasters		Budget March 2014	
	2014	2015	2014	2015
GDP growth (per cent)	2.9	2.5	2.7	2.3
Claimant unemployment (mn)	1.1	1.0	1.20	1.13
Current account (£bn)	-62.2	-55.7	-	-
PSNB (2014-15, 2015-16: £bn)	88.3	73.0	95.5 ³⁵	75.2

Note: mn = million, bn = billion

Sources: HM Treasury Comparison of Independent Forecasts, May 2014.

Office for Budget Responsibility, Economic and fiscal outlook, March 2014.

As can be seen in Table 3.2 annual growth was positive in Q1 2014 in all sectors except mining & quarrying inc. oil & gas extraction, and electricity gas and water supply. Manufacturing, construction, distribution hotels and catering, and business services and finance experienced strong annual growth. It is probable that the economy will continue this robust performance into the second half of 2014.

³¹ “The Trading Dead: The zombie firms plaguing Britain’s economy, and what to do about them”, Papworth, P., The Adam Smith Institute, (2013), page 21.

³² “The IFS Green Budget: February 2013”, page 82.

³³ “The productivity puzzle: a firm level investigation into employment behaviour and resource allocation over the crisis”, Bank of England Working Paper No. 495, available at

<http://www.bankofengland.co.uk/research/Documents/workingpapers/2014/wp495.pdf>; (2014), page 6.

³⁴ Pre-Released Chapter from The IFS Green Budget: February 2013 (Institute for Fiscal Studies), Press Release at

http://www.ifs.org.uk/pr/productivity_puzzle.pdf; main chapter “3. The productivity puzzles” at

http://www.ifs.org.uk/budgets/gb2013/GB2013_Ch3.pdf

³⁵ The PSNB forecast from the OBR excludes “APF transfers”.

Table 3.2: Recent growth in broad industrial sectors of the UK economy

Annual % change

Industrial sectors	2012		2013				2014
	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Agriculture, forestry, and fishing	-3.9%	-4.3%	-7.4%	-3.5%	-2.8%	-2.5%	1.8%
Mining & quarrying inc oil & gas extraction	-5.1%	-12.9%	-7.3%	-2.9%	-2.5%	5.0%	-0.5%
Manufacturing	-1.3%	-2.8%	-2.9%	-0.9%	-0.7%	1.9%	3.5%
Electricity gas and water supply	-2.6%	5.5%	7.4%	0.3%	-3.4%	-5.0%	-10.9%
Construction	-10.3%	-8.1%	-5.1%	0.7%	5.6%	3.4%	5.4%
Distribution hotels and catering	1.6%	1.3%	2.1%	3.9%	3.3%	4.6%	5.1%
Transport, storage and communication	-1.7%	-0.7%	0.1%	1.5%	1.7%	1.8%	1.3%
Business services and finance	1.5%	1.6%	1.6%	2.1%	2.3%	2.7%	3.6%
Government and other services	2.0%	0.9%	0.7%	0.6%	-0.3%	1.4%	1.4%

Source: Office for National Statistics (as of 22 May 2014)

Table 3.3 shows that household annual spending growth was positive in the second half of 2012, throughout 2013 and into the first quarter of 2014. Investment fell heavily during the 2008/09 recession but had picked up strongly by the last quarter of 2013. Looking forward, investment is likely to remain positive.

Table 3.3: UK domestic expenditure growth

Annual % change

Expenditure	2012		2013				2014
	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Households	1.8%	1.8%	2.1%	1.9%	2.5%	2.2%	2.1%
Non-profit institutions	1.6%	-2.1%	3.5%	3.0%	2.1%	4.4%	-0.9%
General Government	1.5%	1.3%	-1.7%	1.3%	1.7%	1.6%	2.2%
Gross fixed capital formation	-1.1%	-5.0%	-8.3%	-3.2%	1.4%	8.8%	8.5%

Source: Office for National Statistics (as of 22 May 2014)

Inflation has fallen below the Bank of England's central symmetrical target of 2 per cent since the Autumn 2014 LEO, with annual Consumer Price Index (CPI) inflation standing at 1.8 per cent in April, up slightly from 1.6 per cent in March³⁶. Meanwhile annual Retail Price Index (RPI) inflation stood at 2.5 per cent in April, unchanged from March. In the three months to March weekly wages (including bonuses) increased by 1.7 per cent³⁷, the first time since 2010 that this figure was higher than CPI inflation which stood at 1.6 per cent in March 2014³⁸. The Bank of England also modified its policy of forward guidance in relation to its monetary policy in February³⁹ (see Box 3.2) as UK unemployment was reaching (and in the three months to February 2014 had passed) the level at which further guidance was required as set out in its previous policy of forward guidance issued in August 2013. In its May 2014 Inflation Report the Bank observed that since the issuing of this further guidance "the margin of spare capacity has

³⁶ Office for National Statistics, 'Statistical Bulletin: Consumer Price Inflation, April 2014', 20 May 2014.

³⁷ Office for National Statistics, 'Statistical Bulletin: Labour Market Statistics, May 2014', 14 May 2014.

³⁸ BBC, 'UK unemployment rate falls to five-year low', 14 May 2014.

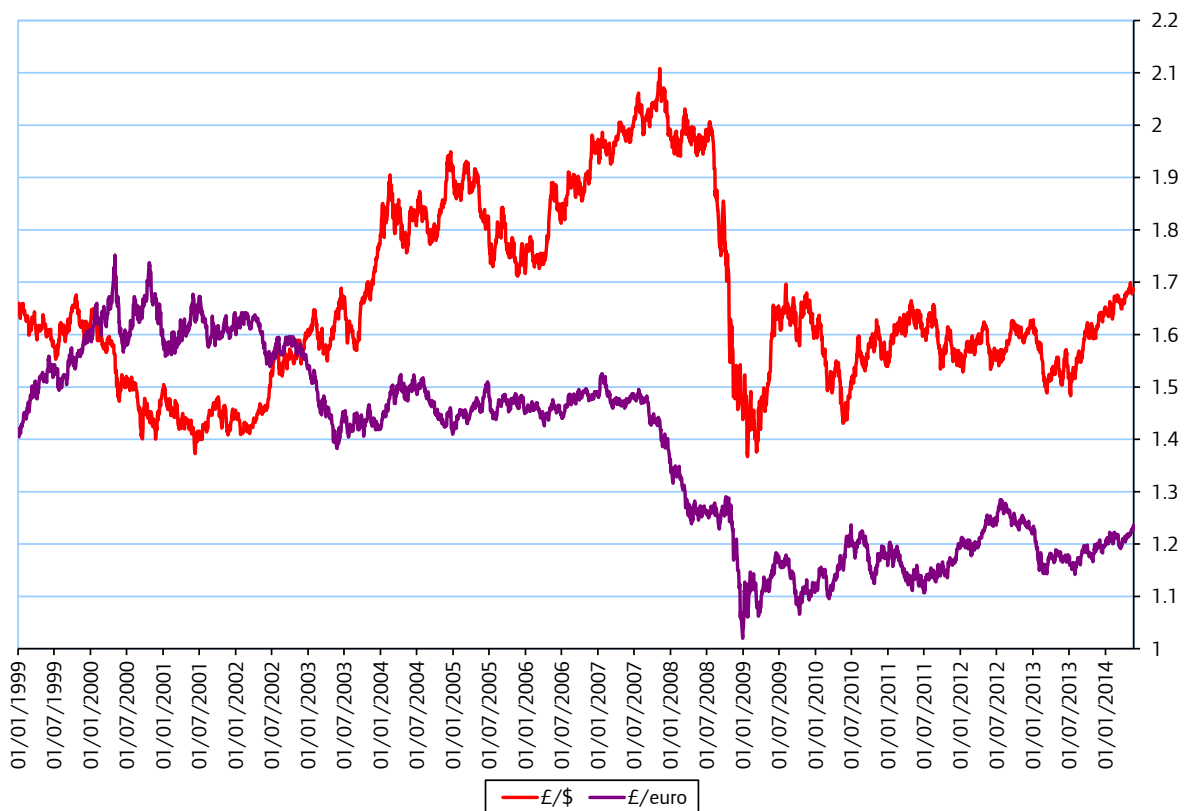
³⁹ Bank of England, 'Inflation Report, February 2014', 12 February 2014.

probably narrowed a little since then, the MPC continues to judge that there remains scope to make greater inroads into slack before raising Bank Rate⁴⁰.

Sterling has appreciated slightly since the middle of 2013, however it continues to remain relatively weak against the dollar compared to the heights it reached in 2007 (see Figure 3.8). With respect to the euro, sterling has been more stable and still remains at a relatively competitive level, especially compared to its pre-recession highs, which should provide some ongoing support to exporters, tourism and import substitution. However, evidence of an export-led recovery is largely absent⁴¹.

Figure 3.8: £ to \$ and £ to euro exchange rates

Last data point is 22/5/14



Source: Bank of England

Sterling's depreciation from the heights seen during 1998 to 2007 is further illustrated by its effective exchange rate index (EERI)⁴² (see Figure 3.9). There was a fall of approximately 30 per cent from its peak in early 2007 up to January 2009. Since then sterling has fluctuated and has risen since the middle of 2013 as evidence of the UK economic recovery mounted, however it remains well below its pre-recession levels. This relative weakness should provide some support to the UK export sector and therefore the UK economy as a whole.

⁴⁰ Bank of England, 'Inflation Report, May 2014', 14 May 2014.

⁴¹ BBC, 'UK current account deficit near record high at £22.4bn', 28 March 2014.

⁴² The Sterling Effective Exchange Rate Index measures the overall change in the trade-weighted exchange value of sterling. It is designed to measure changes in the price competitiveness of traded goods and services and so the weights reflect trade flows in goods and services.

Figure 3.9: Sterling EERI rate

Last data point is 22/5/14



Source: Bank of England

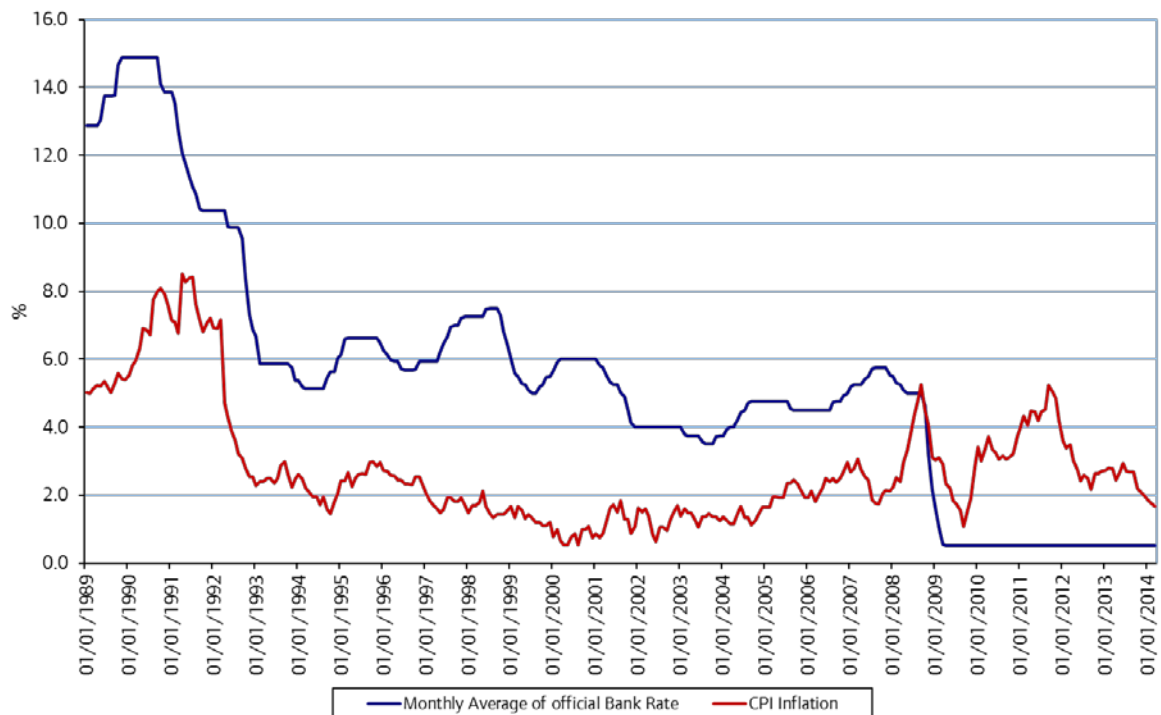
Box 3.2: Five years of extraordinary monetary policy

Interest rates in the UK have remained at the historically low level of 0.5 per cent since March 2009 (see Figure 3.10) when quantitative easing (QE), now at £375 billion, was also first introduced⁴³. Following speculation on the timing of the first base rate increase since the 2008/09 recession, in August 2013 the Bank of England announced 'Forward Guidance' that noted that the Bank's base rate would not rise until at least when ILO unemployment had fallen to 7.0 per cent⁴⁴. However, given the rapid subsequent fall in the ILO unemployment rate, by the end of 2013 it seemed likely that the guidance threshold would be reached significantly earlier than anticipated when 'Forward Guidance' was first introduced. In response to this, while holding the view that significant slack in the economy remained, in February the Monetary Policy Committee (MPC) outlined 'further guidance' for monetary policy.

⁴³ Initially £75 billion worth of asset purchases with central bank reserve were announced increasing in increments to £375 billion in July 2012 (see 'News Release – Bank of England Reduces Bank Rate by 0.5 Percentage Points to 0.5% and Announces £75 Billion Asset Purchase Programme,' March 2009).

⁴⁴ The Bank of England, Inflation Report, August 2013.

Figure 3.10: UK base rate and CPI inflation



Source: Bank of England and ONS

This 'further guidance' outlined in the February Inflation Report⁴⁵ states that to meet the official inflation target of two per cent, while supporting the government's economic policy, rises in the base rate are expected to be gradual and the rate is anticipated to remain substantially below the pre-crisis levels. Similarly, QE will remain in place at least until the first rise in the base rate. Moreover, the new guidance does not specify a single threshold or a target; instead the MPC will continue to assess the economy's spare capacity by observing a broad set of measures on the labour market and the business sector. However, as stated in February's Inflation Report "the timing and pace of tightening" will depend on economic circumstances.

According to the Bank of England and Martin Weale, a member of the MPC, given the inflation target and unused capacity in the economy, the Bank's interest lies with "what the degree of slack in the economy is and how far we can reduce any slack without taking risks with inflation"⁴⁶. The February Inflation Report noted that the MPC's view on spare capacity is that "although such estimates are necessarily uncertain, the Committee judges that spare capacity remains, equivalent to around 1.0 per cent to 1.5 per cent of GDP and concentrated in the labour market".

Recent inflation data would seem to support this. In April, the CPI annual inflation rate remained below the Bank's official target for the fifth month in a row. This level of inflation is unlikely to put pressure on the Bank to raise interest rates in the very near-term. Moreover, the MPCs expectation in recent rate-setting meetings was that it is unlikely that CPI inflation will

⁴⁵ The Bank of England, Inflation Report, February 2014.

⁴⁶ Speech by Martin Weale, 'Slack and the labour market', 20 March 2014.

exceed by more than one per cent the central symmetrical target of two per cent in the next 18 to 24 months⁴⁷. Further, the Bank also upgraded its expectation for GDP growth in the short-term saying that “the recent strength of both the business surveys and activity indicators was consistent with quarterly growth of close to 1% in the first half of the year”⁴⁸.

At the time of the February Inflation Report, the MPC anticipated productivity growth to accelerate in 2014 and to be one of the factors likely to drive near-term reductions in spare capacity, while falls in the unemployment rate were anticipated to slow. However, difficulty in accurately quantifying spare capacity implies that a degree of uncertainty around the likely path of interest rates remains. When rates do rise, as the February 2014 Inflation Report stated, the base rate is likely to rise only gradually and will remain in “the range of 2 per cent – 3 per cent for some while beyond the forecast horizon”⁴⁹, significantly below its pre-recession average level of 5 per cent. In the context of recent data, the market view is that the first rate rise is likely to occur in Q2 2015 as implied by market interest rates and this expectation is also concurred by organisations such as the OECD^{50,51}.

The fact that even in the light of a more sustained economic recovery, monetary policy is set to remain extremely accommodative has led to concerns around the potential risks that may follow when this policy is reversed. Even when the global recovery was more uncertain in 2013, the International Monetary Fund (IMF) suggested that easy credit can impose a potential risk and threaten financial stability⁵². Although confirmed causal relationships between ultra-loose monetary policy and economic outcomes are hard to pin point, a working paper by the Federal Reserve from 2012 outlines some of the undesired consequences from either extended periods of very low interest rates, as well as QE or both⁵³.

The Federal Reserve's research suggested that although the desirable benefits of loose monetary policy may outweigh the drawbacks in the short-term, easy credit conditions over longer periods of time can result in misallocation of resources, more unequal distribution of income and wealth, and increased risk taking resulting in financial instability. One side effect of low interest rates, including QE in recent years, is often higher asset prices. Greater access to mortgage finance following the easy monetary policy will boost the housing market, while in a search for a higher rate of return, investors turn to riskier assets driving up equity prices. The recovery in equity prices, especially in the US has been remarkable, and some market commentators view this situation as a sign of a bubble building up⁵⁴. In the UK, the OECD has raised concerns around the strength of house price growth, given that the growth in the supply of new houses has picked up only moderately in comparison⁵⁵.

Another symptom of easy monetary policy has been the misallocation of resources, which has emerged in the UK in the form of the so-called ‘zombie companies’. During the recession, low

⁴⁷ “While inflation was likely to pick up somewhat in the coming months, all members agreed that the probability that it would be above 2.5% in 18–24 months time remained less than 50%”. Minutes of the Monetary Policy Committee Meeting, 9 April 2014.

⁴⁸ The Bank of England, Minutes of the Monetary Policy Committee Meeting 9 April 2014, 23 April 2014.

⁴⁹ The Bank of England, February 2014 Inflation report.

⁵⁰ The Bank of England, February 2014 Inflation report, Chart 1.1.

⁵¹ OECD Economic Outlook, Volume 2014/1, May 2014.

⁵² The International Monetary Fund, ‘Global Financial Stability Report: Old Risks, New Challenges’, April 2013.

⁵³ Ultra Easy Monetary Policy and the Law of Unintended Consequences, Federal Reserve Bank of Dallas, August 2012.

⁵⁴ The Economist, ‘Not fully inflated’, December 2013.

⁵⁵ OECD Economic Outlook, Volume 2014/1, May 2014.

interest rates have enabled many insolvent and unprofitable firms to continue to operate, while in the early 1990s recession, the real interest rate remained significantly above the rate seen in recent years. In consequence, a rebalancing of resources towards more productive uses has not necessarily happened to the same extent as in previous recessions⁵⁶. Between 2009 and 2011, the number of company liquidations averaged 17,300, compared to 22,300 in the period from 1991 to 1993^{57,58}.

In a recent speech on financial stability, the Governor of the Bank of England also reflected on the risks associated with the current easy monetary stance stating that “in pursuing price stability, monetary policy can contribute to the gradual build-up of financial vulnerabilities through its effect on the degree of risk-taking in the economy. For example, the period of low and predictable interest rates before the financial crisis helped drive a ‘search for yield’ and leverage cycle, even with inflation subdued. It doesn’t take a genius to see that similar risks exist today”⁵⁹.

There are also potential risks associated with exiting this accommodative stance in monetary policy. Since the start of the financial crisis, the Federal Reserve, the Bank of England and more recently the Bank of Japan have grown the size of their balance sheets with the intention to stimulate the economy. However, reducing QE can be tricky. For instance, scaling back QE in the US is feared to have created financial instability in some emerging economies⁶⁰. Further, in its latest Global Financial Stability report, the IMF warns about the potential dangers of the tapering of the unconventional monetary policy in the US and the importance of getting “the timing, execution and communication” correct. Nevertheless, at the end of April the Federal Reserve reduced its bond purchases to \$45 billion a month, a widely expected move and the fourth reduction this year⁶¹.

3.3 The world economy

In April the IMF downgraded their forecast for the world economy this year and next with it now forecast to expand by 3.6 per cent in 2014 and by 3.9 per cent in 2015⁶². Their forecasts though for developed economies were generally the same as previous produced, with the US economy forecast to grow by 2.8 per cent in 2014 and then by 3.0 per cent in 2015⁶³. The Eurozone is forecast to grow by 1.2 per cent in 2014 and by 1.5 per cent in 2015⁶⁴, both upgrades on the previous forecast. Growth in emerging and developing economies has been downgraded and is expected to be 4.9 per cent in 2014 and 5.3 per cent in 2015⁶⁵.

In their latest World Economic Outlook the IMF note that “global activity strengthened during the second half of 2013 and is expected to improve further in 2014–15. The impulse has come mainly from advanced economies, although their recoveries remain uneven. With supportive monetary conditions and a smaller drag from fiscal consolidation, annual growth is projected to

⁵⁶ This misallocation of resources ties in with ‘the productivity puzzle’ and may be one of the factors explaining persistently low productivity observed in the UK since the recession (see Box 3.1: The UK productivity puzzle for more information).

⁵⁷ The Financial Times, ‘Ranks of UK zombie companies shrink’, January 2014.

⁵⁸ The Insolvency Service, ‘Headline statistics for England and Wales, 1984 to date’.

⁵⁹ A speech by Mark Carney, ‘One Mission. One Bank. Promoting the good of the people of the United Kingdom’, March 2014.

⁶⁰ UK Reuters, ‘Emerging economies to suffer more from U.S. taper - World Bank’s Kim’, November 2013.

⁶¹ Wall Street Journal, ‘Fed Cuts Bond Buys, Sees Growth Pickup’, 30 April.

⁶² The IMF, ‘World Economic Outlook: Recovery Strengthens, Remains Uneven’, April 2014.

⁶³ Ibid.

⁶⁴ Ibid.

⁶⁵ Ibid.

rise above trend in the United States and to be close to trend in the core euro area economies. In the stressed euro area economies, however, growth is projected to remain weak and fragile as high debt and financial fragmentation hold back domestic demand⁶⁶. However, they observe that "growth in emerging market economies is projected to pick up only modestly. These economies are adjusting to a more difficult external financial environment in which international investors are more sensitive to policy weakness and vulnerabilities given prospects for better growth and monetary policy normalization in some advanced economies. As a result, financial conditions in emerging market economies have tightened further"⁶⁷. With respect to risks to the global economy they note that "downside risks continue to dominate the global growth outlook, notwithstanding some upside risks in the United States, the United Kingdom, and Germany. In advanced economies, major concerns include downside risks from low inflation and the possibility of protracted low growth, especially in the euro area and Japan. While output gaps generally remain large, the monetary policy stance should stay accommodative, given continued fiscal consolidation. In emerging market economies, vulnerabilities appear mostly localized. Nevertheless, a still-greater general slowdown in these economies remains a risk, because capital inflows could slow or reverse. Emerging market and developing economies must therefore be ready to weather market turmoil and reduce external vulnerabilities"⁶⁸.

In its Global Financial Stability Report the IMF observed that "the global financial system is undergoing a number of challenging transitions on the path to greater stability. As the economic recovery in the United States gains footing, U.S. monetary policy has begun to normalize"⁶⁹; while "the euro area is strengthening bank capital positions as it moves from fragmentation to a more robust framework for integration"⁷⁰. It further observed that the global "transitions are far from complete, and stability conditions are far from normal. Since October, bouts of financial turbulence have highlighted the substantial adjustment that lies ahead. In advanced economies, financial markets continue to be supported by extraordinary monetary accommodation and easy liquidity conditions. They will need to transition away from these supports if they are to create an environment of self-sustaining growth, marked by increased corporate investment and growing employment"⁷¹. With it also noting that "for advanced and emerging market economies alike, a successful shift from 'liquidity-driven' to 'growth-driven' markets requires a number of elements, including a normalization of U.S. monetary policy that avoids financial stability risks; financial rebalancing in emerging market economies amid tighter external financial conditions; further progress in the euro area's transition from fragmentation to robust integration; and the successful implementation of 'Abenomics' (the new macro policy in Japan) to deliver sustained growth and stable inflation in Japan"⁷².

The **US** economy continues to grow, although the latest figures showed output increasing by an annualized rate of just 0.1 per cent in Q1 2014⁷³, after increasing by an annualised rate of 2.6 per cent in Q4 2013. This was the slowest rate of growth for a year and a half; the slow rate of growth was blamed, in part at least, on bad weather in the first quarter of 2014⁷⁴. US consumer

⁶⁶ Ibid.

⁶⁷ Ibid.

⁶⁸ Ibid.

⁶⁹ The IMF, 'Global Financial Stability Report: Moving from Liquidity – to Growth-Driven Markets', April 2014.

⁷⁰ Ibid.

⁷¹ Ibid.

⁷² Ibid.

⁷³ Bureau of Economic Analysis, 'National Income and Product Accounts: Gross Domestic Product: First Quarter 2014 (advance estimate)', 30 April 2014.

⁷⁴ BBC, 'US economic growth falls sharply to 0.1% in first quarter', 30 April 2014.

confidence remained broadly steady in April⁷⁵, and the US economy continues to create jobs with it adding 288,000 jobs in April, the strongest rate of job creation since January 2012, leaving unemployment at 6.3 per cent⁷⁶. The stock market has continued to be strong which suggests some confidence in the US economy, although some concerns have been expressed concerning its current high level⁷⁷. Interest rates remain at a target rate of between 0 to 0.25 per cent and tapering of the Federal Reserve's bond buying scheme began in January⁷⁸. Thus despite the poor start to 2014 the evidence points to a continued modest, if somewhat mediocre⁷⁹, US recovery as shown by the April 2014 Beige Book from the Federal Reserve stating that "reports from the twelve Federal Reserve Districts suggest economic activity increased in most regions of the country since the previous report", although this "expansion was characterized as modest or moderate" by a number of districts⁸⁰.

The **Eurozone** economy continues its slow recovery with output in the Eurozone increasing by 0.2 per cent in Q1 2014⁸¹. It has thus emerged from recession although economic activity over the course of 2013 likely declined by around 0.5 per cent⁸². Most member states saw positive growth in GDP in the first quarter of 2014, however the economies of Cyprus, Estonia, Italy, the Netherlands and Portugal all contracted, while France saw zero growth. Economic forecasts for the Eurozone have improved with the European Commission forecasting growth of 1.2 per cent in 2014 and 1.7 per cent in 2015⁸³. Most economic indicators show a slow improvement in the situation in the Eurozone. The sovereign debt crisis in the Eurozone has continued to abate although structural problems in the zone still need to be addressed⁸⁴. The IMF notes that "policies implemented at both the national and European levels are supporting the transition to a more robust framework for integration, but important challenges remain. The restructuring of the debt-burdened euro area corporate sector has been stalled by the unfinished repair of bank balance sheets. Moreover, credit conditions remain difficult in stressed euro area economies. Although market sentiment regarding stressed euro area banks and sovereigns has improved markedly, it may be running ahead of the necessary balance-sheet repair"⁸⁵. There therefore remains a risk of the reoccurrence of the Eurozone crisis, which would act as a drag on global economic growth. Inflation is currently very low in the Eurozone and there are concerns that it may experience a deflationary period⁸⁶, with some commentators calling for additional nonconventional monetary policies to avoid this scenario. The risk from deflation is particularly worrying for the Eurozone given the impact it has on the 'real value' of sovereign debt (which are at high levels in some countries). Eurozone unemployment remains very high, but has fallen from its peak levels seen in 2013, with it standing at 11.8 per cent in March 2014. However it remains very elevated in some countries with it standing at 26.3 per cent in Spain⁸⁷ (and 26.5 per cent in Greece in January). Unemployment in the under 25 age group also remains a major

⁷⁵ The Conference Board, 'Consumer Confidence Survey: The Conference Board Consumer Confidence Index® Falls Slightly in April', 29 April 2014.

⁷⁶ BBC, 'US economy records bumper jobs growth in April', 2 May 2014.

⁷⁷ The Economist, 'Markets: Uh-oh', 28 March 2014.

⁷⁸ BBC, 'Fed tapers, now the hard part begins', 18 December 2013.

⁷⁹ The Economist, 'America's economy: You can have any recovery you like, so long as it's mediocre', 4 April 2014.

⁸⁰ The Federal Reserve Board, 'The Beige Book', 9 April 2014.

⁸¹ Eurostat, 'News release: Flash estimate for the first quarter of 2014', 15 May 2014.

⁸² The IMF, 'World Economic Outlook: Recovery Strengthens, Remains Uneven', April 2014.

⁸³ European Commission, 'European Economic Forecast: Spring 2014', May 2014.

⁸⁴ The Economist, 'The battle for euro-zone reforms: Angela all alone', 20 December 2013.

⁸⁵ The IMF, 'Global Financial Stability Report: Moving from Liquidity – to Growth-Driven Markets', April 2014.

⁸⁶ The Wall Street Journal, 'OECD Warns Euro Area of Higher Deflation Risks: Think Tank Cautions on Weak banks, Calls on ECB to Supervise Strictly', 3 April 2014.

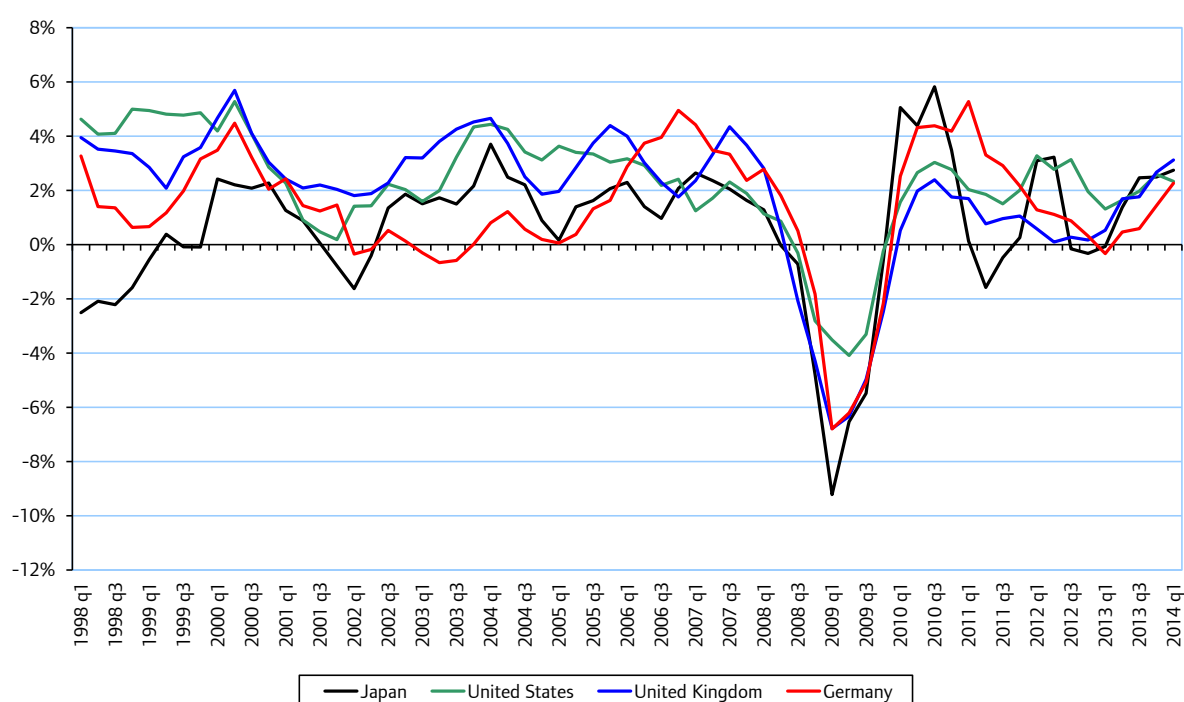
⁸⁷ Eurostat, 'Newsrelease euroindicators March 2014: Euro area unemployment rate at 11.8%', 2 May 2014.

problem with it standing at 24.0 per cent in the Eurozone and 55.4 per cent in Spain in March (and 58.8 per cent in Greece in January).

Japan's economy grew quickly in the first quarter of 2014 with it growing by 1.5 per cent⁸⁸, partly as a result of an anticipated rise in sales tax. Results from the Bank of Japan's Tankan survey of business sentiment showed that manufacturing sentiment, although improving, was barely higher in the three months ending in March⁸⁹. However, there is some evidence that the Japanese rate of inflation in April may hit its 2 per cent target, in part due to the rise in the sales tax⁹⁰. In April the IMF forecast that Japan's economy would grow by 1.4 per cent in 2014 and by 1.0 per cent in 2015⁹¹.

Figure 3.11: GDP growth in selected industrialised countries

Real GDP, annual % change, last data point is Q1 2014



Source: OECD

3.4 Emerging market economies

China's economy slowed in the first quarter of 2014 when it grew at an annualised rate of 7.4 per cent, down from 7.7 per cent in the final quarter of 2013⁹². There is some concern that Chinese economic growth may slow in 2014⁹³. Chinese inflation remains relatively low, standing at 1.8 per cent in April, suggesting a weakness in demand in the economy but providing scope for policy changes to stimulate growth if this is required⁹⁴. In April the IMF forecast that the

⁸⁸ BBC, 'Japan posts strong growth ahead of sales tax rise', 15 May 2014.

⁸⁹ Reuters, 'Tax hike hurts Japan business mood more than in 1997: BOJ tankan', 1 April 2014.

⁹⁰ BBC, 'Japan retail sales surge on tax hike', 28 April 2014.

⁹¹ The IMF, 'World Economic Outlook: Recovery Strengthens, Remains Uneven', April 2014.

⁹² BBC, 'China's economy grows 7.4% in 2014 Q1, better than forecast', 16 April 2014.

⁹³ BBC, 'China manufacturing output remains weak in March', 1 April 2014.

⁹⁴ The Wall Street Journal, 'Economists react: China's Rock Bottom Inflation', 9 May 2014.

Chinese economy will grow by 7.5 per cent in 2014 and 7.3 per cent in 2015⁹⁵, while the Asian Development Bank (ADB) forecasts Chinese growth of 7.5 per cent in 2014 and 7.4 per cent in 2015⁹⁶. **India's** economy grew by 4.7 per cent in the quarter to December 2013, a rate which was below consensus expectations⁹⁷. Meanwhile inflation remains relatively high, with consumer price index inflation standing at 8.59 per cent in April 2014⁹⁸ and above the Reserve Bank of India's target set for January 2015 of inflation of 8 per cent⁹⁹. This may limit the central bank's ability to stimulate growth. The IMF forecasts Indian growth will be 5.4 per cent in 2014 and 6.4 per cent in 2015¹⁰⁰, while the ADB forecasts growth of 5.5 per cent in 2014 and 6.0 per cent in 2015¹⁰¹. **Russia's** economic growth slowed in 2013 with it growing by just 1.3 per cent over the course of the year due in part to "frail domestic demand" which dragged it close to stagnation¹⁰². Events in Ukraine may make this precarious economic situation worse in the beginning of 2014. However, the IMF forecast in April that the Russian economy will grow by 1.3 per cent in 2014 and by 2.3 per cent in 2015¹⁰³.

3.5 Risks to the world economy

While shocks to global trade either due to an escalation of the troubles in Ukraine or turmoil in the Middle East, for example, would act as a dampener on the global recovery, it is probably fair to say that downside risks to the world economic outlook, although still elevated, have moderated somewhat since the beginning of 2013 and into 2014. These risks are thus more subdued than those highlighted in many of the recently published LEOs. Still as has been the case since the start of the Eurozone crisis, the foremost concern in the world economy continues to be the sovereign debt problems in 'peripheral' Eurozone nations, where further policy initiatives to ease financial stress need to be implemented¹⁰⁴. The potential need for a restructuring of sovereign debt, or a disorderly default on sovereign debt, by countries within the Eurozone and the damage this would do to the global financial system and to business confidence is still a significant risk to the world economy. This is particularly the case given that while some measure of bank restructuring has taken place, the global financial system remains vulnerable to shocks.

Since the publication of the last LEO in November 2013 the risk of low or even negative inflation in the Eurozone and some other countries has become more evident. If low inflation continues, this could de-anchor inflation expectations. Deflation increases the burden of debt and also leads to rising real interest rates. Either situation could reignite worries about the Eurozone and would likely dampen economic growth in the Eurozone.

Emerging market economies have also continued to slow¹⁰⁵, with a number experiencing disruption due to the US taper. A key risk would be if a slowdown in a key emerging market economy such as China spread to other countries. However, confidence in the advanced economies continues to improve which could see a faster than expected upturn in business sentiment and investment especially as credit to businesses, though tight, continues to ease.

⁹⁵ The IMF, 'World Economic Outlook: Recovery Strengthens, Remains Uneven', April 2014.

⁹⁶ Asian Development Bank, 'Asian Development Outlook 2014: Fiscal Policy for Inclusive Growth', April 2014.

⁹⁷ The Financial Times, 'India's economy expands 4.7 per cent in final quarter of 2013', 28 February 2014.

⁹⁸ The Economic Times, 'RBI not in a position to lower interest rates unless inflation eases', 22 May 2014.

⁹⁹ The Financial Times, 'India central bank considers inflation targeting', 22 January 2014.

¹⁰⁰ The IMF, 'World Economic Outlook: Recovery Strengthens, Remains Uneven', April 2014.

¹⁰¹ Asian Development Bank, 'Asian Development Outlook 2014: Fiscal Policy for Inclusive Growth', April 2014.

¹⁰² The World Bank, 'Russian Economic Report 31', 26 March 2014.

¹⁰³ The IMF, 'World Economic Outlook: Recovery Strengthens, Remains Uneven', April 2014.

¹⁰⁴ Ibid.

¹⁰⁵ Reuters, 'Emerging markets output growth falls fourth straight month: survey', 3 April 2014.

Further, even after the start of the US taper, monetary policies of most central banks in the developed world remains very accommodating. Even if more monetary tightening does occur monetary policy is likely to take quite some time to return to a neutral stance and will therefore likely provide support to the global economy for some time yet.

3.6 Conclusion

London's economy is expected to grow relatively strongly over 2014-16 with above trend growth in 2014-15 and around trend growth in 2016. Employment is also expected to rise at a reasonable but moderating rate, as the current fast pace of employment growth eases. Downside risks to the London economy have continued to ease since the November 2013 LEO but remain elevated due to incomplete reforms in the Eurozone, concerns about potential deflation in some countries, a continued slowing in several emerging market economies and continuing political uncertainties in a number of countries. The UK public finance consolidation, which is likely to continue after the 2015 general election is also likely to act as a drag on growth. Still UK inflation is below the Bank of England's central symmetrical target and there are indications that real wage growth may pick up which will ease the pressure on household finances. In the longer term a sustained and balanced recovery will need to be based more on private sector investment and net exports. The process of economic recovery continues although it may still be sometime before this is felt by London households. Still the prospects for London's economy over the next couple of years, which picked up in 2013, have continued to brighten into 2014.

4. Review of independent forecasts

What the forecasts provide

In Chapter 5, GLA Economics' forecast of four economic indicators is provided: workforce employment, real output, private consumption (household expenditure) and household income in London. In this chapter the consensus view as of 22 May 2014 on the first three of these indicators is summarised¹⁰⁶, drawing on forecasts from outside (independent) organisations¹⁰⁷. Both annual growth rates and 'standardised' absolute levels are reported. All the data is in real terms (constant prices). The source for all historic data in the following tables and charts is EE.

Additionally, both the consensus¹⁰⁸ and GLA Economics' own forecasts provide predictions of employment and output growth in six broad sectors:

- manufacturing
- construction
- transportation and storage
- distribution¹⁰⁹, accommodation and food service activities
- finance¹¹⁰ and business services¹¹¹
- other (public & private) services¹¹².

It should be noted, that since our Spring 2012 forecast GLA Economics has been using the new Standard Industrial Classification (SIC 2007), which is explained in more detail in Appendix A.

¹⁰⁶ The consensus forecast for GVA and employment is based on the latest available forecast from CE, CEBR, EE and OE, while the consensus forecast for household expenditure is based on the latest available forecast from CE, EE and OE only.

¹⁰⁷ Most forecasters do not yet provide forecasts of household income.

¹⁰⁸ The consensus GVA forecast for the six broad sectors is based on the latest available forecast from CE, CEBR, EE and OE for GVA but the consensus employment forecast for the six broad sectors is based on the latest available forecast from CE, EE and OE only.

¹⁰⁹ Distribution is made from the summation of Wholesale and Retail (see Appendix A).

¹¹⁰ This is defined as Financial and insurance activities in Appendix A.

¹¹¹ Business services is made from the summation of Information and Communication, Professional, scientific and technical services and real estate, and Administrative and support service activities (see Appendix A).

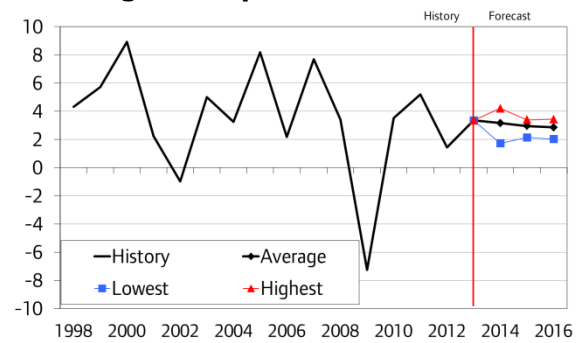
¹¹² This is made from the summation of Public admin and defence, Education, Health, Arts, entertainment and recreation and Other services (see Appendix A).

Output

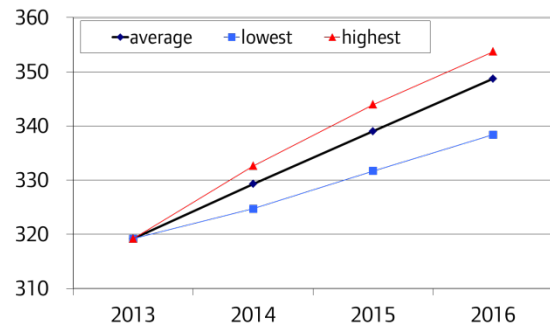
(London GVA, constant prices (base year 2010), £ billion)

The consensus (mean average view) is for real output growth to be 3.2 per cent in 2014, easing to 3.0 per cent in 2015 and 2.9 per cent in 2016.

Annual growth (per cent)



Level (constant year 2010, £ billion)



Annual growth (per cent)				Level (constant year 2010, £ billion)			
	2014	2015	2016		2014	2015	2016
Average	3.2	3.0	2.9	Average	329	339	349
Lowest	1.7	2.2	2.0	Lowest	325	332	338
Highest	4.2	3.4	3.4	Highest	333	344	354

History: Annual growth (per cent)

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
4.3	5.7	8.9	2.2	-1.0	5.0	3.2	8.2	2.2	7.7	3.4	-7.3	3.5	5.2	1.4	3.4

History: Level (constant year 2010, £ billion)

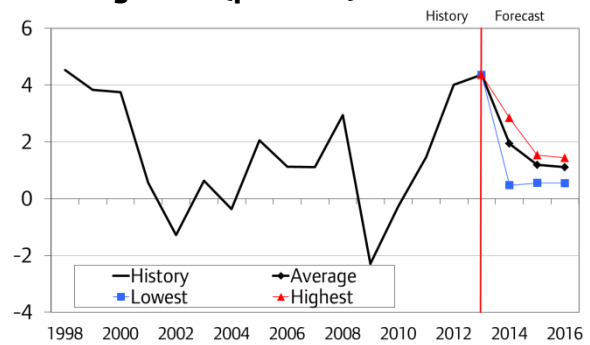
1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
185.6	193.6	204.7	223.0	228.0	225.8	237.1	244.8	264.9	270.7	291.5	301.4	279.6	289.4	304.4	308.8	319.2

Employment

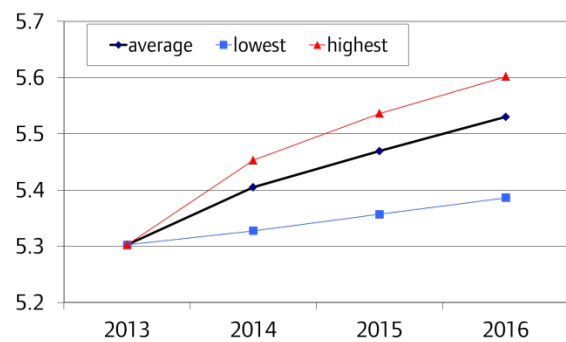
(London workforce jobs)

The consensus view is for the number of workplace jobs to increase by 1.9 per cent in 2014, by 1.2 per cent in 2015 and 1.1 per cent in 2016.

Annual growth (per cent)



Level (millions)



Annual growth (per cent)				Level (millions)			
	2014	2015	2016		2014	2015	2016
Average	1.9	1.2	1.1	Average	5.41	5.47	5.53
Lowest	0.5	0.6	0.5	Lowest	5.33	5.36	5.39
Highest	2.8	1.5	1.4	Highest	5.45	5.54	5.60

History: Annual growth (per cent)

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
4.5	3.8	3.8	0.6	-1.3	0.6	-0.4	2.1	1.1	1.1	2.9	-2.3	-0.3	1.5	4.0	4.4

History: Level (millions)

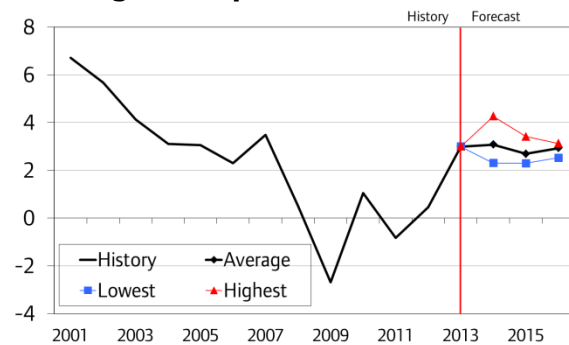
1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
4.10	4.29	4.45	4.62	4.65	4.59	4.62	4.60	4.69	4.75	4.80	4.94	4.83	4.81	4.88	5.08	5.30

Household expenditure

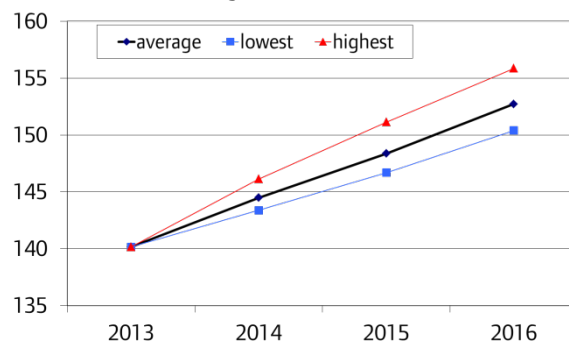
(London household spending, constant year 2010, £ billion)

The consensus view is for positive household expenditure growth of 3.1 per cent in 2014, 2.7 per cent in 2015 and 2.9 per cent in 2016.

Annual growth (per cent)



Level (constant year 2010 £ billion)



Annual growth (per cent)				Level (constant year 2010, £ billion)			
	2014	2015	2016		2014	2015	2016
Average	3.1	2.7	2.9	Average	144	148	153
Lowest	2.3	2.3	2.5	Lowest	143	147	150
Highest	4.3	3.4	3.1	Highest	146	151	156

History: Annual growth (per cent)

2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
6.7	5.7	4.1	3.1	3.1	2.3	3.5	0.5	-2.7	1.0	-0.8	0.5	3.0

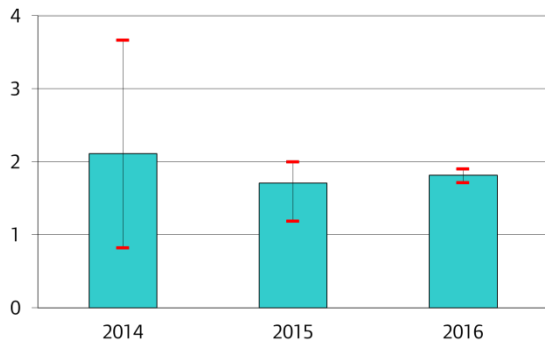
History: Level (constant year 2010, £ billion)

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
104.6	111.6	117.9	122.8	126.6	130.5	133.5	138.2	138.9	135.2	136.6	135.4	136.1	140.1

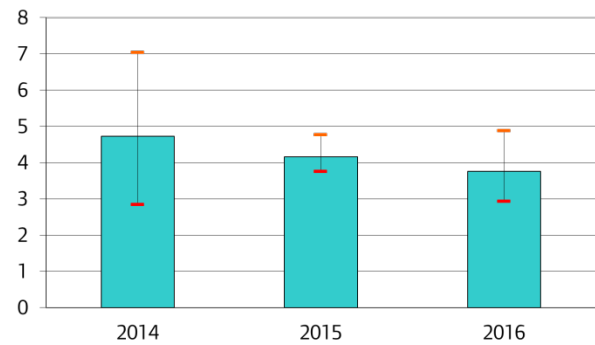
Output growth by sector (per cent annual change)

As the recovery continues it is expected that there will be positive output growth in all sectors.

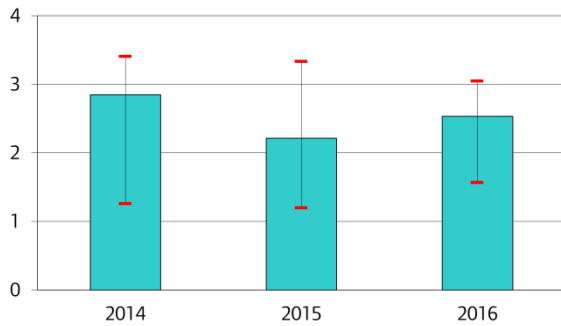
Manufacturing



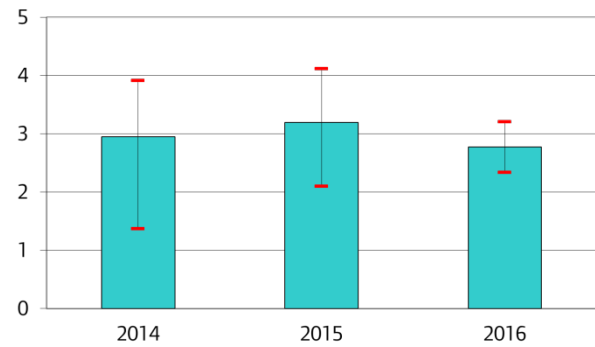
Construction



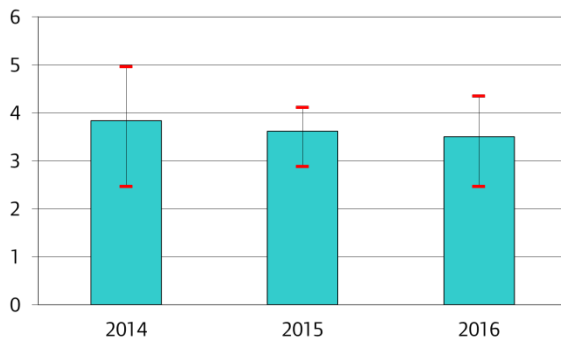
Distribution, accommodation and food service activities



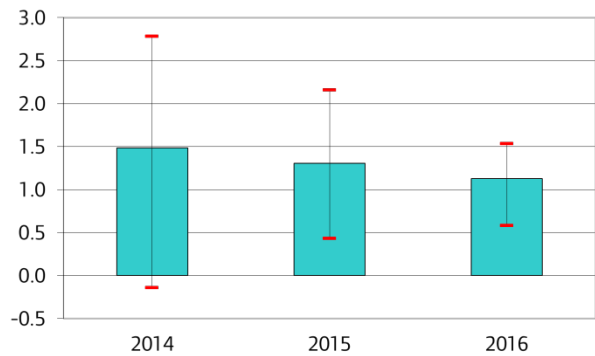
Transportation and storage



Finance and business



Other (public & private) services

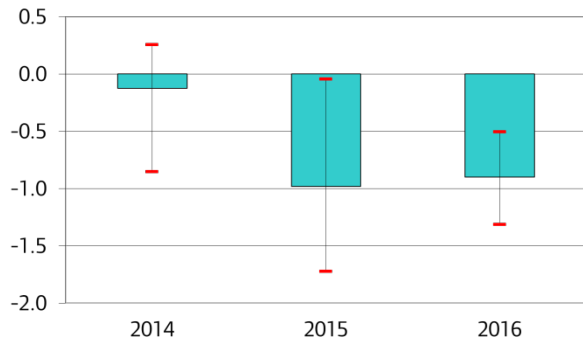


		2014	2015	2016			2014	2015	2016
Manufacturing	<i>Average</i>	2.1	1.7	1.8	Construction	<i>Average</i>	4.7	4.2	3.8
	<i>Lowest</i>	0.8	1.2	1.7		<i>Lowest</i>	2.8	3.8	2.9
	<i>Highest</i>	3.7	2.0	1.9		<i>Highest</i>	7.0	4.8	4.9
Distribution, accommodation and food service activities	<i>Average</i>	2.8	2.2	2.5	Transportation and storage	<i>Average</i>	2.9	3.2	2.8
	<i>Lowest</i>	1.3	1.2	1.6		<i>Lowest</i>	1.4	2.1	2.3
	<i>Highest</i>	3.4	3.3	3.0		<i>Highest</i>	3.9	4.1	3.2
Finance and business	<i>Average</i>	3.8	3.6	3.5	Other (public & private) services	<i>Average</i>	1.5	1.3	1.1
	<i>Lowest</i>	2.5	2.9	2.5		<i>Lowest</i>	-0.1	0.4	0.6
	<i>Highest</i>	5.0	4.1	4.3		<i>Highest</i>	2.8	2.2	1.5

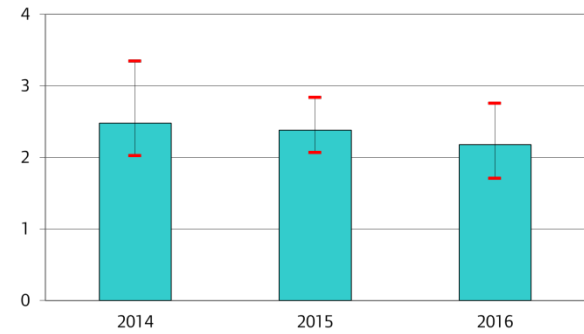
Employment growth by sector (per cent annual change)

Forecast employment growth is positive for all sectors, excluding the manufacturing sector, where employment is expected to fall for all years in the forecast period and other (public & private) services which is expected to decline in 2015 and 2016.

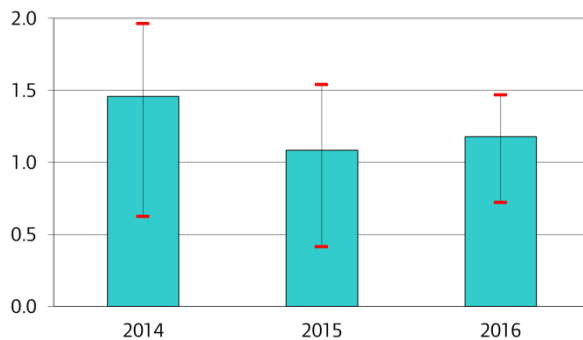
Manufacturing



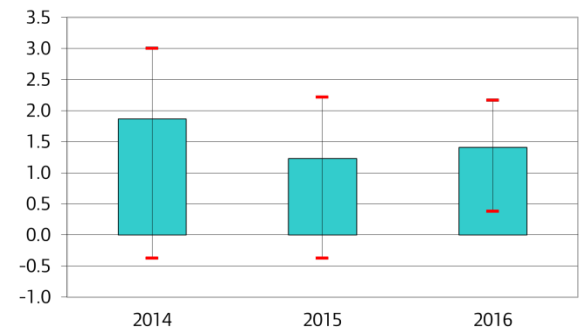
Construction



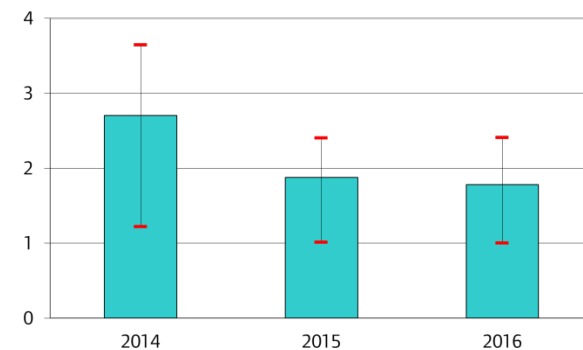
Distribution, accommodation and food service activities



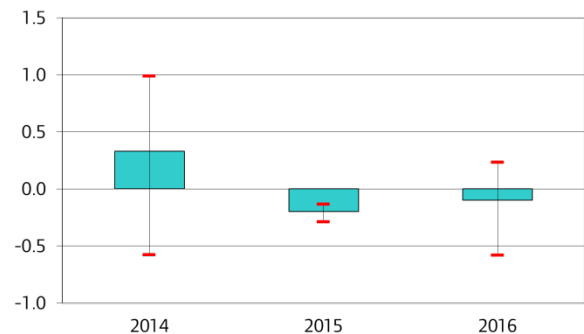
Transportation and storage



Finance and business



Other (public & private) services



		2014	2015	2016			2014	2015	2016
Manufacturing	<i>Average</i>	-0.1	-1.0	-0.9	Construction	<i>Average</i>	2.5	2.4	2.2
	<i>Lowest</i>	-0.9	-1.7	-1.3		<i>Lowest</i>	2.0	2.1	1.7
	<i>Highest</i>	0.3	0.0	-0.5		<i>Highest</i>	3.3	2.8	2.8
Distribution, accommodation and food service activities	<i>Average</i>	1.5	1.1	1.2	Transportation and storage	<i>Average</i>	1.9	1.2	1.4
	<i>Lowest</i>	0.6	0.4	0.7		<i>Lowest</i>	-0.4	-0.4	0.4
	<i>Highest</i>	2.0	1.5	1.5		<i>Highest</i>	3.0	2.2	2.2
Finance and business	<i>Average</i>	2.7	1.9	1.8	Other (public & private) services	<i>Average</i>	0.3	-0.2	-0.1
	<i>Lowest</i>	1.2	1.0	1.0		<i>Lowest</i>	-0.6	-0.3	-0.6
	<i>Highest</i>	3.6	2.4	2.4		<i>Highest</i>	1.0	-0.1	0.2

5. The GLA Economics forecast

It is necessary to distinguish carefully between the GLA's long-term employment projections and this forecast, which contains the GLA's medium-term planning projections. Trend projections, by definition, do not incorporate cyclical variations. The actual course of output and employment will vary around this trend. Trend projections are essential for planning to provide capacity (such as office space, housing and transport) to accommodate the needs of the economy throughout and at the peak of the cycle, not just at its low points. For business planning (for example the likely course of revenue), estimates of actual numbers of jobs and actual output at any point in time are required. The medium-term planning projections provide these estimates. As time progresses and more data become available, it becomes possible to identify turning points in the data; whether underlying trends are continuing or new trends are being established. The source for all historic data in the following tables and charts is EE.

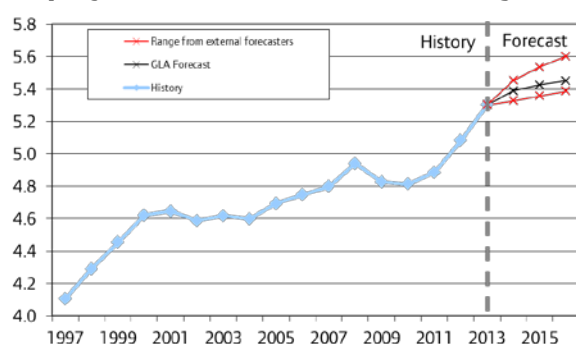
5.1 Results

Following the resumption of positive growth in 2010, output is expected to continue to rise between 2014 and 2016. Employment growth is forecast to slow after 2014.

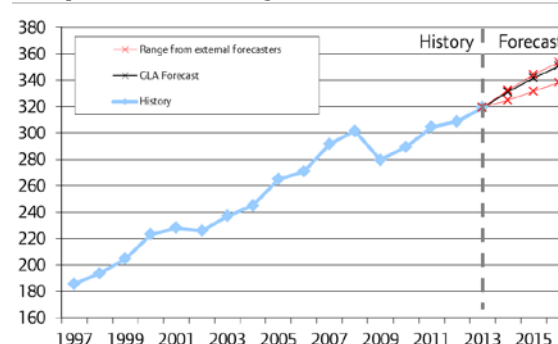
Household spending is expected to continue to grow between 2014 and 2016. Household income growth is also expected to be positive over the forecast period.

Figure 5.1: Trend and forecast employment and output

Employment (millions of workforce jobs)



Output (constant year 2010, £ billion)



Source: EE for historic data and GLA Economics' calculations for forecast

Table 5.1: Forecast and historical growth rates

(Annual % change)

	2008	2009	2010	2011	2012	2013	2014	2015	2016
GVA	3.4	-7.3	3.5	5.2	1.4	3.4	3.8	3.2	2.6
Workforce jobs	2.9	-2.3	-0.3	1.5	4.0	4.4	1.6	0.7	0.5
Household spending	0.5	-2.7	1.0	-0.8	0.5	3.0	2.2	2.1	2.2
Household income	1.2	2.6	1.6	-0.9	2.4	0.7	2.2	2.3	2.5

Table 5.2: Forecast and historical levels

(constant year 2010, £ billion except jobs)

	2008	2009	2010	2011	2012	2013	2014	2015	2016
GVA	301.4	279.6	289.4	304.4	308.8	319.2	331.4	342.2	351.2
Workforce jobs (millions)	4.94	4.83	4.81	4.88	5.08	5.30	5.39	5.43	5.45
Household spending	138.9	135.2	136.6	135.4	136.1	140.1	143.2	146.1	149.3
Household income	154.7	158.8	161.3	159.9	163.8	164.9	168.5	172.4	176.7

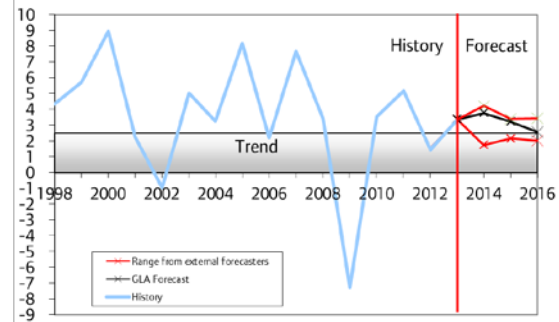
Output

(London GVA, constant year 2010, £ billion)

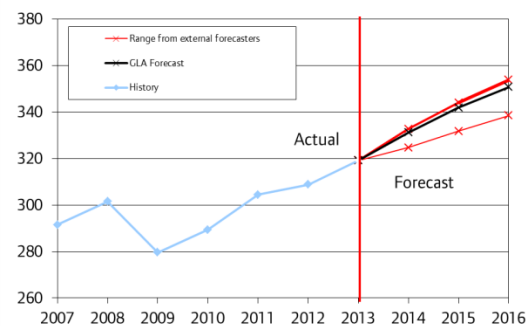
London's real GVA is forecast to grow between 2014 and 2016. Forecast growth rates are 3.8 per cent in 2014, 3.2 per cent in 2015 and 2.6 per cent in 2016.

The GLA Economics' forecast is generally more optimistic than the consensus average forecast over 2014-2016.

Annual growth (per cent)



Level (constant year 2010, £ billion)



Growth (annual per cent)					Level (constant year 2010, £ billion)				
	2013	2014	2015	2016		2013	2014	2015	2016
GLA	3.4	3.8	3.2	2.6	GLA	319	331	342	351
Consensus		3.2	3.0	2.9	Consensus		329	339	349

History: Annual growth (per cent)

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
4.3	5.7	8.9	2.2	-1.0	5.0	3.2	8.2	2.2	7.7	3.4	-7.3	3.5	5.2	1.4	3.4

History: Level (constant year 2010, £ billion)

1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
185.6	193.6	204.7	223.0	228.0	225.8	237.1	244.8	264.9	270.7	291.5	301.4	279.6	289.4	304.4	308.8	319.2

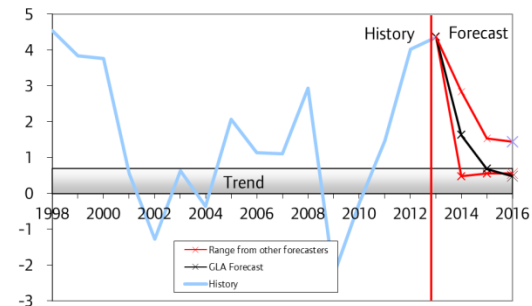
Employment

(London workforce jobs)

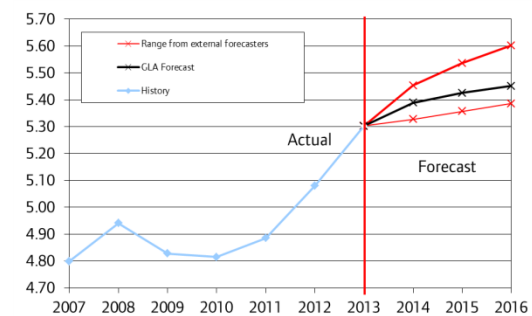
London's employment is forecast to rise between 2014 and 2016.

GLA Economics' forecast for employment growth is more pessimistic than the consensus average forecast throughout 2014-2016.

Annual growth (per cent)



Level (millions of workforce jobs)



	Growth (annual per cent)					Level (millions of workforce jobs)			
	2013	2014	2015	2016		2013	2014	2015	2016
GLA	4.4	1.6	0.7	0.5	GLA	5.30	5.39	5.43	5.45
Consensus		1.9	1.2	1.1	Consensus		5.41	5.47	5.53

History: Annual growth (per cent)

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
4.5	3.8	3.8	0.6	-1.3	0.6	-0.4	2.1	1.1	1.1	2.9	-2.3	-0.3	1.5	4.0	4.4

History: Level (millions)

1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
4.10	4.29	4.45	4.62	4.65	4.59	4.62	4.60	4.69	4.75	4.80	4.94	4.83	4.81	4.88	5.08	5.30

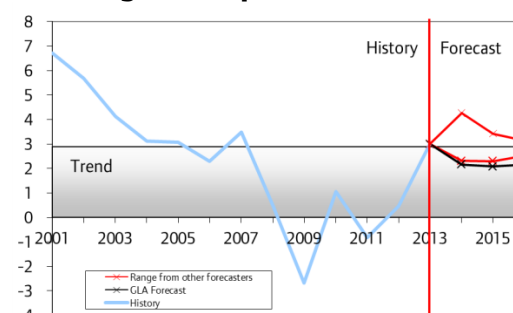
Household expenditure

(London household spending, constant year 2010, £ billion)

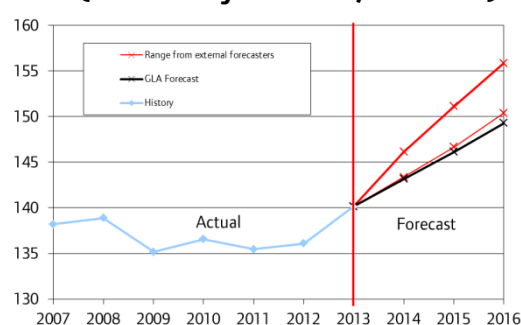
Growth in London's household spending is forecast to be positive over the forecast period.

GLA Economics' household spending growth forecast is lower than the consensus average over the forecast period.

Annual growth (per cent)



Level (constant year 2010, £ billion)



Growth (annual per cent)					Level (constant year 2010, £ billion)				
	2013	2014	2015	2016		2013	2014	2015	2016
GLA	3.0	2.2	2.1	2.2	GLA	140	143	146	149
Consensus		3.1	2.7	2.9	Consensus		144	148	153

History: Annual growth (per cent)

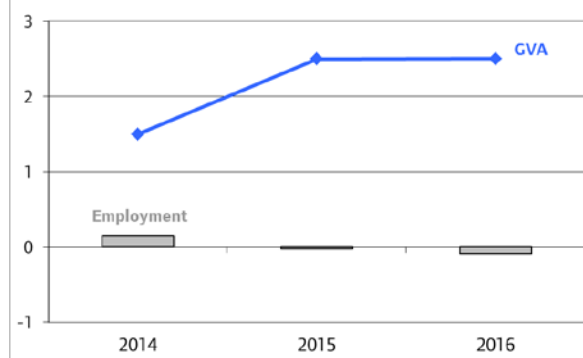
2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
6.7	5.7	4.1	3.1	3.1	2.3	3.5	0.5	-2.7	1.0	-0.8	0.5	3.0

History: Level (constant year 2010, £ billion)

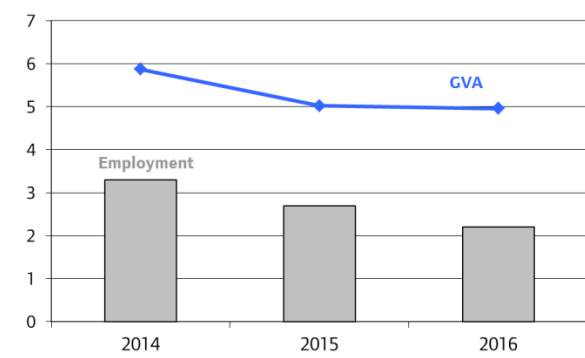
2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
104.6	111.6	117.9	122.8	126.6	130.5	133.5	138.2	138.9	135.2	136.6	135.4	136.1	140.1

Output and employment growth by sector (per cent annual change)

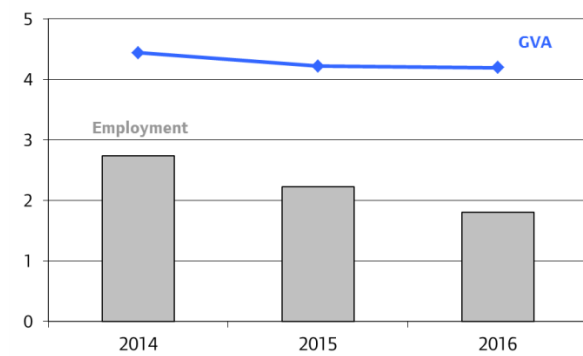
Financial services



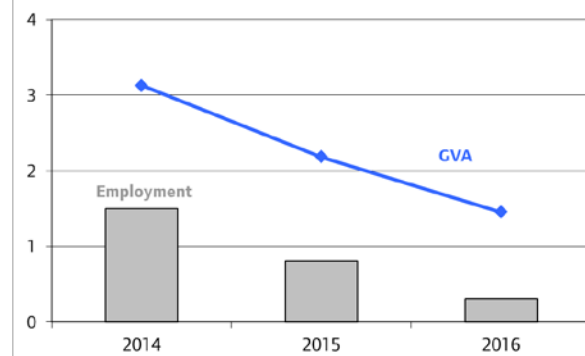
Business services



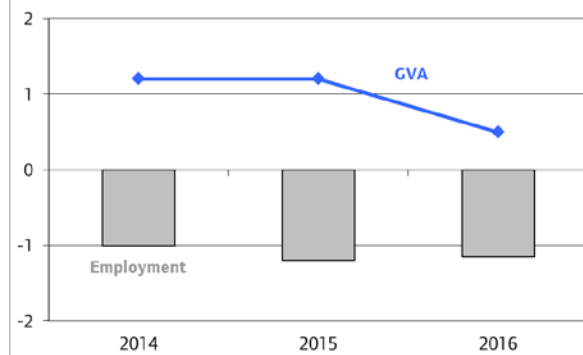
Finance and business (combined)



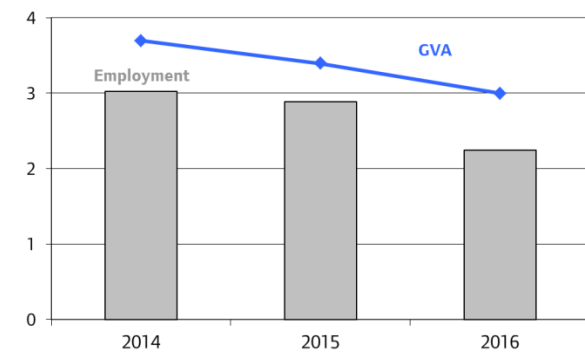
Distribution, accommodation and food service activities



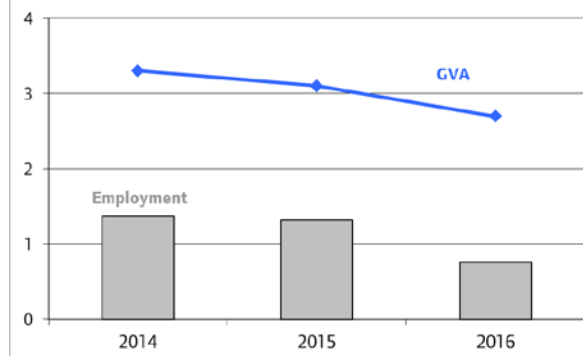
Manufacturing



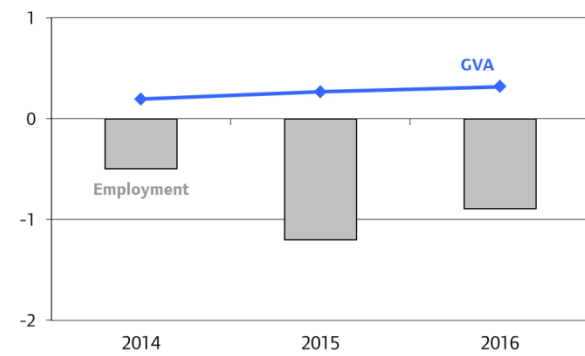
Construction



Transportation and storage



Other (public & private) services



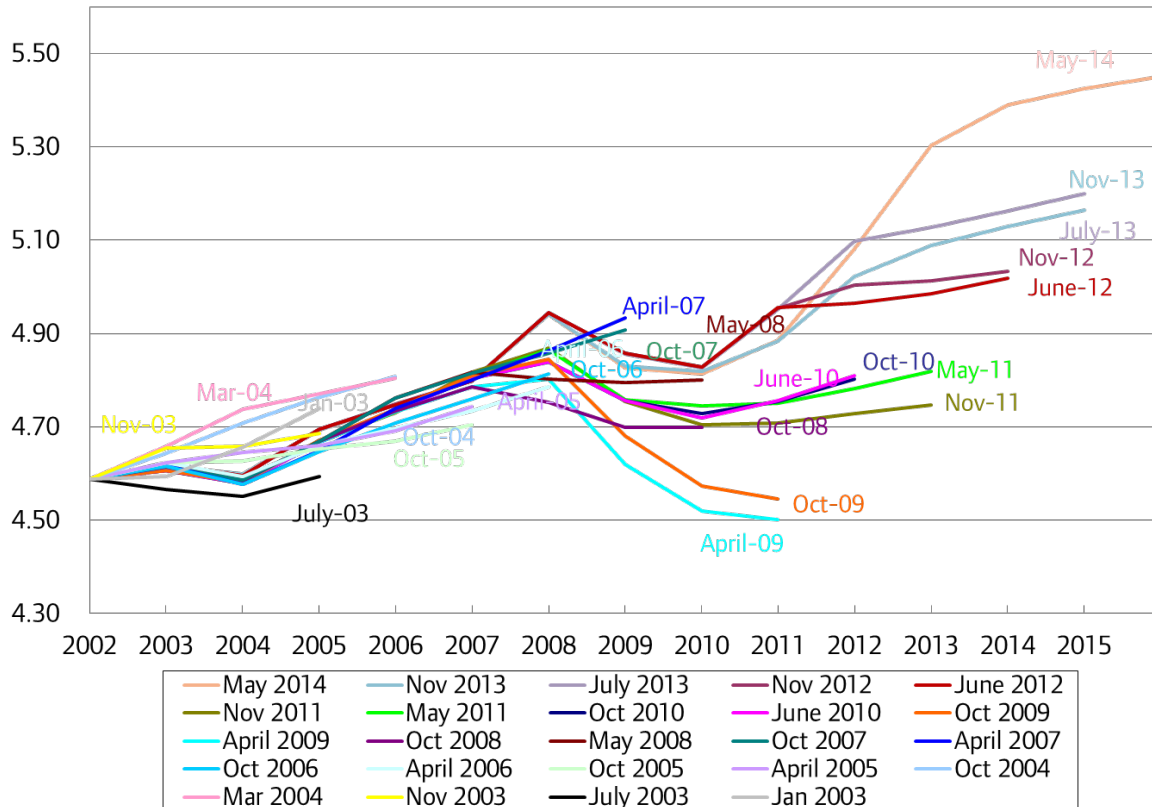
Output and employment growth by sector (per cent annual change)

	2014	2015	2016
Financial services			
Output	1.5	2.5	2.5
Employment	0.1	0.0	-0.1
Business services			
Output	5.9	5.0	5.0
Employment	3.3	2.7	2.2
Financial and business services combined			
Output	4.4	4.2	4.2
Employment	2.7	2.2	1.8
Distribution, accommodation and food service activities			
Output	3.1	2.2	1.5
Employment	1.5	0.8	0.3
Transportation and storage			
Output	3.3	3.1	2.7
Employment	1.4	1.3	0.8
Other (public & private) services			
Output	0.2	0.3	0.3
Employment	-0.5	-1.2	-0.9
Manufacturing			
Output	1.2	1.2	0.5
Employment	-1.0	-1.2	-1.2
Construction			
Output	3.7	3.4	3.0
Employment	3.0	2.9	2.2
<i>(Memo: non-manufacturing)</i>			
Output	3.9	3.3	2.7
Employment	1.7	0.7	0.5

5.2 Comparison with previous forecasts

This section compares the current forecast with previous forecasts in this series. Since the base years for the forecasts change and the base data is continuously revised, the forecasts have been rebased into a common base year for the comparison in Figures 5.2 and 5.3. The most recent forecast for London's workforce jobs growth and output growth is generally higher than in the November 2013 forecast.

Figure 5.2: Employment – latest forecast compared with previous forecasts
(millions of workforce jobs)

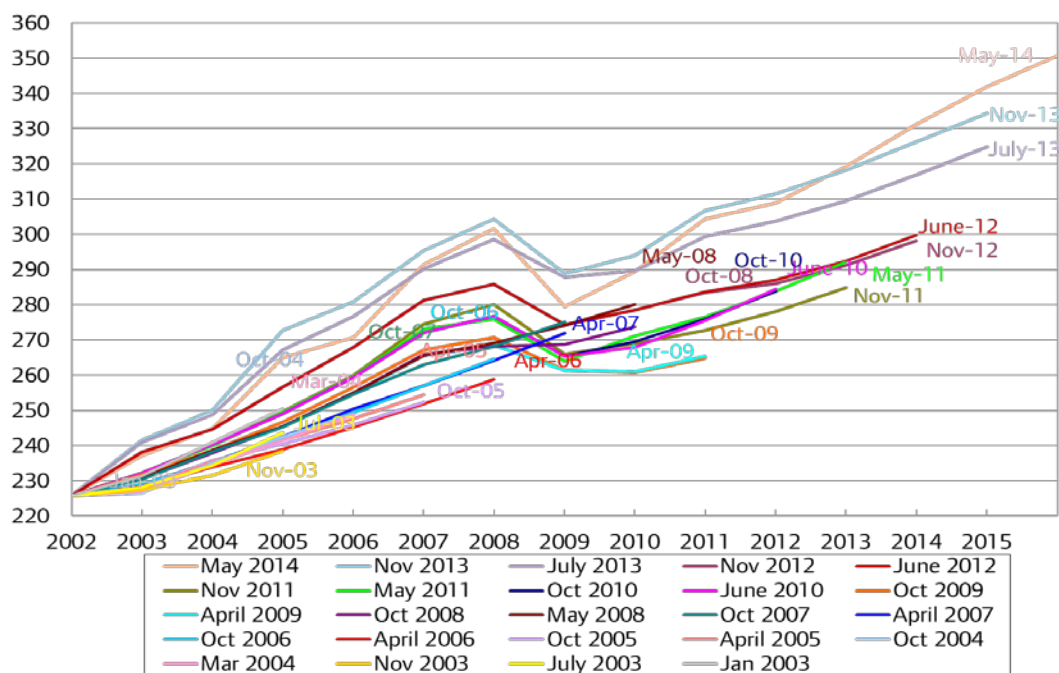


Source: Various London's Economic Outlooks

Table 5.3: Comparisons with previous published forecasts
(London workforce jobs, per cent annual growth)

Forecast	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
May 2014	0.6%	-0.4%	2.1%	1.1%	1.1%	2.9%	-2.3%	-0.3%	1.5%	4.0%	4.4%	1.6%	0.7%	0.5%
Nov 2013											1.3%	0.8%	0.7%	
July 2013											0.6%	0.7%	0.7%	
Nov 2012										1.0%	0.2%	0.4%		
June 2012										0.2%	0.4%	0.6%		
Nov 2011									0.1%	0.4%	0.4%			
May 2011									0.1%	0.7%	0.8%			
Oct 2010								-0.6%	0.6%	1.0%				
June 2010								-0.8%	0.8%	1.1%				
Oct 2009							-3.4%	-2.3%	-0.6%					
April 2009							-3.8%	-2.2%	-0.4%					
Oct 2008						-0.7%	-1.1%	0.0%						
May 2008						-0.3%	-0.1%	0.1%						
Oct 2007					1.2%	0.9%	1.0%							
April 2007					1.2%	1.4%	1.5%							
Oct 2006				1.3%	1.1%	1.1%								
April 2006				0.8%	0.8%	1.1%								
Oct 2005			0.6%	0.4%	0.8%									
April 2005			0.3%	0.7%	1.1%									
Oct 2004		1.4%	1.2%	0.9%										
Mar 2004		1.7%	0.7%	0.7%										
Nov 2003	1.5%	0.1%	0.6%											
July 2003	-0.5%	-0.4%	0.9%											
Jan 2003	0.2%	1.4%	1.8%											

Figure 5.3: Output – latest forecast compared with previous forecasts
(constant year 2010, £ billion)



Source: Various London's Economic Outlooks

Table 5.4: Comparisons with previous published forecasts
(London GVA, per cent annual growth)

Forecast	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
May 2014	5.0%	3.2%	8.2%	2.2%	7.7%	3.4%	-7.3%	3.5%	5.2%	1.4%	3.4%	3.8%	3.2%	2.6%
Nov 2013											2.2%	2.5%	2.5%	
July 2013											1.9%	2.4%	2.5%	
Nov 2012										0.9%	1.8%	2.4%		
June 2012										1.2%	1.9%	2.5%		
Nov 2011									1.4%	2.0%	2.4%			
May 2011									2.0%	2.6%	2.9%			
Oct 2010								1.6%	2.4%	2.9%				
June 2010								1.0%	2.8%	3.3%				
Oct 2009							-3.5%	-0.2%	1.5%					
April 2009							-2.7%	-0.2%	1.7%					
Oct 2008						0.8%	0.2%	1.9%						
May 2008						1.3%	1.8%	2.2%						
Oct 2007					3.3%	2.0%	2.6%							
April 2007					2.6%	2.8%	3.0%							
Oct 2006				3.1%	3.0%	3.0%								
April 2006				2.7%	2.6%	2.8%								
Oct 2005			2.0%	2.3%	2.6%									
April 2005			2.6%	2.5%	2.7%									
Oct 2004		3.8%	3.1%	2.7%										
Mar 2004		3.3%	2.9%	3.0%										
Nov 2003	0.7%	1.9%	3.0%											
July 2003	1.1%	2.6%	4.1%											
Jan 2003	2.4%	4.1%	4.0%											

Appendix A: From SIC 2003 to SIC 2007¹¹³

Before the Spring 2012 LEO GLA Economics used a 12-sector breakdown of the economy in our long-run employment projections – see Table A1. However, the switch over to SIC 2007 allows us both to use sector categories which are more relevant to London and to use a 'higher resolution' of sectors: we now use 16 sectors in our long-run employment projections. The main innovations in SIC 2007 were the new section J, "Information and Communication" and the breakdown of "Business Services" into three categories that are highly relevant to London.

Table A1 shows the broad level mapping of the SIC 2003 categories used in Working Paper 38: 'Employment projections for London by sector and trend-based projections by borough' (November 2009), into the SIC 2007 categories we use now.

Table A1: GLA SIC categories

SIC 2007 GLA Sectors	SIC 2003 GLA Sectors
Primary & utilities	Primary & utilities
Manufacturing	Manufacturing
Construction	Construction
Wholesale	Wholesale
Retail	Retail
Transportation and Storage	Transport & communications
Accommodation and food service activities	Hotels & restaurants
Financial and insurance activities	Financial services
Information and Communication	Business services
Professional, scientific and technical services and real estate	
Administrative and support service activities	
Public Admin and defence	Public Admin
Education	Health & education
Health	
Arts, entertainment and recreation	
Other services	Other services

Most of the new categories introduced by SIC 2007 relate to service activities. This is significant for London as many of its jobs are service sector based. For example Real Estate and Professional and Administrative Service activities have almost three times as many divisions under SIC 2007. Business activities (Section K under SIC 2003), which make up a large proportion of London's employee jobs, has moved to several areas in SIC 2007 including Sections L (Real Estate Activities), M (Professional, Scientific and Technical Activities) and N (Administrative and Support Services Activities). Section M includes legal and accounting activities, head office activities, management consultancy, architectural and engineering activities, scientific research and development, advertising and market research, other professional, scientific and technical activities and veterinary activities.

¹¹³ GLA Economics, 'Employment projections for London by sector and trend-based projections by borough', Working Paper 51, December 2011.

Some of the business activities from Section K of SIC 2003 have also moved to Sections S (Other service activities) and J (Information and communication) in SIC 2007. Section J in SIC 2007 also includes publishing, film, broadcasting and news agencies in addition to telecoms and computer related activities. The sale of fuel is now considered a retail activity (in SIC 2003 it was part of motor trade), and recycling has moved from manufacturing to water supply and sewerage and waste management.

Appendix B: Explanation of terms and some sources

Definitions, differences, and revisions

Forecasting organisations use varying definitions of the regional indicators they supply. It is therefore not always possible to assign a completely consistent meaning to the terms used.

Throughout this report, as far as is compatible with the individual definitions applied by the forecasters, 'employment' refers to 'workforce employment' as defined in, the ONS publication *Labour Market Trends*. *London's Economic Outlook: December 2003* and *The GLA's Workforce Employment Series* provide a more detailed explanation of this term.

Forecasters' definitions are broadly compatible with this but in some cases differences arise from the treatment of small items such as participants in government training schemes or the armed forces. The GLA uses civilian workforce employment throughout.

Output refers to GVA, a term introduced by the 1995 revision of the European System of Accounts (ESA95). Some forecasters still estimate GDP, which differs slightly from GVA. Imputed rental income from the ownership of property is included in some cases but not in others. GLA Economics' *London's Economic Outlook: December 2003* provides a more detailed explanation of this term.

Estimates of nominal regional GVA are available up to 2012 from the ONS. So far only experimental official estimates of real regional GVA are available because of the difficulties in producing authoritative regional price deflators, although the ONS has produced regional price indexes for the year 2010¹¹⁴. Most regional forecasters supply their own estimates of London's real GVA. The real London GVA figures used in this GLA Economics' forecast are supplied by EE.

GVA estimates are less reliable than employment estimates because there is no independent source of information from which to judge the size of total sales by London-based agents. ONS estimates are calculated by the factor incomes method, beginning from wages paid to people with workforce jobs located in London. Profits are imputed on the basis of these earnings estimates from knowledge of national sectors of employment. Most regional forecasters adopt a variant of this technique.

Consumption refers to private consumption, otherwise known as household expenditure; in some cases the expenditure of non-profit organisations is included and in other cases it is not.

¹¹⁴ Office for National Statistics, 'UK Relative Regional Consumer Price Levels for Goods and Services for 2010', 12 July 2011.

Appendix C: Glossary of acronyms

ADB	Asian Development Bank
bn	Billion
CE	Cambridge Econometrics
CEBR	The Centre for Economic and Business Research
CIPS	The Chartered Institute of Purchasing and Supply
CPI	Consumer Price Index
DCLG	Department for Communities and Local Government
ECB	European Central Bank
EE	Experian Economics
EERI	Effective Exchange Rate Index
EFSF	European Financial Stability Facility
EU	European Union
FT	Financial Times
GDP	Gross Domestic Product
GLA	Greater London Authority
GVA	Gross Value Added
GDP	Gross Domestic Product
HM Treasury	Her Majesty's Treasury
IFS	The Institute for Fiscal Studies
ILO	International Labour Organisation
IMF	International Monetary Fund
LEO	London's Economic Outlook
LFS	Labour Force Survey
LHS	Left Hand Scale
mn	Million
MPC	Monetary Policy Committee
OE	Oxford Economics
OECD	Organisation for Economic Co-operation and Development
ONS	Office for National Statistics
OPEC	Organisation of Petroleum Exporting Countries
PMI	Purchasing Managers' Index
Q2	Second Quarter
QE	Quantitative Easing
RHS	Right Hand Scale
RPIX	Retail Price Index (excluding mortgage interest payments)
RPI	Retail Price Index
TfL	Transport for London

Appendix D: Bibliography

Asian Development Bank, Asian Development Outlook 2014: Fiscal Policy for Inclusive Growth, April 2014

Bank of England, 'A speech by Mark Carney: One Mission. One Bank. Promoting the good of the people of the United Kingdom', March 2014

Bank of England, Credit Conditions Survey – Survey Results 2014 Q1, 3 April 2014

Bank of England, Inflation Report, August 2013, February 2014 and May 2014

Bank of England, Minutes of Monetary Policy Committee Meeting, 8 & 9 January 2014, 5 & 6 February 2014, 5 & 6 March 2014, 9 April 2014, and 7 & 8 May 2014.

Barnett, A., Chiu, A., Franklin, J. and Sebastia-Barriel, M., 'The productivity puzzle: a firm level investigation into employment behaviour and resource allocation over the crisis', April 2014, Bank of England Working Paper No. 495

Cambridge Econometrics, 2013, Regional Economic Prospects, October 2013

Centre for Economic and Business Research, 2014, The Prospects Service, London, City and Regional Prospects, April 2014

European Commission, European Economic Forecast: Winter 2014, February 2014

Experian Economics, 2014, Regional Forecast, March 2014

Federal Reserve Board, The Beige Book, 16 April 2014

Grice, J., The Productivity Conundrum, Interpreting the Recent Behaviour of the Economy, 2012, Office for National Statistics

H M Treasury, 2014, Forecasts for the UK Economy: A comparison of independent forecasts, May 2014

IMF, Global Financial Stability Report: Moving from Liquidity – to Growth-Driven Markets', April 2014

IMF, Global Financial Stability Report: Old Risks, New Challenges, April 2013.

IMF, World Economic Outlook: Recovery Strengthens, Remains Uneven, April 2014

Institute of Chartered Accountants in England and Wales/Grant Thornton, UK Business Confidence Monitor Report: Q1 2014, February 2014

The Institute for Fiscal Studies, Green Budget: February 2013, February 2013

Knight Frank, Central London Quarterly, Quarter 1 2014

OECD, Economic Outlook, 6 May 2014

Office for Budget Responsibility, Economic and fiscal outlook, March 2014

Office for National Statistics, Economic Review, February and April 2014

Office for National Statistics, Gross Domestic Product Second Estimate of GDP, Q1 2014, 22 May 2014

Office for National Statistics, Statistical Bulletin: Labour Market Statistics, May 2014, 14 May 2014

Office for National Statistics, Statistical bulletin: Labour Productivity, Q4 2013, 1 April 2014

Office for National Statistics, Statistical Bulletin: Consumer Price Inflation, April 2014, 20 May 2014.

Office for National Statistics, UK Relative Regional Consumer Price Levels for Goods and Services for 2010, 12 July 2011

Oxford Economics, 2014, Regional Economic Outlook, April 2014

Papworth, P., The Trading Dead: The zombie firms plaguing Britain's economy, and what to do about them, 2013, The Adam Smith Institute

World Bank, Russian Economic Report 31, 26 March 2014

White, W., 'Ultra Easy Monetary Policy and the Law of Unintended Consequences', August 2012, Federal Reserve Bank of Dallas Working Paper No. 126

GLAECONOMICS

Greater London Authority
City Hall
The Queens Walk
London SE1 2AA

Tel 020 7983 4922
Fax 020 7983 4674
Minicom 020 7983 4000
Email glaeconomics@london.gov.uk

<http://www.london.gov.uk/gla-economics-publications>

MAYOR OF LONDON