

# London's Economic Outlook: Spring 2015

## The GLA's medium-term planning projections

May 2015



## **copyright**

**Greater London Authority**  
**May 2015**

### **Published by**

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

**[www.london.gov.uk](http://www.london.gov.uk)**

Tel 020 7983 4922

Minicom 020 7983 4000

ISBN 978 1 84781 603 0

### **Cover photograph**

© Daryl Rozario

For more information about this publication, please contact:

GLA Economics

Tel 020 7983 4922

Email [glaeconomics@london.gov.uk](mailto: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 .....	5
3. Economic background: Positive outlooks for the UK economy, but downside risks evident globally.....	6
4. Review of independent forecasts.....	35
5. The GLA Economics forecast .....	41
Appendix A: From SIC 2003 to SIC 2007 .....	52
Appendix B: Explanation of terms and some sources.....	54
Appendix C: Glossary of acronyms.....	55
Appendix D: Bibliography .....	56

## 1. Executive summary

GLA Economics' twenty sixth London forecast<sup>1</sup> suggests that:

London's Gross Value Added (GVA) growth rate is forecast to be 3.6 per cent in 2015 with growth moderating to 3.2 per cent in 2016 and 2.5 per cent in 2017.

London is forecast to see rises in employment in 2015, 2016 and 2017.

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)	2014 <sup>2</sup>	2015	2016	2017
London GVA (constant 2011, £ billion)	3.5	3.6	3.2	2.5
<i>Consensus (average of independent forecasts)</i>		3.3	2.9	2.9
London civilian workforce jobs	5.2	1.7	1.2	0.7
<i>Consensus (average of independent forecasts)</i>		1.5	1.2	1.1
London household spending (constant 2011, £ billion)	2.5	3.0	2.9	2.4
<i>Consensus (average of independent forecasts)</i>		3.3	3.0	2.8
London household income (constant 2011, £ billion)	2.3	3.0	2.9	2.8
<i>Memo: Projected UK RPI<sup>3</sup> (Inflation rate)</i>	2.4	1.1	2.4	3.0
<i>Projected UK CPI<sup>4</sup> (Inflation rate)</i>	1.5	0.3	1.5	1.9

Sources: GLA Economics' Spring 2015 forecast and consensus calculated by GLA Economics

Since the publication of the Autumn 2014 London's Economic Outlook (LEO), the economic environment in the UK and London has remained generally robust with the majority of data suggesting that London's economy continues to grow strongly although with perhaps slight signs of dampening. For example, for businesses at the UK level, while confidence<sup>5</sup> was lower at the start of 2015 than at the end of 2014, credit conditions<sup>6</sup> remain unchanged and investment intentions point to "modest growth in capital expenditure over the next twelve months"<sup>7</sup>. Secured lending to households at the UK level remained stable in Q1 but lenders expect the availability to increase over the near term, whilst demand for mortgages fell significantly in Q1

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

<sup>2</sup> All historic data for London GVA, workforce jobs, household spending and household income is from Experian Economics. It should be noted that the 2014 figures for London GVA, civilian workforce jobs, household spending and household income are estimates from Experian Economics.

<sup>3</sup> RPI = Retail Price Index. Although not part of the GLA Economics forecast for London, for reader information HM Treasury Consensus Forecast, May 2015 of the UK RPI inflation rate are reported.

<sup>4</sup> CPI = Consumer Price Index. Although not part of the GLA Economics forecast for London, for reader information HM Treasury Consensus Forecast, May 2015 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.

<sup>5</sup> British Chambers of Commerce, 'Quarterly Economic survey', 1<sup>st</sup> Quarter 2015.

<sup>6</sup> Bank of England, 'Credit Conditions Survey – Survey Results 2015 Q1', 8 April 2015.

<sup>7</sup> Bank of England, 'Agents' summary of business conditions April 2015', 22 April 2015.

in part due to concerns around affordability, and the uncertainty around future house prices. In London, consumer confidence remains very high by historical standards and compared to the UK as a whole<sup>8</sup>. However, amongst companies in London, business confidence in the service sector deteriorated in Q1 from Q4, albeit remaining positive. Furthermore, the Q1 2015 Capital 500, London Quarterly Economic Survey for the London Chamber of Commerce and Industry (LCCI) found a slight reduction in a number of economic indicators although the overall picture remained positive<sup>9</sup>.

The UK as a whole continued to grow, with output increasing for the ninth consecutive quarter in Q1 2015, however, growth slowed to 0.3 per cent after increasing by 0.6 per cent in Q4 2014. Output in Q1 2015 was 2.4 per cent higher than a year earlier and UK GDP now stands 4 per cent higher than its pre-recession peak in Q1 2008. Inflation has remained low in the early months of 2015 and in April Consumer Prices Index (CPI) inflation fell by 0.1 per cent compared to April 2014, the first fall in CPI inflation since the official records began in 1996. With the ONS noting, "based on comparable historic estimates, the last time the UK saw consumer price deflation was in the year to March 1960, when prices fell by an estimated 0.6 per cent"<sup>10</sup>. Given the low level of inflation and the slowing growth in Q1 it seems increasingly likely that the timing of the first interest rate rise in the UK is unlikely to occur much prior to mid-2016<sup>11,12</sup>. Yet, despite the downward revisions to the growth forecasts for the next couple of years the Bank's view on the timing of the first rate rise wasn't very different to the view expressed in February when the previous Inflation Report was published. And, the latest Inflation Report published by the Bank of England in May reiterated the message that "the path of Bank Rate, when it does rise, is likely to move more at a gradual pace and to a limited extent"<sup>13</sup>.

Continuous growth and more recently very low inflation has been coupled with strong employment growth and unemployment in the UK has fallen substantially over the past 18 months<sup>14</sup>. In the three months to the end of March the proportion of people in work in the UK was 73.5 per cent, the highest on record since comparable figures began in 1971<sup>15</sup>. In London, the labour market recovery has been similarly strong with the number of jobs increasing to 5.6 million in Q4 2014, a 209,000 increase from a year earlier<sup>16</sup>, with the employment rate at 72.1 per cent one of the highest since the series began in 1992. However, since the economic recovery began towards the end of 2009, productivity growth has been weak and incomes have stagnated with incomes in 2014 still below the pre-recession peak in real terms. Yet, the recent moderation in oil prices and wider tentative signs indicating that private sector real wage growth is picking up in some sectors suggest household incomes are likely to rise in real terms in 2015 supporting wider economic growth over the forecast period.

Risks to the economy are broadly unchanged compared to those seen in November 2014. Expected spending cuts in the new Parliament could potentially drag on economic growth going forward. Continuing slow growth in Europe, the levels of sovereign debt and, in particular, the risk of a Greek default on debt remain key concerns due to the impact these would have on the

---

<sup>8</sup> GLA Economics, 'London's Economy Today: Issue 152', April 2015.

<sup>9</sup> London Chamber of Commerce, 'Q1 2015 Capital 500', 2 April 2015.

<sup>10</sup> ONS, 'Consumer Price Inflation, April 2015', 19 May 2015.

<sup>11</sup> International Monetary Fund (IMF), 'World Economic Outlook, Uneven Growth – Short- and Long-term Factors', April 2015.

<sup>12</sup> Bank of England, 'Inflation Report May 2015', 13 May 2015.

<sup>13</sup> Ibid.

<sup>14</sup> ONS, 'Economic Review, May 2015', 6 May 2015.

<sup>15</sup> ONS, 'UK Labour Market, May 2015', 13 May 2015.

<sup>16</sup> ONS, 'Regional Labour Market, April 2015', 17 April 2015.

UK and London's growth. Despite these risks, efforts by the European Central Bank (ECB) to stimulate the Eurozone economies with the implementation of looser monetary policy is showing signs of some success and the latest data on activity from Europe suggest that prospects in the currency bloc are improving, albeit slowly. However, an agreement between the Greek government and the European Commission is required to see off a further escalation in the Greek debt crisis with a number of repayments due by mid-June being a possible trigger point. If Greece were to default, the risks of contagion in the Eurozone could have a sizeable effect on the UK and this increased economic uncertainty would be likely to dampen growth.

Whilst lower oil prices are likely to have a positive impact on growth in some economies, a consequence of lower oil and commodity prices could act as a drag on growth in a number of emerging market economies (see Box 3.1). While with the first interest rate rise in the US likely to take place later on in 2015 the IMF has warned that the volatility that hit emerging markets in 2013 following the "taper talk" in the US may not be "a one-off episode" and that emerging markets "need to prepare in advance to deal with this uncertainty"<sup>17</sup>.

On the whole the prospects for the UK economy and London are positive going forward, with the UK economy forecast to grow considerably faster than the Eurozone economies in 2015. A pick-up in inflation in the second half of 2015 is expected and will divert the downward pressure on prices. Despite continuous GDP growth over the last two years loose monetary policy is likely to support growth for some time to come. However, significant exchange rate movements and sterling's appreciation against the Euro following expansive monetary policy measures from the ECB could dampen export sales to the recovering Eurozone, but at least businesses and consumers remain confident about the future outlook. Forecast real income growth is likely to support household spending in the near term, whilst investment intentions amongst service industry businesses remain stronger than in manufacturing<sup>18</sup>, which should particularly benefit London. In consequence London's economy is expected to grow over the medium term in both output and employment.

---

<sup>17</sup> IMF, Lagarde, C., 'Spillovers from Unconventional Monetary Policy – Lessons for Emerging Markets', 17 March 2015.

<sup>18</sup> Bank of England, 'Agents' summary of business conditions April 2015', 22 April 2015.

## 2. Introduction

The spring 2015 edition of *London's Economic Outlook* (LEO) is GLA Economics' twenty sixth 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)<sup>19</sup>
- 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.

---

<sup>19</sup> CEBR does not provide a forecast for employment in the sectors of the London economy or for household expenditure in London.

### 3. Economic background: Positive outlooks for the UK economy, but downside risks evident globally

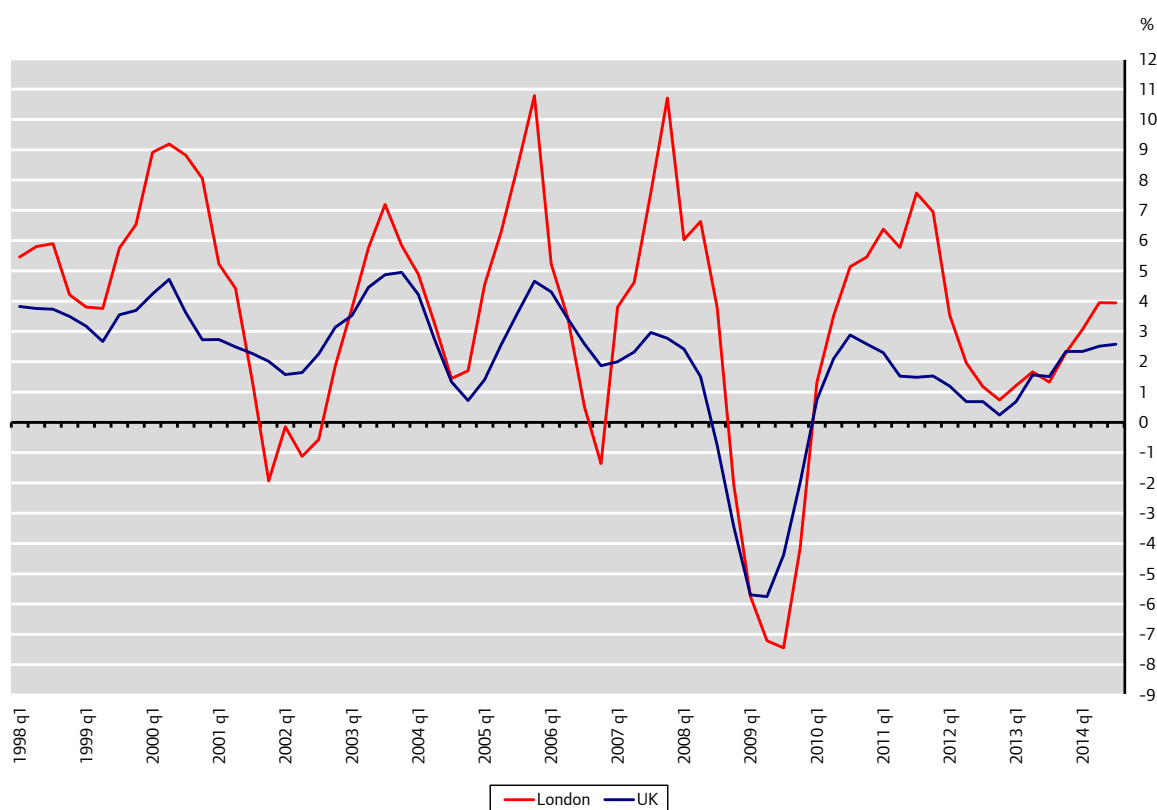
This section provides an overview of recent developments in the London, UK and world economies.

#### 3.1 The London economy

London's annual growth in output stood at 3.9 per cent in the third quarter of 2014 compared to 2.6 per cent in the UK (see Figure 3.1). London's economic expansion continues with other economic indicators continuing to suggest that the London economy has grown more strongly than the UK into the first quarter of 2015.

**Figure 3.1: Output growth – London and UK**

Real GVA, annual % change, last data point is Q3 2014



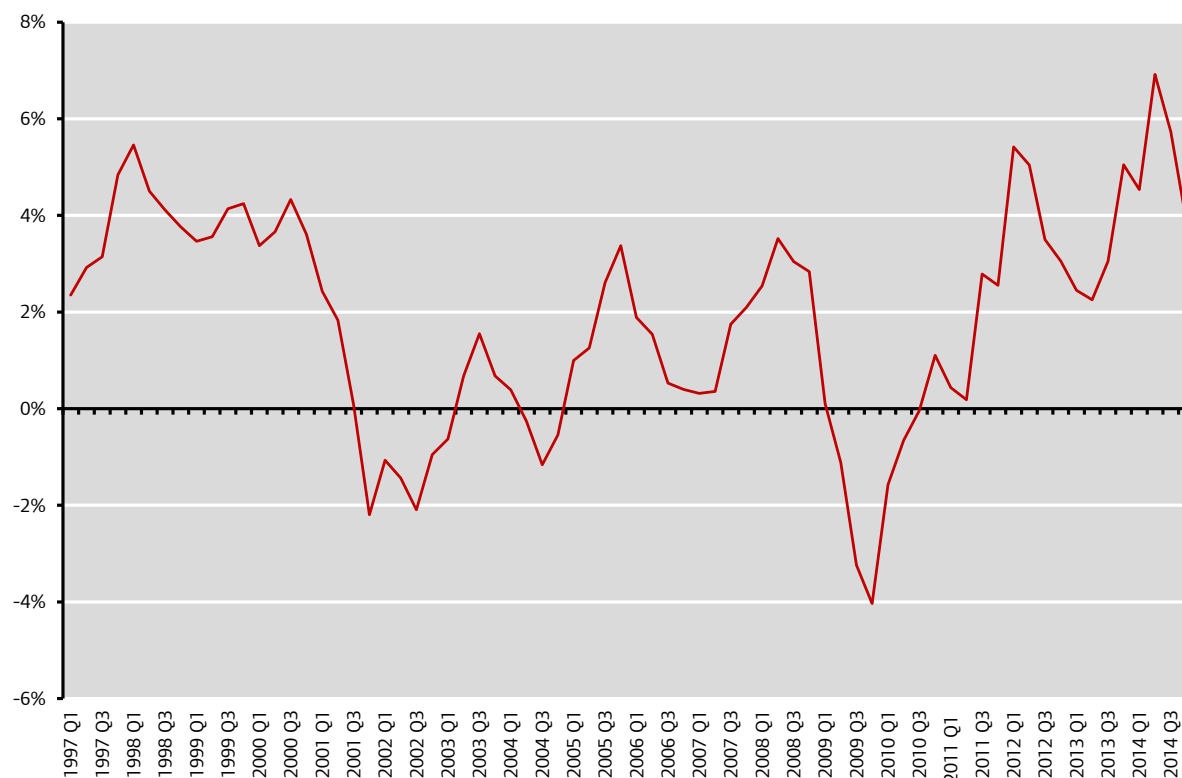
Source: Experian Economics

In the year to Q4 2014, there has been a 3.9 per cent increase in the number of workforce jobs (see Figure 3.2), with the total number of workforce jobs in London standing at 5.599 million, the highest level on record (see Figure 3.3). London's employment rate (ie, the proportion of London's resident working age population in employment) continues to stay at near record levels since the series began in 1992. In the period January – March 2015, London's employment rate stood at 72.1 per cent, an increase of 1.0 percentage points on the year; for the UK the rate stood at 73.5 per cent, an increase of also 1.0 percentage points on the year. London's ILO unemployment rate is down 1.6 percentage points on the year, standing at 6.2 per cent in the three months to February; whereas the timelier claimant count measure is at its lowest rate since August 1975, at 2.1 per cent, down 0.8 percentage points on the year.



**Figure 3.2: London civilian workforce jobs (annual percentage change)**

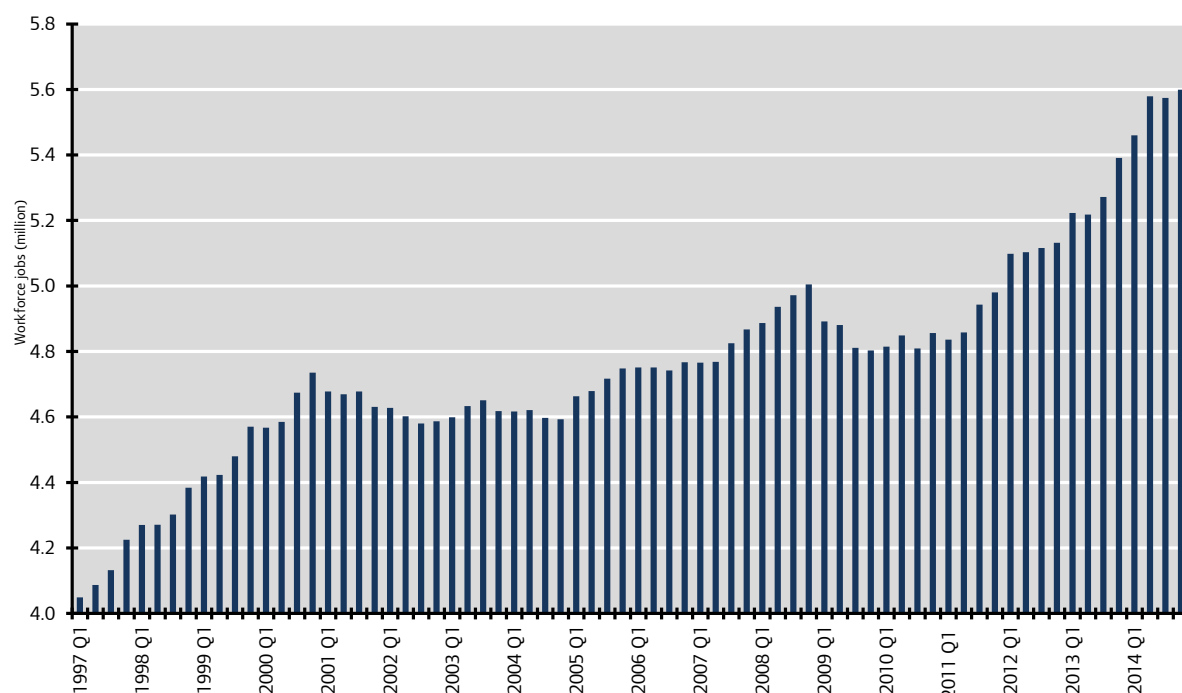
Last data point is Q4 2014



Source: Office for National Statistics

**Figure 3.3: London civilian workforce jobs (level)**

Last data point is Q4 2014

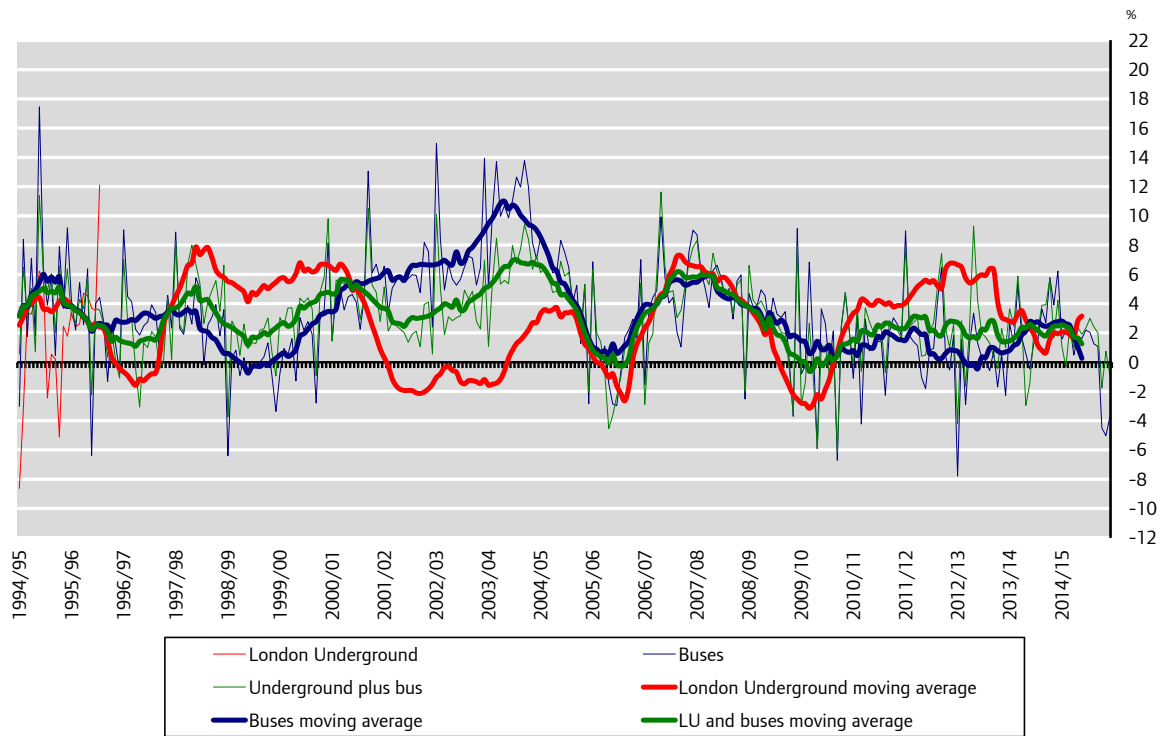


Source: Office for National Statistics

Public transport usage is a useful and timely indicator of economic activity in London. Figure 3.4 shows that there is positive annual growth in both the moving average of bus travel and underground usage; with moving average growth rates over the last six months largely at a similar level.

**Figure 3.4: London public transport usage**

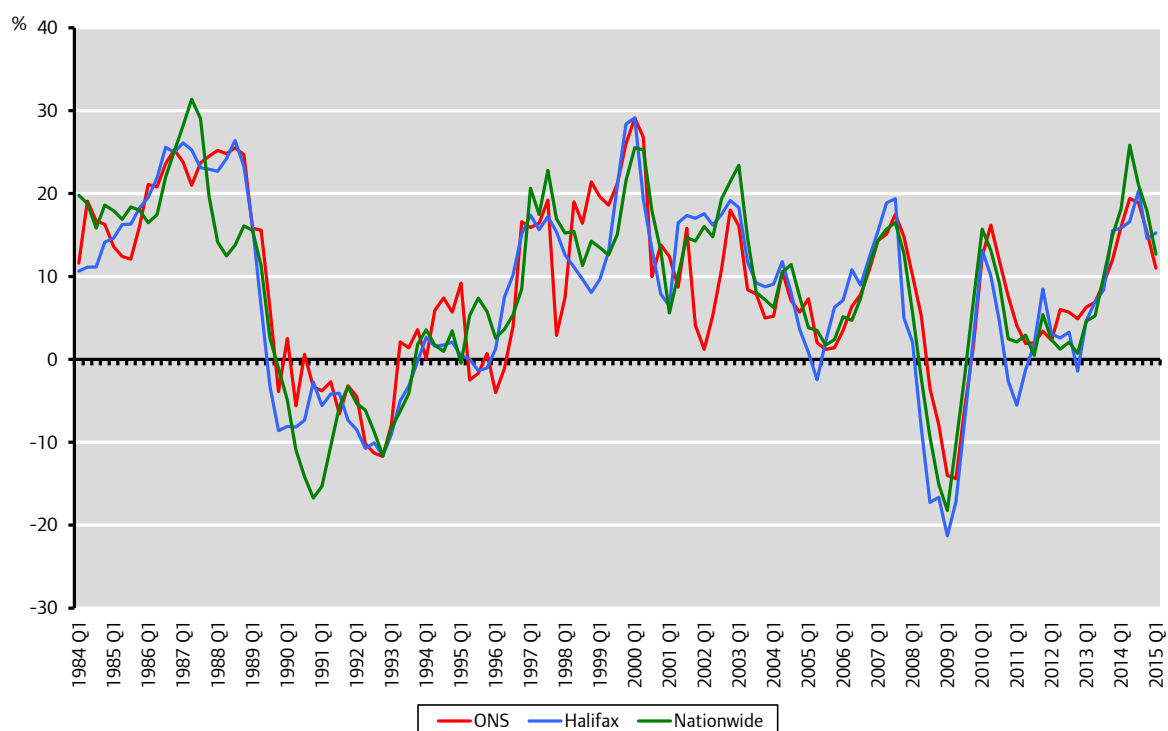
Annual % change in passengers using London Underground and buses (adjusted for odd days). Last data point is the 31-day period ending 31/03/2015



Source: Transport for London

There continues to be very strong annual growth in house prices in London, as measured by the ONS, Nationwide and the Halifax (see Figure 3.5). Annual house price inflation accelerated very quickly in the first half of 2014, with the Nationwide measure estimating annual house price inflation of 25.8 per cent in Q2 2014. Annual house price inflation moderated in the second half of 2014; while more timely data from the Royal Institution of Chartered Surveyors (RICS) Residential Market Survey showed that between September 2014 and March 2015, the net balance of surveyors reported falling prices in London; although as of April 2015, a positive net balance of surveyors are observing price rises and are expecting prices to rise in the next three months. As of Q1 2015, annual house price inflation in London remains higher than in the UK with it estimated at between 11 and 15 per cent across the three measures for London; while estimates for the UK stand at between 6 and 9 per cent.

**Figure 3.5: House price inflation in London**  
Annual % change, last data point is Q1 2015



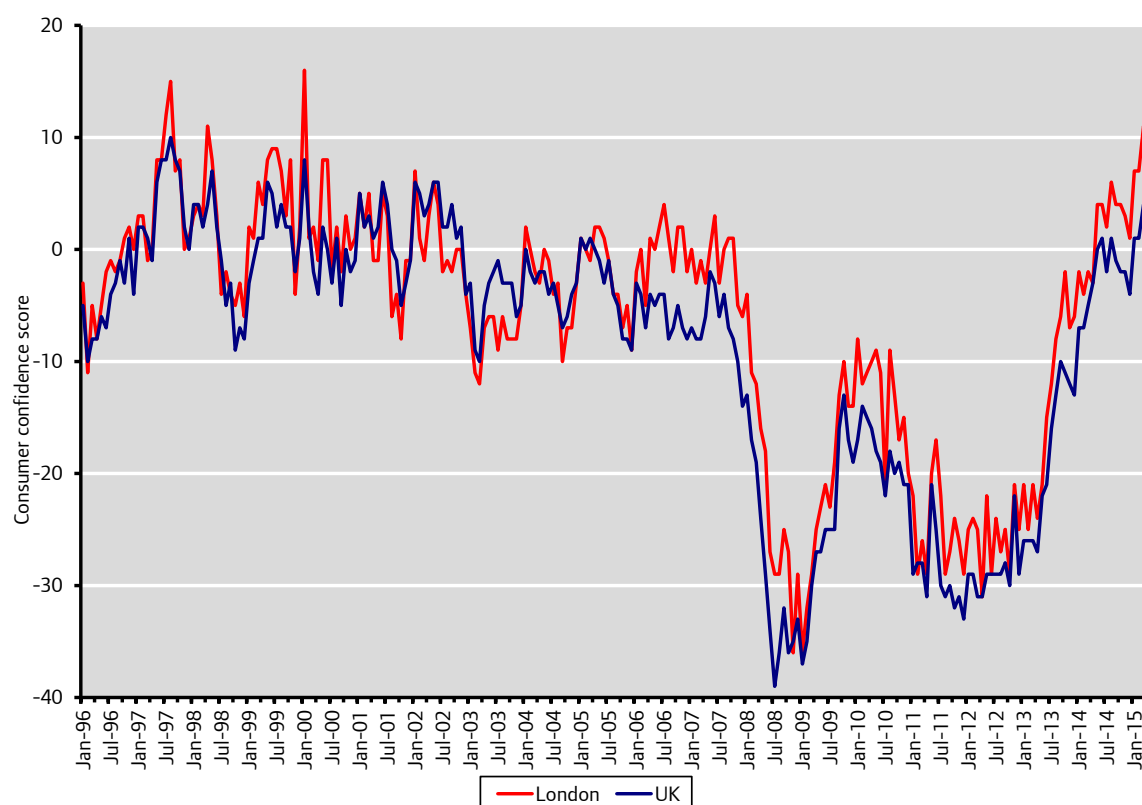
Sources: ONS, Halifax house price index, Nationwide

Knight Frank's Q1 2015 'Central London Quarterly' for commercial property found that "across the capital, leasing supply is falling and the vacancy rate at 5.4% is at its lowest since Q3 2007", continuing that "coincidentally, prime rents are now rising above their 2007 peak levels". Q1 2015 saw a significant drop in demand compared to Q4 2014, especially in Docklands, however this was the result of the take-up levels being at their highest in this area of London for four years "so a fall in demand during Q1 2015 was unsurprising", and it fell by 81 per cent over Q4 2014. Within the City, the vacancy rate fell to 5.7 per cent, "the lowest rate since 2001", continuing that "we expect supply to tighten further during the course of 2015". Within the West End, the vacancy rate fell to 4.6 per cent, "well below the long-term average of 5.9 per cent". Across all three areas of London, prime headline rents increased. In Canary Wharf, rents rose by 4 per cent, the first increase since Q2 2010; in the City, prime headline rent rose for the second consecutive quarter, which "represents growth of 8.3 per cent in just six months"; and in the West End, prime headline rents rose for the fifth consecutive quarter, by "7.0 per cent...", the highest quarterly growth since 2010 during the post-Global Financial Crisis recovery"<sup>20</sup>.

<sup>20</sup> Knight Frank, 'Central London Quarterly – Offices Q1 2015'.

Data from the UK Consumer Confidence Barometer, produced by GfK-NOP (Figure 3.6) shows that consumer confidence in London improved significantly in 2013 and turned positive in the middle of 2014 for London with it having regained the levels seen before the 2008/09 recession. Consumer confidence has continued its upward trend since the publication of Autumn 2014 LEO, with confidence in London reaching its highest level for 15 years in March; and in April, for the UK as a whole, at its highest level since September 2002. 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.

**Figure 3.6: UK Consumer Confidence Barometer**  
Consumer confidence score, last data point is April 2015



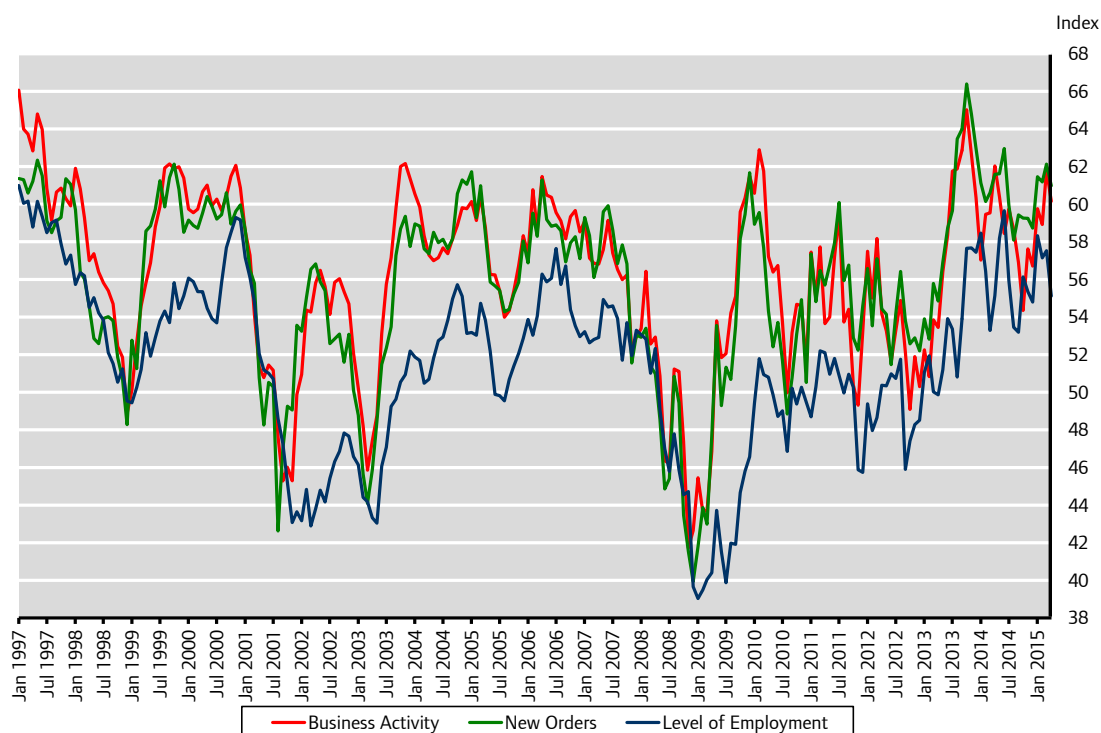
Sources: GfK NOP on behalf of the European Commission

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 also increasing. Employment in London firms, after falling in April 2013, has been rising consistently since then (see Figure 3.7).

### Figure 3.7: Recent survey evidence on London's economic climate

Purchasing Manager's Index (PMI) survey, last data point April 2015

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 to grow in the first quarter of 2015, but at a slower rate than in previous quarters. Having grown by 0.6 per cent in Q4 2014, output rose by 0.3 per cent in Q1 2015, which is the ninth consecutive quarter of rising UK output. UK output was 2.4 per cent higher in Q1 2015 than in Q1 2014. GDP is now 4.0 per cent above its peak of Q1 2008 (from the peak in Q1 2008 to the trough in Q2 2009, GDP decreased by 6.0 per cent)<sup>21</sup>. The International Monetary Fund (IMF) now forecasts that the UK economy will grow by 2.7 per cent in 2015 and by 2.3 per cent in 2016<sup>22</sup>. Unemployment in the UK has continued its downward trend, with the ILO measure of unemployment standing at 5.6 per cent in the three months to February 2015 (its lowest level since 2008 and down 1.3 percentage points on a year earlier)<sup>23</sup>. Table 3.1 shows a summary of forecasts for the UK economy.

<sup>21</sup> ONS, 'Gross Domestic Product Preliminary Estimate of GDP, Q1 2015', 28 April 2015.

<sup>22</sup> IMF, 'World Economic Outlook: Uneven Growth: Short- and Long-Term Factors', April 2015.

<sup>23</sup> ONS, 'Statistical Bulletin: UK Labour Market, April 2015', 17 April 2015.

**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 2015	
	2015	2016	2015	2016
GDP growth (per cent)	2.5	2.3	2.5	2.3
Claimant unemployment (mn)	0.72	0.68	0.77	0.74
Current account (£bn)	-85.2	-78.9	-	-
PSNB (2015-16; 2016-17: £bn)	74.6	52.8	75.3	39.4

Note: mn = million, bn = billion

Sources: HM Treasury Comparison of Independent Forecasts, May 2015.

Office for Budget Responsibility, Economic and fiscal outlook, March 2015.

As can be seen in Table 3.2 annual growth was positive in Q1 2015 in all sectors except mining & quarrying (extraction), and construction. Strong growth is observed in service sectors, specifically transport, storage and communication; and distribution, hotels and catering. Business services and finance (a sector of importance for London) showed 3.4 per cent annual growth in Q1 2015, however when looking at quarter-on-quarter growth, the sector only grew by 0.1 per cent in the first three months of the year, compared to 1.3 per cent growth in Q4 2014. Still, in line with forecasts of the UK economy, it is expected that growth will continue throughout 2015 across the majority of sectors.

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

Annual % change

Industrial sectors	2013		2014				2015
	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Agriculture, forestry, and fishing	-3.0	-2.2	3.0	2.0	1.9	1.6	0.9
Mining & quarrying (extraction)	-1.1	6.1	3.1	1.3	-4.3	-2.2	-3.2
Manufacturing	-0.8	1.3	3.0	3.2	3.0	2.6	1.3
Electricity, gas, steam and air supply	-3.0	-3.8	-10.4	-8.0	0.6	-3.7	3.3
Construction	5.0	5.1	9.7	8.5	7.2	4.5	-0.8
Distribution hotels and catering	3.3	4.4	5.0	4.5	4.2	5.2	4.7
Transport, storage and communication	1.6	1.4	0.2	2.2	3.5	4.3	5.0
Business services and finance	2.4	3.1	3.5	4.0	3.9	4.1	3.4
Government and other services	0.6	0.8	0.9	1.3	1.2	0.8	0.8

Source: Office for National Statistics (as of 28 April 2015)

Table 3.3 shows that all listed measures of domestic expenditure have shown positive annual growth (at market prices) across the sample. Investment fell heavily during the 2008/09 recession but has remained strong since the second half of 2013. Looking forward, investment is likely to remain positive, although general government expenditure is likely to remain tight.

**Table 3.3: UK domestic expenditure growth**

Annual % change

	2013			2014			
Expenditure	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Households	3.3	4.1	3.7	3.9	4.2	4.4	4.3
Non-profit institutions	2.9	5.1	4.4	3.6	1.1	2.3	0.2
General Government	1.9	1.1	1.4	2.4	1.9	3.5	0.7
Gross fixed capital formation	3.6	8.1	7.8	10.0	10.1	9.2	6.5

Source: Office for National Statistics (as of 28 April 2015)

Inflation has continued a downward trend over the past six months, with CPI inflation going negative at -0.1 per cent in April 2015, after standing at 0.0 per cent for both February and March 2015. Retail Price Index (RPI) inflation stood at 0.9 per cent for April 2015. Significant downward pressure from the fall in oil prices and lower food prices have resulted in the downward progress towards negative inflation, however the “downward contribution [in April] came from transport services,..., with the timing of Easter this year a likely factor”<sup>24</sup>. Prior to the release of these data, on 13 May, in his opening remarks to the press conference presenting the May Inflation Report, the Governor of the Bank of England, Mark Carney, stated that “although it [inflation] could temporarily turn negative in the near term, inflation is expected to pick up notably towards the end of the year as the past falls in prices drop out of the annual comparison”<sup>25</sup>.

There have been considerable movements in exchange rates over the course of the previous six months, largely due to external factors such as the recovery in the US economy, making the likelihood of interest rate rises there more probable. While the impact of “non-standard monetary policy”<sup>26</sup> (through quantitative easing), has led to a significant depreciation of the euro, to its lowest level against sterling for seven years.

As shown in Figure 3.8, there has been clear evidence of the appreciation of sterling against the euro over the last two years, although the pace of the appreciation has been more sudden over the last six months. The movements of sterling against the US dollar since July 2014 have been consistent, with a depreciation of the pound against the dollar. While the depreciation of sterling against the dollar may help exporters and make the UK a more attractive tourist location for this market, the appreciation of sterling against the euro will have offsetting impacts, and with the European Union being the UK’s largest trading partner, this could negatively impact exporters to the EU and may encourage greater imports to the UK.

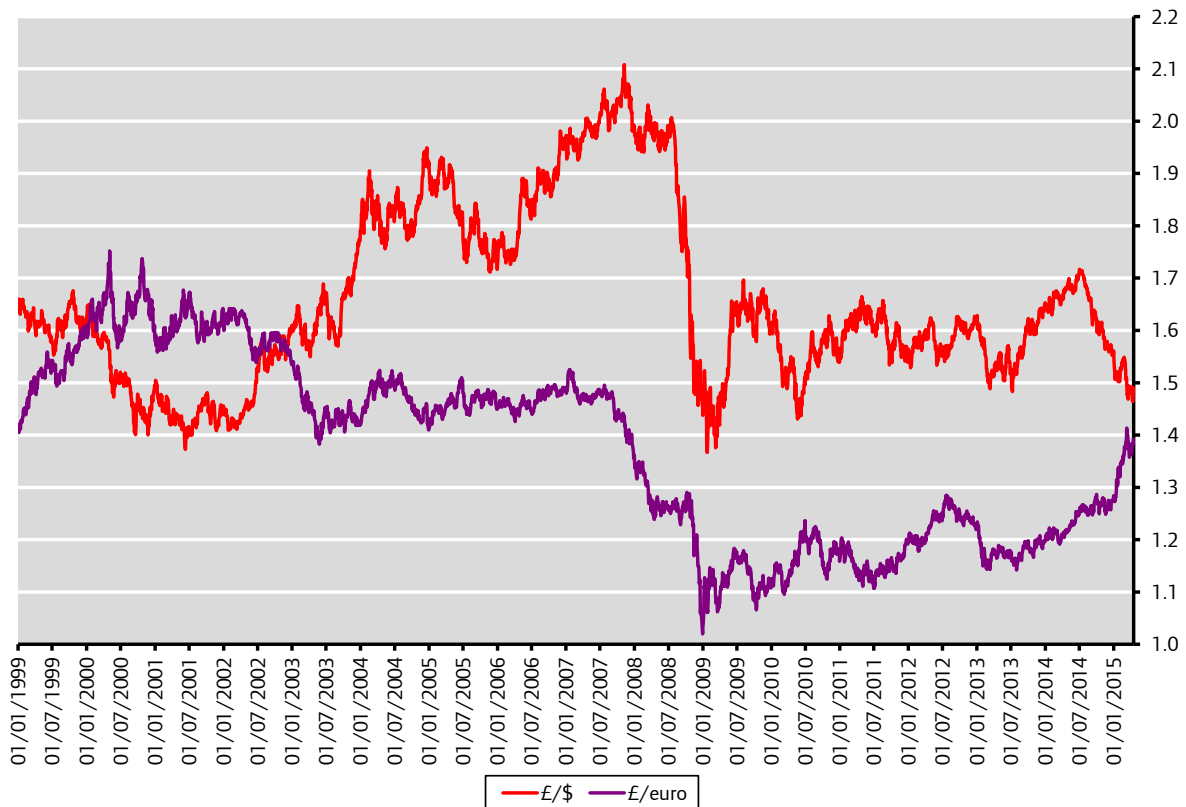
<sup>24</sup> ONS, ‘Consumer Price Inflation, April 2015’, 19 May 2015.

<sup>25</sup> Bank of England, ‘Inflation Report Press Conference, Opening remarks by the governor’, 13 May 2015.

<sup>26</sup> European Central Bank (ECB), ‘Introductory statement to the press conference’, Mario Draghi, 15 April 2015

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

Last data point is 16/04/2015



Source: Bank of England

Still sterling has generally appreciated against a number of currencies over the last two years, following the sharp depreciation of the currency between 2007 and early 2009. Between January and March, the Sterling effective exchange rate index (EERI)<sup>27</sup> (see Figure 3.9) appreciated by over five per cent, although it has fallen back slightly since early March. However the general appreciation of sterling may act as a means of making UK exports less competitive, especially in light of the significant depreciation of the euro (see Box 3.2 for further details).

<sup>27</sup> 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 16/04/2015



Source: Bank of England

### 3.3 The world economy

In April, the IMF released their latest World Economic Outlook<sup>28</sup>, which argued that there is a “complexity of the forces shaping macroeconomic evolutions around the world” and there is thus “a resulting difficulty of distilling a simple bottom line”. In the preface of the report, Oliver Blanchard, the IMF’s Chief Economist, reported that prospects for the world economy were uneven, and driven by two longer-term factors including the legacy of the financial and Eurozone crises and the reduction in potential output growth, but also noted current factors “that both have major distributional implications, namely, the decline in the price of oil and large exchange rate movements”. The variations in the movements of the forecasts by the IMF for individual countries were influenced by the specific impact of these factors, stating that “some countries suffer legacies, others do not. Some countries suffer from lower potential growth, others do not. Some countries’ currencies move with the dollar, others move with the euro, others with the yen.” Thus he observed given this statement, and that forecasts at an aggregated level show only minor revisions to those published in October, that “these aggregate numbers do not do justice to the diversity of underlying evolutions”.

As part of the World Economic Outlook, the IMF also released their forecasts for the world economy, which only marginally change global growth forecasts in 2015 and 2016 (compared to the update in January). For the world economy, growth is forecast to be 3.5 per cent for 2015, and 3.8 per cent for 2016 (an upward revision of 0.1 percentage points for 2016 from the January update). For the G7 economies, forecasts were unchanged from October, with growth of 2.3 per cent forecast in both 2015 and 2016, although there was variation between the countries. Amongst emerging market and developing economies, there were downward revisions

<sup>28</sup> IMF, ‘World Economic Outlook – Uneven Growth: Short- and Long-Term Factors’, April 2015.

for growth in China, forecast at 6.8 per cent in 2015 and 6.3 per cent in 2016 (downwardly-revised by 0.3 and 0.5 percentage points respectively); however for India there was a significant upgrade of over one percentage point for both 2015 and 2016, where growth is now forecast to be 7.5 per cent for both years.

The IMF also published their Global Financial Stability Report in April, which stated that over the past six months there has been “a wide range of positive and negative macroeconomic and financial developments...these developments have increased financial stability risks”. This is based on the argument that while global growth is expected to be “slightly higher” in 2015 compared to 2014, driven by lower oil and commodity prices, as well as expansive monetary policy, “the financial stability risks around this baseline are rising and rotating”. In particular the IMF reports that financial stability “is not fully grounded in advanced economies, and risks have increased in many emerging markets”. These include the volatility of exchange rates, described as having “increased by more than during any similar period since the global financial crisis”; rising credit risks and “strains in the debt-repayment capacity of the oil and gas sector” having particular effect on oil producing nations<sup>29</sup>.

### Box 3.1 Oil Prices and the global economy

The November edition of London's Economic Outlook noted that oil prices had dropped from the 2014-peak of \$115.1 per barrel on the 23<sup>rd</sup> of June to less than \$80 per barrel on the 17<sup>th</sup> of November – a fall of 31.3 per cent. Since then, Brent crude oil prices have fallen a further 41.1 per cent to \$46.6 per barrel on the 13<sup>th</sup> of January 2015, the lowest level since March 2009. However, since that low point, as shown in Figure 3.10, prices have partially recovered and currently stand at \$65.87 per barrel<sup>30</sup>, a price still significantly below the levels experienced in the 2011-2014 period.

The IMF states that the decline in oil prices between July and mid-October 2014 could be explained mostly by weak demand, which also affected the prices of other non-energy commodities<sup>31</sup>. Subsequently, supply factors were found to be the main contributors of lowering oil prices between mid-October 2014 and early January 2015. In particular, global oil supply was affected by the decision of the Organization of the Petroleum Exporting Countries (OPEC) to maintain current production levels despite the steady rise in production from non-OPEC producers, mainly the U.S.<sup>32</sup>.

<sup>29</sup> IMF, 'Global Financial Stability Report, April 2015: Navigating Monetary Policy Challenges and Managing Risks', April 2015.

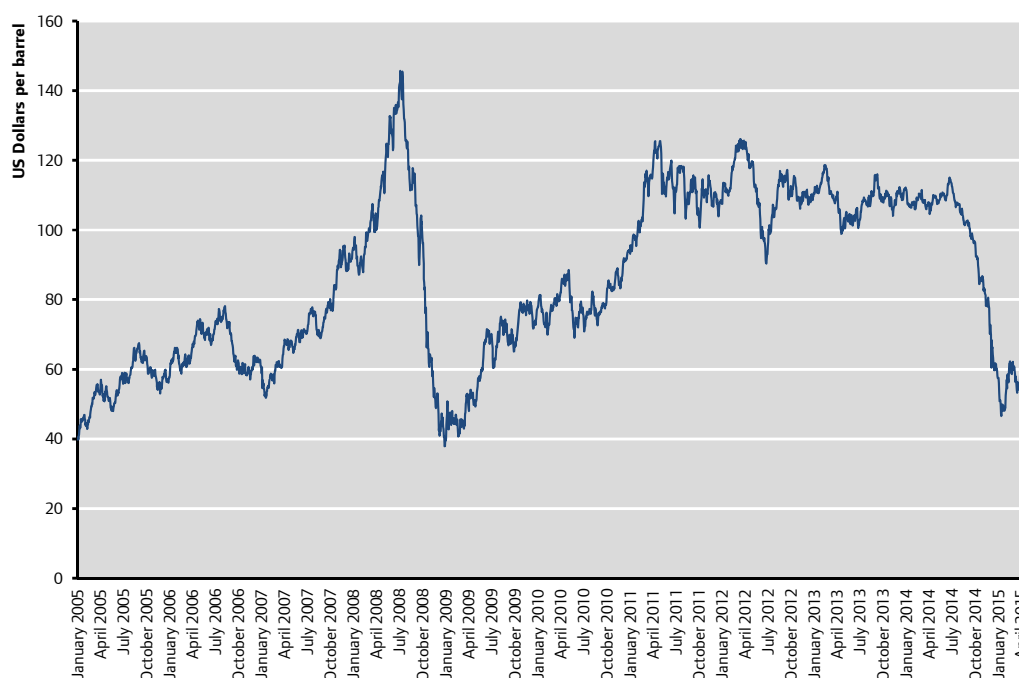
<sup>30</sup> As of 11<sup>th</sup> May 2015.

<sup>31</sup> IMF, 'World Economic Outlook – Uneven Growth: Short- and Long-Term Factors', April 2015.

<sup>32</sup> Organization of the Petroleum Exporting Countries (OPEC), 'OPEC 166<sup>th</sup> Meeting concludes', 27 November 2014.

**Figure 3.10: Brent oil price per barrel, US Dollars**

Last data point: 11 May 2015



Source: Macrobond

The overall impact of this decline in oil prices is expected to be mixed, with net-importer countries gaining and producer countries losing out. In the most recent publication of its Fiscal Monitor, the IMF estimated that oil importer countries' gains from lower oil prices could range from near zero to 5 per cent of GDP, depending on the expected pass-through of the international price to domestic retail prices<sup>33</sup>. For Central and Eastern European Countries and members of the Commonwealth of Independent States<sup>34</sup>, the savings on energy subsidies for 2015 are estimated at 0.5 per cent of GDP, assuming the historical prices pass-through considering the fact that the U.S. dollar appreciation against most currencies has dampened the positive effects of lower oil prices<sup>35</sup>.

While the gains from lower oil prices could be large, but spread across many importer economies, the adverse effects will be concentrated in relatively few producer countries. The IMF estimates an average impact on oil exporters' economies of 4 per cent of GDP in 2015, with country-specific estimates ranging from zero in Latin American and Asian and Pacific countries to more than 25 per cent of GDP in Middle Eastern and North African countries<sup>36</sup>.

However, the future impacts of lower oil prices will depend largely on the persistence of lower oil prices. In relation to this, the World Bank has stated that commodity prices are likely to remain low into 2015-2017, while the IMF has recently revised down its projections for oil prices

<sup>33</sup> IMF, 'Fiscal Monitor', April 2015.

<sup>34</sup> The Commonwealth of Independent States is a regional organisation whose participating countries are former Soviet Republics. Russia accounts for over 50 per cent of the population and over 75 per cent of the GDP of the Commonwealth of Independent States.

<sup>35</sup> IMF, 'Fiscal Monitor', April 2015.

<sup>36</sup> *Ibid.*

in 2019 from \$93 to \$72 a barrel<sup>37, 38</sup>. Furthermore, the IMF has warned that negative factors, such as investment weakness in response to diminished expectations, may offset the 'cheap-oil' boost experienced by oil importer countries<sup>39</sup>.

The IMF has also warned about the risks that oil prices may rebound faster than is currently expected. On the one hand, a sharp price increase may happen following a market correction of its recent behaviour, should it believe it has overreacted to the oil supply shock. On the other hand, oil prices could increase following a stronger than expected negative supply response to lower prices<sup>40</sup>. In contrast, the IMF would not consider a demand-driven oil price rebound negatively, as this higher demand would be representative of stronger overall global growth.

In addition to providing a boost to global growth, lower oil prices have impacted on inflation rates globally. As well as putting further downward pressure on inflation in economies that were already dealing with a low-growth and low inflation environment, such as Japan and the Eurozone as shown in Figure 3.11, the decline in oil prices has helped reduce inflation in the UK, the US and China. Specifically, slowing inflation was driven by energy prices more broadly, as gas prices declined as well over the same period. In the Eurozone, energy prices fell by 5.8 per cent in March 2015 when compared to a year earlier, up from -7.9 per cent in February<sup>41</sup>. The same had happened in the U.S., but energy prices rose 1.1 per cent in March (up from 1.0 per cent in February 2015 and -9.7 per cent in January 2015), showing hints of the non-persistence of lower oil prices impacts on overall inflation levels<sup>42</sup>. In contrast, energy prices' decline was less sharp but more persistent in the UK (-3.3 per cent in March 2015, down from -2.4 per cent in February 2015) with gas prices, alongside clothing, producing the largest downward contribution to the inflation rate in March 2015<sup>43</sup>.

A notable exception to this trend was Russia, which has experienced a growing inflation rate of up to 16.9 per cent in March 2015, having suffered from international sanctions that have led to a strong exchange rate depreciation from July 2014.

<sup>37</sup> World Bank, 'Global Economic Prospects', January 2015.

<sup>38</sup> IMF, 'World Economic Outlook – Uneven Growth: Short- and Long-Term Factors', April 2015.

<sup>39</sup> IMF, 'World Economic Outlook Update', 20 January 2015.

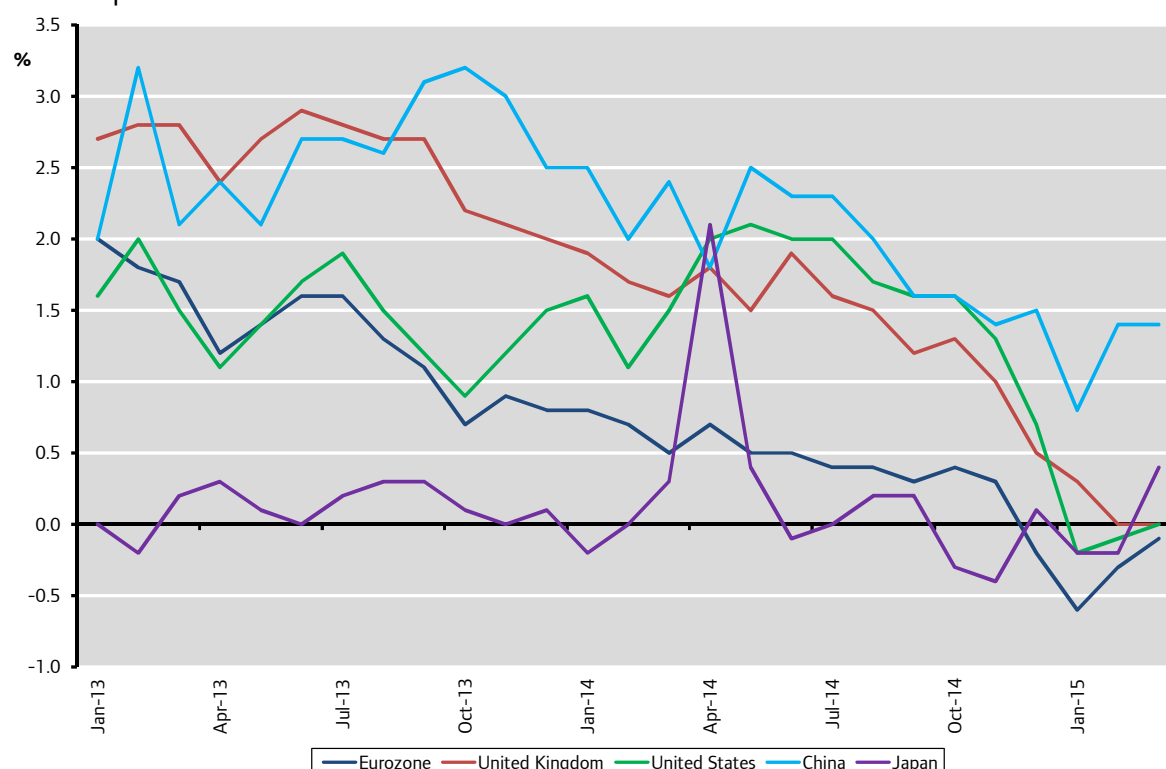
<sup>40</sup> IMF, 'World Economic Outlook – Uneven Growth: Short- and Long-Term Factors', April 2015.

<sup>41</sup> Eurostat, 'Euro area annual inflation up to -0.1%', 31 March 2015.

<sup>42</sup> Bureau of Labor Statistics, 'Consumer Price Index – March 2015', 17 April 2015.

<sup>43</sup> ONS, 'Consumer Price Inflation, March 2015', 14 April 2015.

**Figure 3.11: Consumer Price Index annual rate of change in selected countries**  
Last data point March 2015



Source: Eurostat, US Bureau of Labour Statistics, National Bureau of Statistics of China, Japan Statistics Bureau

Overall, while lower oil prices are expected to impact positively on global GDP, especially on oil importers, they are likely to have had little permanent effect on the global inflation rate. Indeed, the Bank of England, the ECB and the Federal Reserve Bank of Philadelphia all expect inflation to pick up in 2015<sup>44, 45, 46</sup>.

The **Eurozone** remains the single greatest downside risk to the UK economy, where much attention continues to centre on the troubles of the Greek economy and the potential knock-on effects to the rest of the bloc and major trading partners (see Box 3.2). Greece notwithstanding, growth in the Eurozone remains relatively weak, standing at 0.3 per cent in Q4 2014, and 0.9 per cent for 2014 as a whole. Still, there appears more of a consensus from within the Eurozone and outside, that there are positive signs for the Eurozone economy going forward. In the World Economic Outlook, the IMF summarise that “there are signs of a pickup and some positive momentum”. However they continue that “risks of prolonged low growth and low inflation remain”<sup>47</sup>, and the President of the ECB, Mario Draghi, in his statement prepared for the International Monetary and Financial Committee on 17 April stated that the “economic situation and short-term outlook for the euro area are currently brighter than they have been for several years”, continuing that “the economic recovery is expected to broaden and strengthen

<sup>44</sup> Bank of England, ‘Inflation Report’, February 2015.

<sup>45</sup> ECB, ‘Inflation forecasts’, April 2015.

<sup>46</sup> Federal Reserve Bank of Philadelphia, ‘First Quarter 2015 Survey of Professional Forecasters’, February 2015.

<sup>47</sup> IMF, ‘World Economic Outlook – Uneven Growth: Short- and Long-Term Factors’, April 2015.

gradually"<sup>48</sup>. However, the Eurozone has witnessed similar trends in inflation as with the rest of the global economy, with four consecutive months of negative inflation between December and March (although the first estimate for April shows zero inflation), a marginal improvement in labour market performance, and unemployment remains very high at 11.3 per cent in March 2015 (down 0.8 percentage points from its recent peak in 2013). Unemployment also remains very elevated in some member states (at 25.7 per cent in Greece in January, and 23.0 per cent in Spain in March – however in Spain, the unemployment rate has fallen by 2.1 percentage points over the last year).

### Box 3.2: Quantitative easing programme launched in the Eurozone

Since the publication of the Autumn 2014 LEO there have been significant moves from the ECB to kick-start the Eurozone recovery following a lengthy period of uncertainty, weak growth and deflationary concerns. The most significant development has been the launch of a programme of quantitative easing; ie, a programme where the ECB pumps new money into the economy in order to encourage private sector investment, and hence reduce deflationary pressure (for more on the deflationary pressures in the Eurozone see Box 3.1). On 22 January, the President of the ECB, Mario Draghi, announced a programme of asset purchases amounting to €60 billion a month, until at least September 2016. This comes off the back of other monetary policy initiatives put in place over the last year, including targeted longer-term refinancing operations, the third covered bond purchasing programme and the asset backed securities purchasing programme.

It is too early to provide a definitive judgement as to the impact the programme is having on the Eurozone's economy, but in a speech to the International Monetary and Financial Committee on 17 April, Mario Draghi stated that "there is clear evidence that the policy measures are effective, as financial market conditions and the cost of external finance for the private sector have eased considerably over the past months and borrowing conditions for firms and households have improved notably, with a pick-up in the demand for credit".

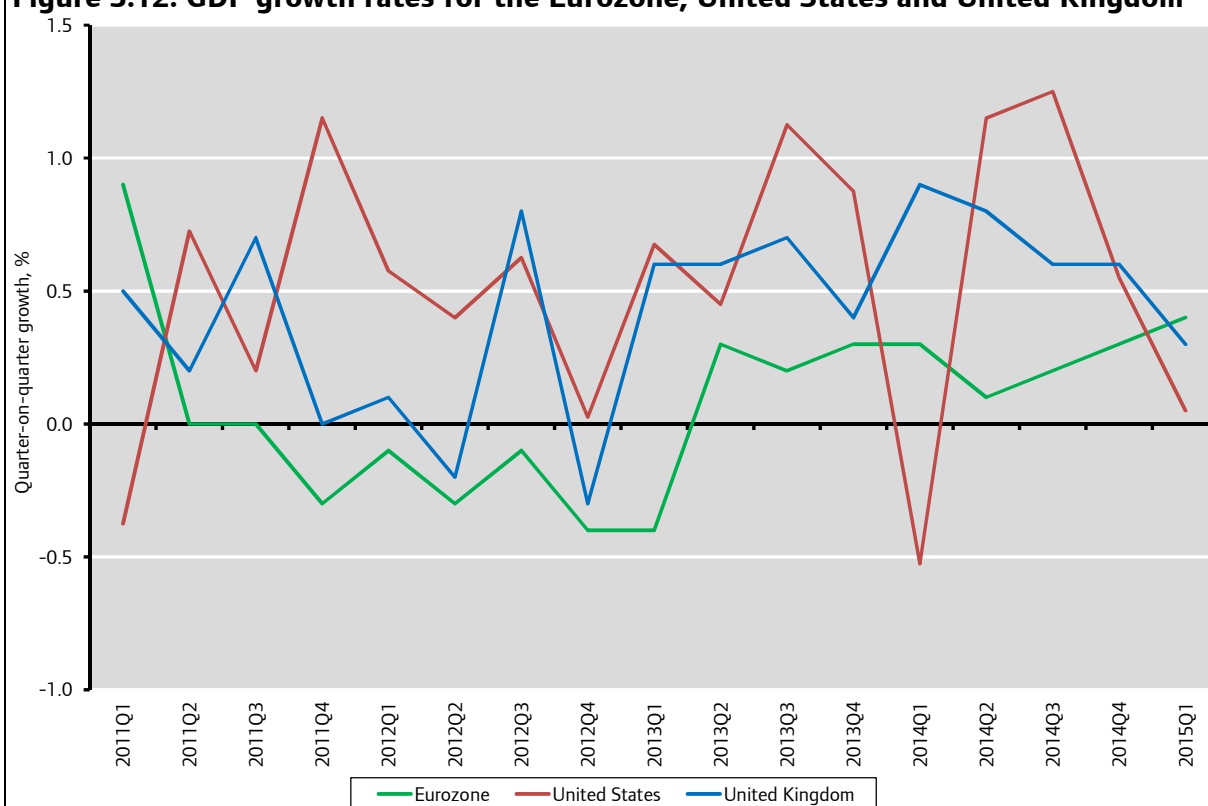
Data from the Euro Area Bank Lending Survey for April 2015 found evidence that "in the first quarter of 2015, credit standards on loans to enterprises were eased further, thereby supporting the recovery of loan growth"<sup>49</sup>, with a net percentage of banks reporting tighter lending standards falling from -5 per cent in January to -9 per cent in April. Easing lending standards may be more as a result of greater competition from other banks rather than banks' perceptions of risk from an improvement in the general economic situation and outlook. The survey went on to find that a net percentage of banks expect the volume of credit supplied to businesses and households to increase over the next three months, with a net percentage of 39 per cent expecting an increase to businesses (compared to 17 per cent in January), and a net percentage of 29 per cent expecting an increase to households (compared to 19 per cent in January). In a specific response to the programme of asset purchasing, the survey found evidence that, over the last six months, the additional liquidity "contributed somewhat" to an increase in loans granted to non-financial corporations, with 26 per cent stating this response, and 31 per cent expecting this over the next six months. The survey also found that the expanded asset purchasing "contributed somewhat" to a loosening of terms and conditions for loans and enterprises.

<sup>48</sup> ECB, 'Euro area economic outlook, the ECB's monetary policy and current policy challenges'. statement by Mario Draghi, 17 April 2015.

<sup>49</sup> ECB, 'The euro areas bank lending survey: first quarter of 2015', April 2015.

Data suggests that the Eurozone's performance in recent times has been improving although the economy can still only be seen as weak. Growth of GDP for 2014 as a whole stood at only 0.9 per cent (compared to 2.8 per cent for the UK and 2.4 per cent for the United States) and quarter-on-quarter growth rates have not shown a significant upward trajectory (as shown in Figure 3.12). Within the Eurozone, after witnessing 0.8 per cent growth in Q1 2014, Germany saw two quarters where no growth occurred, however Q4 2014 proved stronger with 0.7 per cent growth; meaning there was 1.5 per cent growth in 2014 for the largest economy in the Eurozone. The two other major economies in the Eurozone performed much more poorly with France contracting by 0.1 per cent, and Italy contracting by 0.4 per cent; however France grew by 0.6 per cent in Q1 2015. The Eurozone as a whole though continued its gradual pick-up in the first quarter of the year, with growth of 0.4 per cent, performing more strongly than the UK and the United States. The UK witnessed the slowest rate of growth for nine quarters, at just 0.3 per cent, and the United States saw annualised growth of just 0.2 per cent.

**Figure 3.12: GDP growth rates for the Eurozone, United States and United Kingdom**



Source: Eurostat; Office for National Statistics; Bureau of Economic Analysis. Quarter-on-quarter growth rates for United States are annualised growth rates for specific quarters divided by four.

Whilst GDP growth in the Eurozone has been positive for the past seven quarters, that growth has been relatively weak and has not shown significant upward momentum, ECB staff macroeconomic projections published in March have seen significant upward revisions<sup>50</sup>. The ECB now forecasts real GDP growth for 2015 of 1.5 per cent, an upward revision of 0.5 percentage points compared to the December forecast; and growth in 2016 of 1.9 per cent (upwardly-revised by 0.4 percentage points). The ECB outline a number of factors that are contributing to improved sentiment; notably the falls in oil prices, the depreciation of the euro

<sup>50</sup> ECB, 'March 2015 ECB staff macroeconomic projections for the euro area', March 2015

as well as the expansionary monetary policy. These forecasts for growth however are still disappointing when put in context of other major economies.

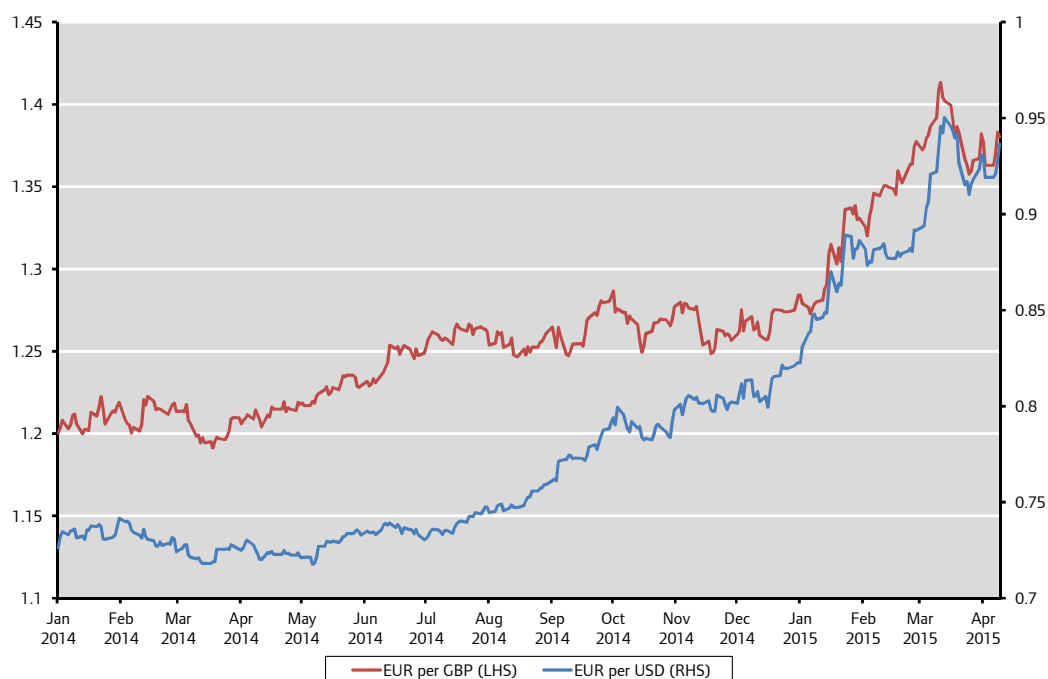
**Table 3.4: GDP growth forecasts (per cent), from selected organisations; 2015 – 2016; most recent published forecast**

	2015				2016			
	IMF	OECD	EC	OBR	IMF	OECD	EC	OBR
Eurozone	1.5	1.1	1.5	1.2	1.7	1.7	1.9	1.4
UK	2.7	2.7	2.6	2.5	2.3	2.5	2.4	2.3
US	3.1	3.1	3.1	--	3.1	3.0	3.0	--
World	3.5	3.7	3.5	3.5	3.8	3.9	3.9	3.6

Sources: IMF – International Monetary Fund; OECD – Organisation for Economic Co-operation and development; EC – European Commission; OBR – Office for Budget Responsibility

One factor specifically mentioned as a cause for optimism for the Eurozone was the movement in exchange rates. As indicated by Figure 3.13, there has been a significant depreciation in the Euro effective exchange rate over the course of the last year, which should create increased demand for Eurozone exports and increased domestic demand for goods, all of which should lead to increased output growth in the Eurozone.

**Figure 3.13: Euro to US Dollar; and Euro to Pound Sterling exchange rates**



Source: Bank of England

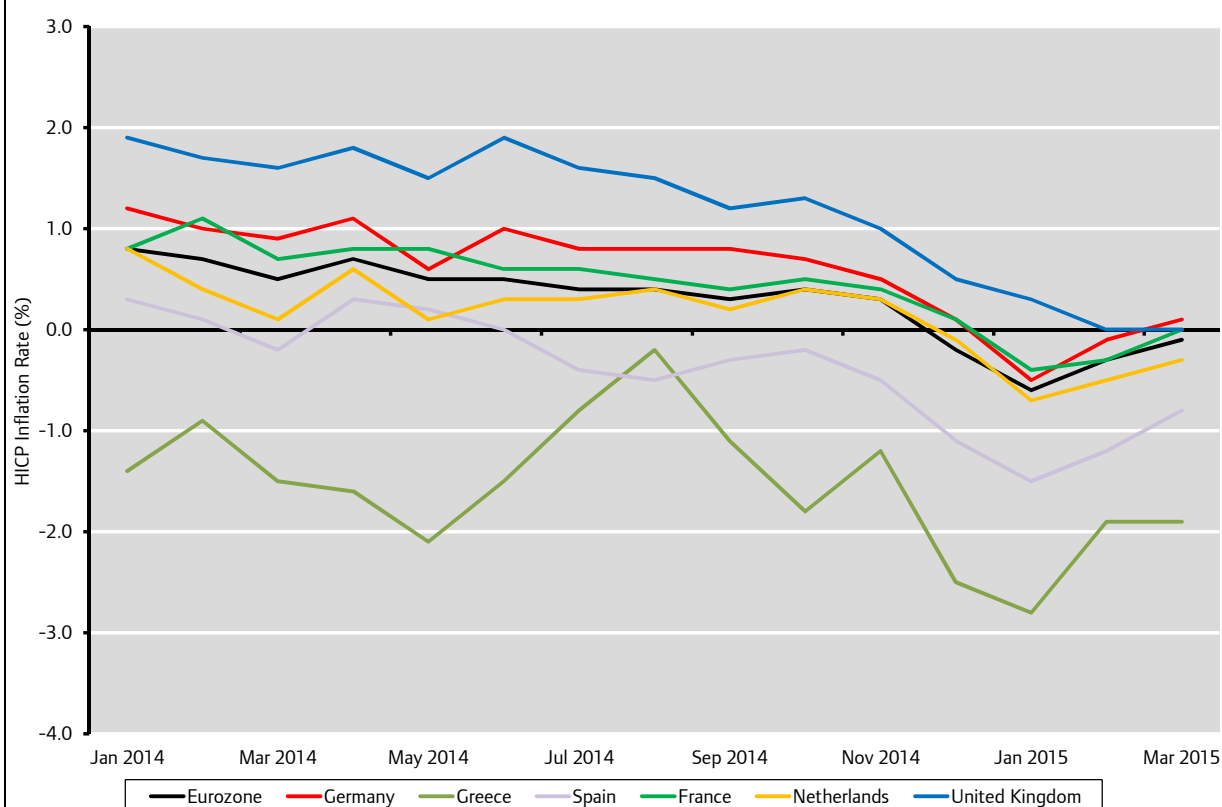
The sustained depreciation of the euro over the course of the last year has seen that, in March, the euro stood at its lowest level against the dollar for over 12 years and to its lowest level against the pound for over seven years. In the context of the euro to dollar exchange rate, a major factor in the recent path of the rate has been the announcement of the quantitative easing policy by the ECB alongside an expectation of an upward movement in interest rates by



the Federal Reserve in the near future. In their staff macroeconomic projections, the ECB assume an unchanged effective exchange rate of the euro through to the end of the forecast in 2017. An alternative scenario of continued depreciation against the dollar could mean that real GDP may increase further, by between 0.1 and 0.3 percentage points.

Inflation in the Eurozone remains below zero (ie, negative inflation or deflation). The move towards a policy of quantitative easing is intended to move inflation back towards the medium-term target of below, but close to 2 per cent (alongside the removal of the impacts of the fall in oil prices on the inflation rate calculation). Following the estimate of -0.6 per cent annual inflation in January 2015, more timely data has shown movement towards positive territory in recent months (standing at -0.1 per cent in March); however this masks significant differences between member states; with large falls in prices in Spain (-0.8 per cent) and Greece (-1.9 per cent).

**Figure 3.14: Inflation in selected European countries**



Source: Eurostat

Significant downside risks to the Eurozone still remain with the situation in Greece being the most pressing. Following the election of the new Prime Minister, Alexis Tsipras, on 25 January, under a manifesto of anti-austerity policies and the aim of a continued membership of the Eurozone; further loans from the ECB have been predicated on the successful implementation of economic reforms. Whilst Greece repaid loans to the IMF of €450 million on 9 April and €780m on 12 May, fears of a default remain significant. Further repayments to the IMF of over €2bn during June and July are required and treasury bills continue to mature over the coming months. Table 3.5 outlines the timetable of payments required by Greece's creditors from June through to August.

**Table 3.5: Timetable of repayments to creditors from Greece, and maturing of treasury bills**

Date	Event
5 June	IMF repayment: €310mn
12 June	Treasury bills maturing worth €3.6bn
12 June	IMF repayment: €350mn
16 June	IMF repayment: €580mn
19 June	Treasury bill maturing worth €1.6bn
19 June	IMF repayment: €350mn
10 July	Treasury bill maturing worth €2.0bn
13 July	IMF repayment: €465mn
1 August	IMF interest payment: €180mn
7 August	Treasury bill maturing worth €1.0bn

Source: Bloomberg, Barclays Research; sourced from *The Guardian*, 20 April 2015

In his speech to the IMF's International Monetary and Financial Committee on 17 April, Mario Draghi stated that the "economic situation and the short-term outlook for the euro area are currently brighter than they have been for several years", highlighting the role of a "strengthened financial sector, an accommodative macroeconomic policy setting, sound fiscal policies and a determination by euro area governments to pursue structural reforms" in enabling the Eurozone to witness sustained growth, whilst at the same time meeting the price stability mandate of inflation below, but close to 2 per cent over the medium term. However, such a programme of quantitative easing has led to bond yields in some countries falling to near record low levels; with German 10-year bond yields falling below 0.2 per cent in April, and other Eurozone economies having similarly low yields (and outside of the Eurozone, 10-year Swiss bond yields have turned negative). The movement towards bonds offering negative bond yields effectively means that investors are paying governments to borrow money for them, but investors may choose to invest in such bonds as a reaction to potential falls in asset and commodity prices, as well as a prediction on the future path of exchange rates.

Whilst the last six months has shown that growth in the Eurozone remains relatively sluggish, a more expansionary monetary policy should improve growth prospects in the region. However, the lack of a resolution to the debt situation in Greece continues to be the pre-eminent issue for the Eurozone and it is still not certain what the final outcome for Greece, the Eurozone and the global economy is going to be.

The **US** economy has witnessed some significant fluctuations in growth over the past year (see Figure 3.12), with data for the first quarter of 2015 showing that growth in the US economy has slowed, with only moderate annualised growth of 0.2 per cent<sup>51</sup>. For 2014 as a whole, output increased by 2.4 per cent, and the IMF forecasts stronger growth for both 2015 and 2016, of 3.1 per cent for both years. Much attention has been focussed on the potential upward movement of interest rates. When following the Federal Open Market Committee meeting of 17 – 18 March, the Chair of the Federal Reserve, Janet Yellen, provided clarification that they "anticipate that it will be appropriate to raise [the rate] when the Committee has seen further

<sup>51</sup> Bureau of Economic Analysis, 'National Income and Product Accounts: Gross Domestic Product: First Quarter 2015 (advance estimate)', 29 April 2015.

improvement in the labour market and is reasonably confident that inflation will move back to its 2 per cent objective over the medium term"<sup>52</sup>. On the former, total non-farm payroll jobs increased by 126,000 in March 2015, and are up by over 1.5 million since September 2014, and by 3.1 million since March 2014<sup>53</sup>. On the latter, the all items index of the Consumer Price Index, over the last 12 months, recorded a fall of 0.1 per cent in March before seasonal adjustment, the downward trend driven by sharp falls in energy prices<sup>54</sup>. The summary of economic projections of the Federal Reserve Board Members and Federal Reserve Bank Presidents for March 2015 has downwardly revised growth projections for 2015, 2016 and 2017. For 2015, the forecast is for between 2.3 and 2.7 per cent growth (down from between 2.6 and 3.0 per cent growth forecast in December). Further, the personal consumption expenditures (PCE) inflation forecast was also downwardly revised for 2015, now forecast at between 0.6 and 0.8 per cent (from the previous forecast of between 1.0 and 1.6 per cent); still beyond 2015, the inflation forecasts were largely unchanged<sup>55</sup>. Thus although interest rates are likely to soon rise in the US the exact timing of the rise is more uncertain.

**Japan's** economy exited recession in the fourth quarter of 2014, with the economy growing by 0.4 per cent in the final quarter; which was followed by a 0.6 per cent increase in Q1 2015, above market expectations. Data on inflation however continues to disappoint, with the consumer price index in February being unchanged, when accounting for the increase in the sales tax. The IMF's latest forecast has upwardly revised growth targets, forecasting 1.0 per cent growth in 2015 and 1.2 per cent growth in 2016 (upward revisions of 0.2 and 0.4 percentage points respectively). Inflation however has had a significant downward revision, with prices expected to rise by 1.0 per cent in 2015, and even more weakly in 2016, at 0.9 per cent.

---

<sup>52</sup> Federal Reserve, 'Transcript of Chair Yellen's FOMC Press Conference, March 18, 2015'.

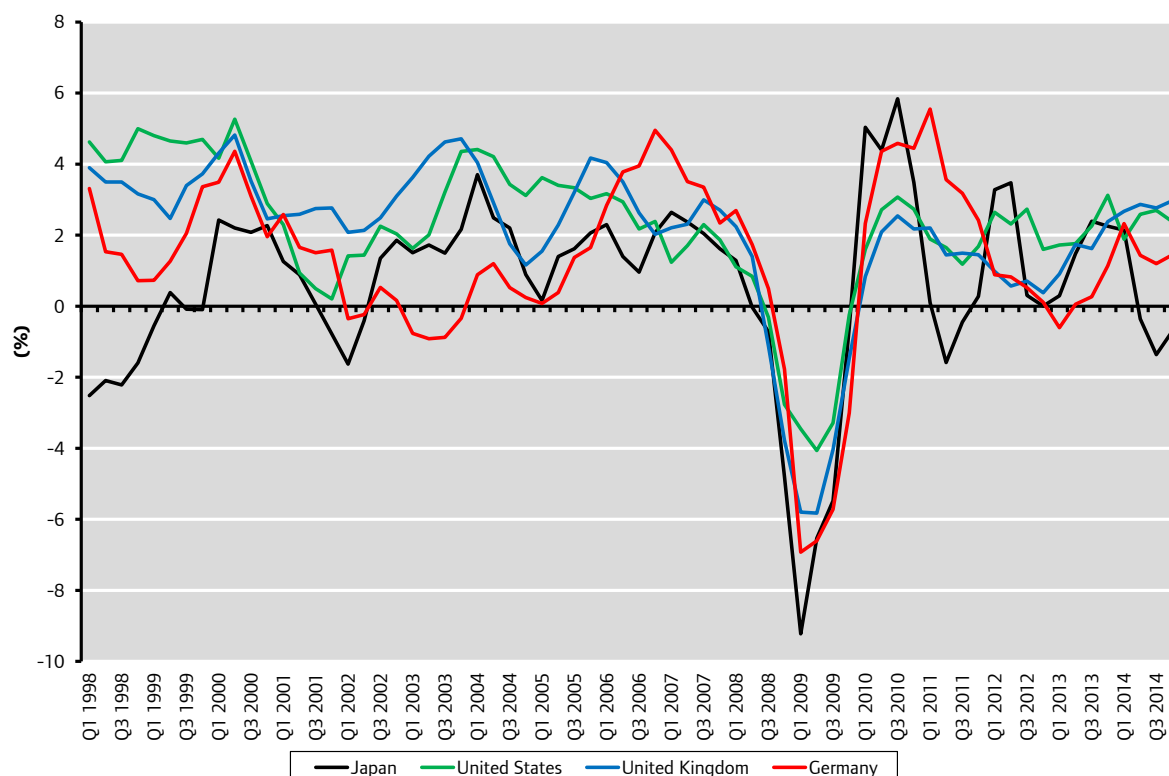
<sup>53</sup> Bureau of Labor Statistics, 'Economic News Release: Employment Situation Summary', 3 April 2015.

<sup>54</sup> Bureau of Labor Statistics, 'News Release: Consumer Price Index – March 2015', 17 April 2015.

<sup>55</sup> Federal Reserve, 'Economic Projections of Federal Reserve Board Members and Federal Reserve Bank Presidents, March 2015', 18 March 2015.

**Figure 3.15: GDP growth in selected industrialised countries**

Real GDP, annual % change, last fully available data point is Q4 2014



Source: OECD

### Box 3.3: Divergence in emerging markets set to continue in the near term

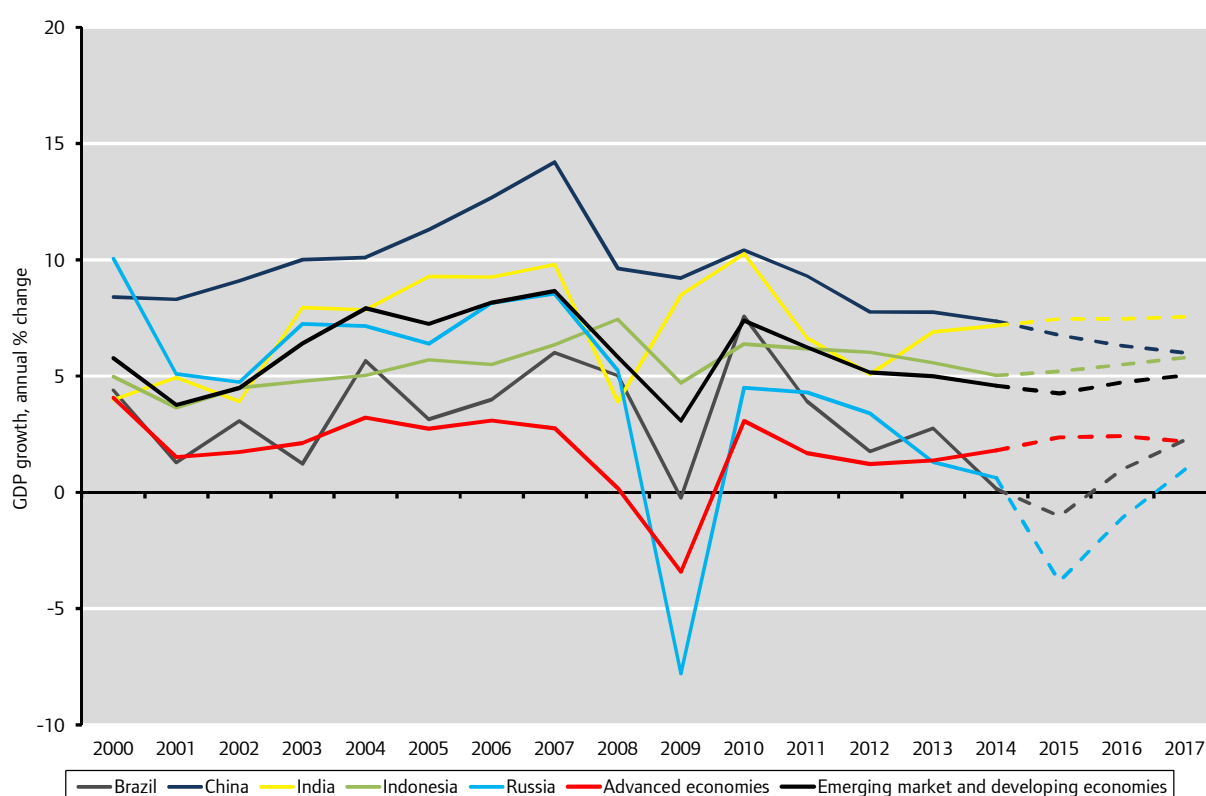
After a period of relatively strong growth in emerging economies since 2010, there was a shift in momentum in 2014 and emerging economies grew at their slowest pace since the financial crisis. This slowdown is likely to have been due to a number of factors, but growth slowing in China and lower oil prices (see Box 3.1) can partially explain these recent developments. Looking ahead, the ending of quantitative easing and the impending rise in interest rates in the US could lead to further headwinds in emerging market economies. Other factors that may further hinder growth prospects in the near term include the relatively high government debt to GDP ratios in some countries leaving little room for a fiscal boost to assist growth<sup>56</sup>, whilst inflation and wider macroeconomic instability may affect the prospects in others. Overall, the picture for the emerging markets is not consistent across economies. Some countries are set to benefit from a stronger US economy, whilst others will be affected by China's rebalancing act and the likely continuation of weak oil and commodity prices. This box will look at some of the reasons behind this emerging market slowdown and the likely path for growth in the next couple of years.

<sup>56</sup> Prudential debt limits (debt to GDP ratio) are considered to be different for developed economies compared to developing and emerging economies, ie, a direct comparison between the two groups may not be advisable. For developed economies, for example, the European Commission adopted the 60 per cent benchmark for the Stability and Growth Pact. Previous research from the IMF suggests that a debt to GDP ratio of 40 per cent for developing and emerging economies provides a reasonable benchmark but doesn't necessarily imply a crisis (IMF, 'Assessing Sustainability', May 2002).

## Economic growth in major emerging economies

Since the financial crisis, emerging economies have grown much more strongly than the advanced economies (see Figure 3.16). However, recent economic performance suggests a slowdown ahead. Figure 3.16 demonstrates GDP growth trends across five of the largest emerging economies as measured by gross domestic product (GDP) based on purchasing-power-parity (PPP) share of world total output<sup>57</sup> and shows the recent downturn in their growth. Jointly these five economies accounted for almost a third of the world's GDP in 2014 and the IMF estimates that emerging markets and developing economies will account for over 70 per cent of global growth in 2015<sup>58</sup>.

**Figure 3.16: Economic growth in selected emerging market economies**



Source: IMF

GDP data from the IMF demonstrate that for almost a decade **China** enjoyed close to double-digit growth in GDP and even during the global financial crisis the economy grew by over nine per cent in both 2008 and 2009 (solid lines in Figure 3.16 refer to historic data and the dashed line to forecasts). However, from 2010 onwards growth in China has slowed. In 2014, the IMF estimates that the Chinese economy recorded its slowest growth since the early 1990s with GDP growing by around 7.4 per cent compared to 2013. The outlook for growth is expected to moderate further with growth of 6.8 per cent forecast in 2015, 6.3 per cent in 2016 and 6.0 per cent in 2017. In **India** the trend is likely to be the opposite. Although growth has slowed from 10.3 per cent in 2010 reaching only around 5 per cent in 2012, conditions are improving again. Recent reforms and lower oil prices have contributed towards positive sentiment and after

<sup>57</sup> The IMF estimates are for 2014, however, the latest available data refer to 2011.

<sup>58</sup> IMF, 'World Economic Outlook: Uneven Growth – Short- and Long- Factors', April 2015.

growth of around 7.2 per cent in 2014 India's growth is expected to overtake China's in 2015 and average around 7.5 per cent until 2017<sup>59</sup>. In comparison economic conditions in **Russia** and **Brazil** have deteriorated sharply. First signs of weakening growth were evident in 2013, but the latest IMF estimates suggest that in 2014 the Russian economy grew by only around 0.6 per cent, whilst GDP in Brazil recorded growth of 0.1 per cent. Prospects beyond 2014 are set to weaken further with both economies expected to contract in 2015, Russia by 3.8 per cent and Brazil by 1.0 per cent. The key reasons for reductions in expected growth rates reflect lower oil prices and geopolitical tensions for Russia; and in Q1 2015 the economy shrank by 1.9 per cent compared to the previous year. In contrast, tighter fiscal and monetary policies as well as a drop in investment by the state-run oil company Petrobras are the key causes behind the deteriorating outlook for Brazil. From 2016 Brazil's economy is forecast return to growth (1.0 per cent) before growing by 2.3 per cent in 2017. Recovery in Russia is expected to take longer with a further decline of 1.1 per cent anticipated in 2016 before growth of 1.0 per cent in 2017.

**The slowing Chinese economy will impact many, whilst fluctuation in commodity prices will leave export dependent countries vulnerable**

As a result of the rebalancing of the Chinese growth model away from an economy driven by public sector investment and trade, and the slowing property market<sup>60</sup> in China (the key driver of growth for some time), combined with sluggish recovery in demand for commodities from the advanced economies, principally the Eurozone, global commodity prices have continued to cool since 2011. Sluggish global demand for commodities and moderating prices have affected growth performance of many emerging market exporters calling into question their traditional export models that focus on commodities.

The IMF estimates that China, the largest emerging market economy, accounted for around 16 per cent of total world output in 2014. Rebalancing of the Chinese economy towards increasing domestic consumption and services is likely to result in lower average annual growth rates in the future compared to what we have become accustomed to. In March 2015, the National People's Congress announced the new Chinese growth target for this year of around 7 per cent, down from 7.5 per cent in 2014 (the economy grew by around 7.4 per cent in 2014). The Chinese authorities have stressed that moderation in growth is inevitable and that slower growth is seen as the new normal for China<sup>61</sup> suggesting that with growth expected to slow further in 2016, it is likely that the growth target will be revised down further in 2016 and 2017. Whilst current government spending decisions continue to support growth, Chinese local government finances remain a concern. Thus although partial restructuring of local government debt<sup>62</sup> was announced in March 2015<sup>63</sup>, given that the local government organisations remain the most indebted public institutions in China<sup>64</sup> it is unlikely that further fiscal stimulus will be injected even if growth falls short of the target. However, in May 2015 the People's Bank of China cut its benchmark rate by 25 basis points to 5.1 per cent for the second time in 2015 to boost activity as growth continued to slowdown.

<sup>59</sup> Ibid.

<sup>60</sup> Rothman, A. in Beyonbricks guest post in the Financial Times 'Will China's property market crash?', March 2015.

<sup>61</sup> The National People's Congress of the People's Republic of China, 'Report on China's economic, social development plan', March 2015.

<sup>62</sup> Market analysis by Société Générale suggests that this could be as high as 47 per cent of GDP.

<sup>63</sup> Ibid.

<sup>64</sup> Economist, 'Defusing a bomb', March 2015.

The consequences of the slowing Chinese economy will leave some emerging markets more exposed than others. In particular, countries that are heavily reliant on commodity exports are more likely to be affected. Historically, South American countries have relied on China to purchase a lion's share of their exported commodities (around 19 per cent of Brazil's and 25 per cent of Chile's total exports went to China in 2013, according to the World Trade Organization) but China is also Africa's largest trading partner surpassing the US in 2009<sup>65</sup> with crude oil, raw materials and resources accounting for most exports. Commodity specialisation and dependency on exports amongst emerging and developing economies more generally vary from country to country. Figures from UNCTAD suggest that average dependency on commodities as a source of export revenue in 2009-10 was around 81 per cent for Africa, 56 per cent for Latin America and the Caribbean and, 28 per cent for developing Asia<sup>66</sup>.

Whilst the cooling in commodity prices will hinder growth prospects, they are also likely to result in sizeable budget deficits in 2015, in particular amongst the oil exporting emerging market economies (the IMF estimates that the average impact of lower oil prices will be around 4 per cent of GDP in 2015<sup>67</sup> for oil exporting economies). In countries where oil and commodity export revenue has contributed towards a large proportion of total fiscal revenue, and where this growth in revenue has financed increases in government expenditure, a fall in oil and in other commodity prices is likely to contribute towards worsening debt to GDP ratios (Figure 3.17)<sup>68</sup>. According to IMF estimates<sup>69</sup>, "most oil exporters need prices considerably above the \$58 a barrel projected for 2015 to cover budgetary spending (at current exchange rates)".

---

<sup>65</sup> Sun, Y. 'Africa in China's Foreign Policy', John L. Thornton China Center and the Africa Growth Initiative at Brookings April 2014.

<sup>66</sup> State of Commodity Dependence 2012. Special Unit on Commodities, UNCTAD.

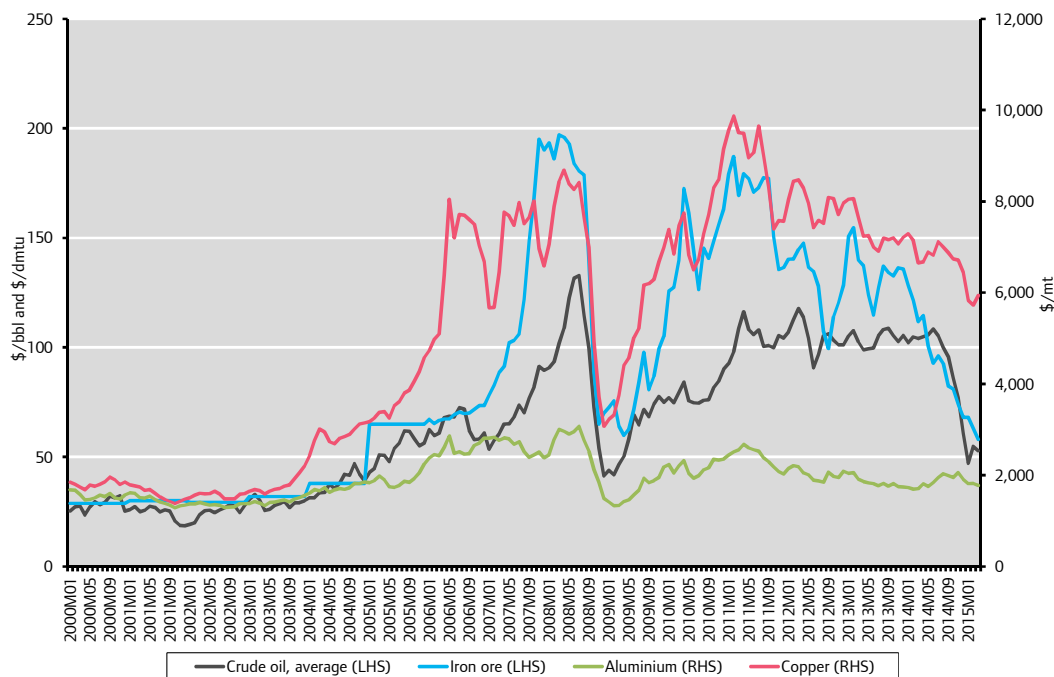
<sup>67</sup> IMF, 'Fiscal Monitor - Now is the Time: Fiscal Policies for Sustainable Growth' April 2015.

<sup>68</sup> Ibid.

<sup>69</sup> Ibid.

**Figure 3.17: Selected commodity prices<sup>70</sup>**

Last data point is March 2015



Source: World Bank, Pink Sheet

The most notable example is the importance of oil to a number of emerging economies the recent moderation in prices. According to the World Bank, oil prices<sup>71</sup> in March were around 55 per cent lower than in the post crisis peak in 2012 (Figure 3.17). Whilst the IMF estimates that the average fiscal saving is around 1 per cent of GDP in 2015 across oil importers in emerging and developing economies, including countries such as India and Brazil. Russia and Venezuela are the two most prominent victims of the recent price fall, even if the scale of the impact is likely to be very different. Russia's large foreign currency reserves have helped. However, the crisis in Ukraine and the tension with the European Union has exacerbated the recent economic situation for Russia. In contrast, Venezuela has had to swap gold reserves to secure dollar funding, whilst the macroeconomic instability continues to drag down prospects. The IMF forecasts that both economies will decline in 2015, Russia's by around 3.8 per cent and Venezuela's by 7 per cent.

A similar declining trend in prices has occurred across a number of other commodities. This weakening in demand started in 2011, largely explained by weaker global economic growth, with depressing effects on growth for commodity exporters. This declining trend is expected to continue with World Bank<sup>72</sup> forecasts suggesting that all main commodity prices will continue to deteriorate for the rest of the year, driven by plentiful supply, before a moderate recovery in prices begins in 2016.

<sup>70</sup> Oil prices are denoted in \$ per barrel (bbl), Iron ore in \$ per dry metric ton unit (dmtu), Copper in \$ per metric ton (mt) and Aluminium in \$ per metric ton (mt).

<sup>71</sup> Crude oil, average spot price of Brent, Dubai and West Texas Intermediate, equally weighed (World Bank).

<sup>72</sup> World Bank, 'Commodity Markets Outlook', April 2015.



### **Stronger growth in the US will benefit some, but the tightening monetary policy imposes challenges for others**

Strong recovery in the US has acted as a boost for many emerging economies with Mexico and China being the key beneficiaries<sup>73</sup>. Continued recovery in the US economy in 2014 made the timing of the first US interest rate rise a top item on the agenda in the Federal Reserve's latest monetary policy meeting. Despite the blip in Q1 2015 data economic sentiment remains optimistic and the Fed expects GDP "to expand at a moderate pace" in 2015, implying that it is unlikely that the first rate rise will be postponed much beyond 2015 given that 15 participants of the Federal Open Market Committee (FOMC) suggested that the appropriate timing of first rate rise is in 2015.

Tightening in the US monetary policy is expected to hit global bond markets hard with emerging economies likely to be disproportionately affected. Historic experiences suggest that turning points in the interest rate cycles tend to be hard to manage. A number of emerging market economies experienced rapid capital inflows and currency appreciation between 2010 and 2012. Given these historic experiences and these developments in emerging market economies, a reversal in monetary policy in the developed economies is likely to create substantial market volatility<sup>74,75</sup>. Furthermore, recent research from the Bank for International Settlements (BIS) suggests that monetary conditions in the advanced economies seem to drive policy rates in the emerging market economies "beyond what domestic factors would suggest"<sup>76</sup>. In this context, in April 2015 the IMF officials warned about a 'Super taper tantrum' that could follow the first rate rise in the US. Emerging market economies, and especially the corporate sector that has been tempted by low rates on dollar denominated debt, are likely to be severely affected<sup>77</sup>. Since the financial crisis, the relatively low cost of dollar denominated debt resulted in a sharp increase in bank loans and bonds provided by businesses that are not officially classified as banks outside the US, and according to BIS lending to non-bank borrowers outside the US has increased by over 50 per cent between the end of 2009 and September 2014<sup>78</sup>.

An indication of the size of the potential impact that a tightening of monetary policy in the US might have was first observed in 2013 when the Fed indicated that it would start tapering the pace of its quantitative easing programme. The impact of the first round of "taper talk" differed across the emerging economies but included rapid currency depreciations, declines in equity prices, and a slowing in capital flows<sup>79</sup>. However, some of the emerging economies are at least partially insulated from these effects due to their large foreign-exchange reserves (such as Russia and China). Others, such as Venezuela, with low reserves combined with high inflation (estimated at around 68.5 per cent in 2014) and wider concerns around macroeconomic stability are less prepared. Furthermore, although debt to GDP ratios are low compared to some advanced economies relatively high leverage in some of the emerging economies is likely to

---

<sup>73</sup> IMF, 'World Economic Outlook: Uneven Growth – Short- and Long- Factors', April 2015.

<sup>74</sup> In open economies, the monetary conditions are likely to transmit through the exchange rate (the currency will either appreciate or depreciate); through policy interest rates set by the central bank (eg, to avoid changes in competitiveness the central bank may choose to alter the interest rate); through the long-term interest rates (The US long-term rate will influence the global benchmark for risk appetite that will in consequence influence domestic long-term rates); through cross-border bank lending or through market risk-taking, effectively classed as 'capital flows'.

<sup>75</sup> The Bank for International Settlement (BIS), 'The transmission of unconventional monetary policy to the emerging markets – An overview', August 2014.

<sup>76</sup> BIS, 'International monetary policy transmission', August 2014.

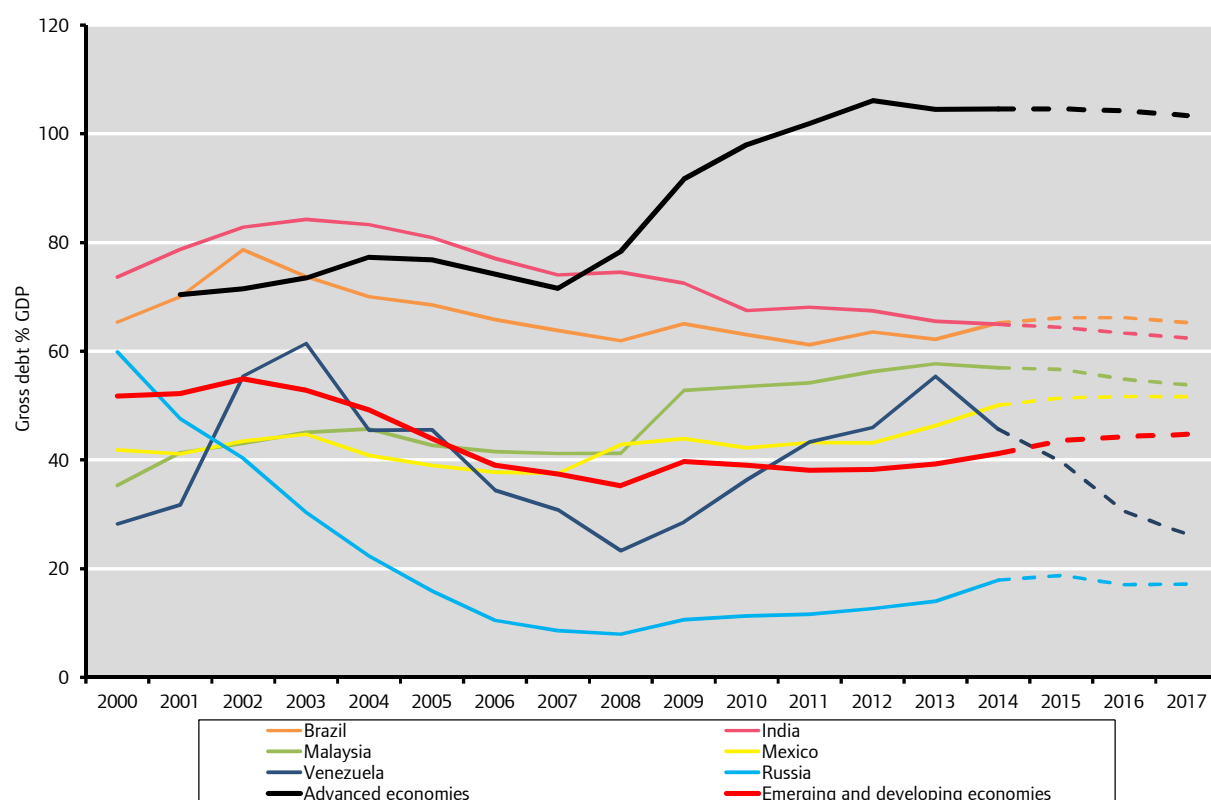
<sup>77</sup> BIS, 'Risks related to EME corporate balance sheets: the role of leverage and currency mismatch', September 2014.

<sup>78</sup> BIS, 'Global liquidity: selected indicators', February 2015.

<sup>79</sup> IMF, 'Emerging Market Volatility: Lessons from the Taper Tantrum', IMF Discussion Note, September 2014.

exacerbate the potential damaging effects of policy tightening in the US (Figure 3.18). In Brazil, where the government debt to GDP ratio, was estimated at 65.2 per cent in 2014, the government has announced planned reductions in government spending to regain policy credibility. Other examples include India with an estimated debt to GDP ratio of 65.0 per cent in 2014, but the latest predictions suggest that this will fall to around 62.4 per cent by 2017. Despite the expected rises in the bank base rate in the US the Federal Open Market Committee anticipates that the federal funds rate will be around 1.88 at the end of 2016<sup>80</sup>, a relatively low level by historical standards<sup>81</sup>.

**Figure 3.18<sup>82</sup>: General government gross debt in selected emerging market economies (historic and forecast)**



Source: IMF

To conclude, slower growth anticipated in emerging markets in 2015 implies that global growth prospects are now more internationally balanced given the recent upward revisions to some advanced economies' growth forecasts. Whilst the emerging market outlook remains mixed with commodity exporters set to experience a sharp slowdown due to lower commodity prices, improving prospects for the advanced economies will boost conditions for some. However, uncertainty around the implications of a Chinese slowdown and the end of monetary easing in the US and the UK are the key risks around the emerging market outlook going forward.

<sup>80</sup> This figure is based on the median of 17 board members' judgement of the appropriate pace of policy firming.

<sup>81</sup> The long-run average for Federal Funds Target Rate is around 5.6 per cent based on data starting from 1971.

<sup>82</sup> General government gross debt data for advanced economies from the IMF are available from 2001 to 2020.

### 3.4 Risks to the world economy

For London's economy, it is clear that the pre-eminent risk remains from within the Eurozone, and particularly the negative contagion effects which could occur from a Greek default, which despite the UK not being particularly exposed to Greek debt (as compared to Eurozone members in particular), the uncertainty and shocks to markets which could occur would have negative impacts to the UK and London's economy. Even without a default, continued protracted negotiations which result in no clear pathway to a resolution could also lead to negative sentiment across the Eurozone, potentially proving a roadblock to a stronger recovery.

In the Autumn 2014 LEO, the risks of low or negative inflation in the Eurozone was identified as a major risk due to the impact of falling prices on the burdens of debt to individuals and economies (given many members have large government debt to GDP ratios). Since the previous publication, inflation has turned negative in the Eurozone and was flat or slightly negative in the UK, however it is expected that as the pace in falls in oil and energy prices decrease, inflation will return to positive territory later in the year. Still, the risks of protracted low or negative inflation remain as a relevant downside risk for the global economy for the foreseeable future.

The past six months has seen significant downward movements in oil and commodity prices, such that in the IMF Global Financial Stability Report, there was an upward revision in the level of risks from emerging markets (compared to the previous report in October); as well as increased market and liquidity risks. Whilst the falls in oil prices act as a positive boost to consumer demand, and thus provide a boost in output (especially in advanced economies), it also has the potential effect of creating fiscal pressures on oil producing nations through reductions in oil revenues, especially as the IMF report that "U.S. dollar-based bond spreads for emerging market oil-exporting countries have already doubled since summer 2014, which suggests that refinancing conditions are now more problematic"<sup>83</sup>. Downside risks through falls in oil prices are more applicable to emerging markets, however this may prove to be a drag on growth going forward.

Also of note are the risks of a slowdown in emerging markets leading to wider contagion across the global economy. In its World Economic Outlook, the IMF forecast growth in China to reduce to "a more sustainable pace"<sup>84</sup>, however these forecasts have been downwardly revised from the report in November, and a slowdown in the Chinese economy is likely to also negatively impact on economies within the region, but also could impact on advanced economies if this results in a reduction in levels of trade. In particular, there has been a slowdown in investment growth in China, as a result of a slowdown in the real estate sector following very strong growth between 2009 and 2012; a further slowdown in investment will negatively impact China's growth and have wider global effects.

Significant movements in exchange rates have occurred over the last year, with the dollar appreciating strongly against the euro (and against other currencies). Since many developing and emerging economies hold debt in dollars, or have currencies pegged to the dollar, the appreciation of the currency could create pressures on balance sheets, could weaken economies' specific competitiveness, or create shocks to the economy through forced adjustments to exchange rate pegs. In particular, the appreciation of the dollar and Sterling against the euro

---

<sup>83</sup> IMF, 'Box 1.1: The Oil Price Fallout – Spillovers and Implications for the Financial Sector', IMF Global Financial Stability Report, April 2015.

<sup>84</sup> IMF, 'World Economic Outlook: Uneven Growth – Short- and Long- Factors', April 2015.

over the last year could potentially be a downside risk to the UK and London's economy, since the depreciation of the euro (which is partly as a result of the more expansive monetary policy of the ECB) would make Eurozone exports more competitive, hence impacting on exporters here in the UK.

Geopolitical risks such as through the conflicts in Ukraine and the Middle East have the potential to become a downside risk to the global economy, however it is the more pertinent risks from a persistence of low inflation across advanced economies; the potential shock to confidence through a default of Greek debt and subsequent exit from the Eurozone; and the risks to emerging market economies through a combination of commodity price falls and fiscal pressures, that are the most pressing downside risks to the forecast.

Upside risks to the forecast include global growth turning out stronger than currently expected. Upside effects such as through an increase in consumption as a result of oil prices may also occur across advanced and emerging economies. Closer to the UK, the outlook from the Eurozone has been more positive since the publication of Autumn 2014 LEO, and further increases in optimism and confidence of businesses to invest, and banks being more willing to loan to businesses following the increased liquidity provided by the ECB, may mean that growth in the Eurozone may be quicker than forecast. However, a review of the current state of the global economy shows that downside risks are more likely over the short to medium term.

### **3.5 Conclusion**

The review of 2014 for the UK is largely positive, with GDP growth of 2.8 per cent, a rate higher than other major advanced economies, and considerably faster than that of the Eurozone. However despite relatively strong growth and recovery post-recession (where UK GDP is now 4.0 per cent higher than the pre-recession peak of 2008 Q1), the falls in oil prices have meant that inflation has been low (recording -0.1 per cent in April), and well below the Bank of England's central symmetrical target. Despite this, inflation is expected to pick up towards the end of the year as the effects of the oil price changes fall out of the inflation calculation. This said, it now appears more likely that potential increases in interest rates will occur later than previously predicted and interest rates will stay low for a prolonged period of time even when they start to rise. Outside of the UK, there are signs that upward movement of interest rates from the Federal Reserve may occur in the near future, however this will likely have to be preceded by increases in the inflation rate.

Since the publication of Autumn 2014 LEO, the ECB made their most significant monetary policy announcement through the programme of quantitative easing. Whilst it is still too early to definitively assess the impact of the programme, there are indications that this is encouraging increased lending, and forecasts for growth have been upwardly revised. This said, it is clear that downside risks are still evident, with the most pressing in the context of the UK economy being from the continued crisis in Greece, to which the end outcome is still very uncertain. Wider global risks are also mostly downward in nature, especially for the emerging economies.

However, London's economy has continued to grow strongly and at a faster rate than that of the UK as a whole, there are continued improvements in the labour market, business confidence remains positive and consumer confidence has reached post-recession record high levels. Thus London's economy is expected to grow over the medium term in both output and employment, although this growth will moderate towards long-term trend levels later in the forecast period.

## 4. Review of independent forecasts

### What the forecasts provide

In Chapter 5, GLA Economics' forecast of four economic indicators is provided: workforce jobs, real output, private consumption (household expenditure) and household income in London. In this chapter the consensus view as of 27 May 2015 on the first three of these indicators is summarised<sup>85</sup>, drawing on forecasts from outside (independent) organisations<sup>86</sup>. 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 consensus<sup>87</sup> and GLA Economics' own forecasts provide predictions of employment and output growth in six broad sectors:

- manufacturing
- construction
- transportation and storage
- distribution<sup>88</sup>, accommodation and food service activities
- finance<sup>89</sup> and business services<sup>90</sup>
- other (public & private) services<sup>91</sup>.

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.

---

<sup>85</sup> 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.

<sup>86</sup> Most forecasters do not yet provide forecasts of household income.

<sup>87</sup> 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.

<sup>88</sup> Distribution is made from the summation of Wholesale and Retail (see Appendix A).

<sup>89</sup> This is defined as Financial and insurance activities in Appendix A.

<sup>90</sup> 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).

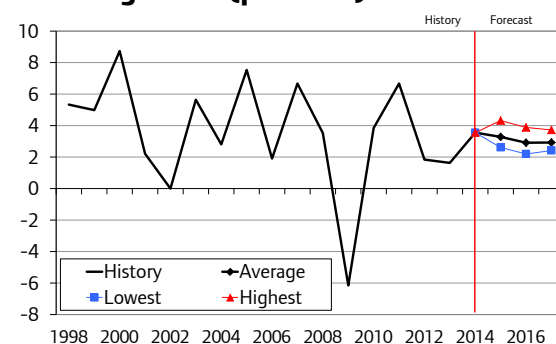
<sup>91</sup> This is made from the summation of Public admin and defence, Education, Health, Arts, entertainment and recreation and Other services (see Appendix A).

## Output

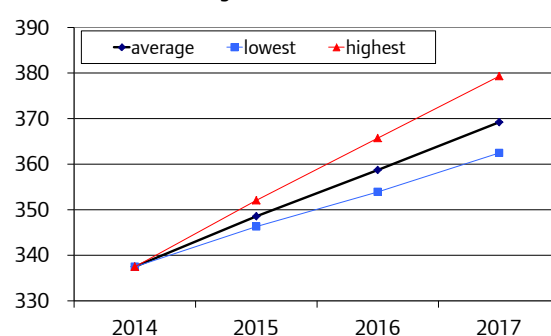
(London GVA, constant prices (base year 2011), £ billion)

The consensus (mean average view) is for real output growth to be 3.3 per cent in 2015, easing to 2.9 per cent in 2016 and 2017.

### Annual growth (per cent)



### Level (constant year 2011, £ billion)



Annual growth (per cent)				Level (constant year 2011, £ billion)			
	2015	2016	2017		2015	2016	2017
Average	3.3	2.9	2.9	Average	349	359	369
Lowest	2.6	2.2	2.4	Lowest	346	354	362
Highest	4.3	3.9	3.7	Highest	352	366	379

### History: Annual growth (per cent)

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
5.3	5.0	8.7	2.2	0.0	5.6	2.8	7.5	1.9	6.7	3.5	-6.1	3.8	6.7	1.8	1.6	3.5

### History: Level (constant year 2011, £ billion)

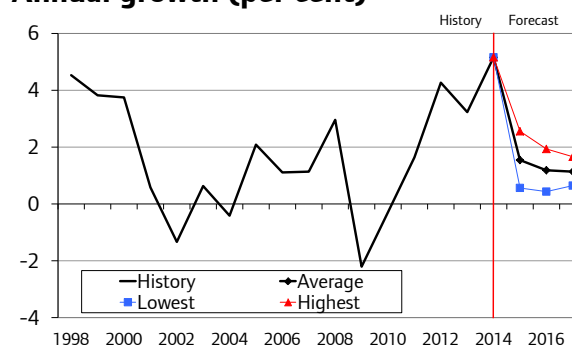
1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
187.6	197.6	207.4	225.5	230.5	230.5	243.5	250.3	269.2	274.3	292.6	302.9	284.3	295.2	314.9	320.7	325.9	337.5

## Employment

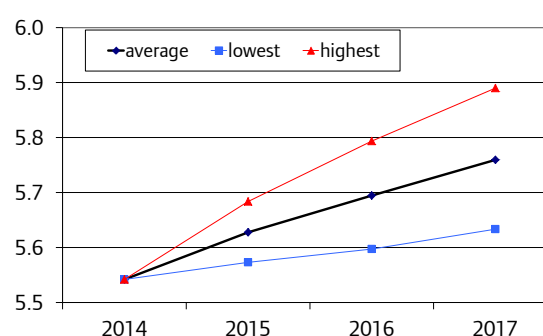
(London workforce jobs)

The consensus view is for the number of workplace jobs to increase by 1.5 per cent in 2015, by 1.2 per cent in 2016 and 1.1 per cent in 2017.

### Annual growth (per cent)



### Level (millions)



Annual growth (per cent)				Level (millions)			
	2015	2016	2017		2015	2016	2017
Average	1.5	1.2	1.1	Average	5.63	5.69	5.76
Lowest	0.6	0.4	0.6	Lowest	5.57	5.60	5.63
Highest	2.6	1.9	1.7	Highest	5.68	5.79	5.89

### History: Annual growth (per cent)

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
4.5	3.8	3.8	0.6	-1.3	0.6	-0.4	2.1	1.1	1.1	3.0	-2.2	-0.3	1.6	4.3	3.2	5.2

### History: Level (millions)

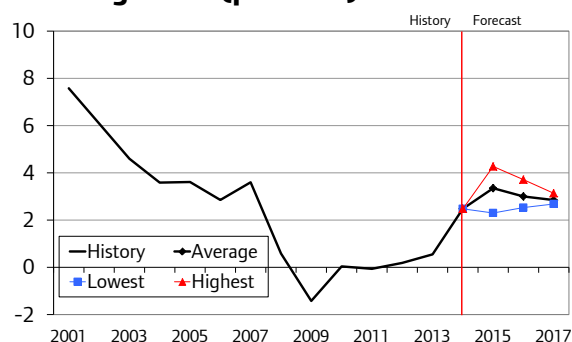
1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
4.10	4.29	4.45	4.62	4.65	4.59	4.61	4.60	4.69	4.74	4.80	4.94	4.83	4.82	4.90	5.11	5.27	5.54

## Household expenditure

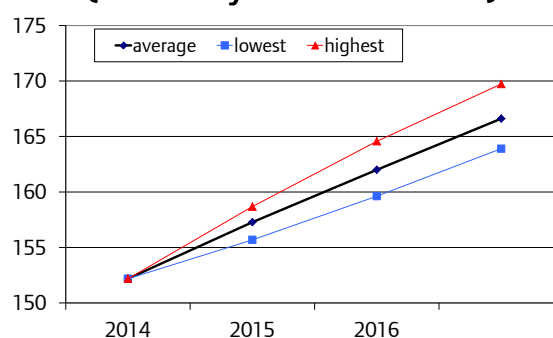
(London household spending, constant year 2011, £ billion)

The consensus view is for positive household expenditure growth of 3.3 per cent in 2015, 3.0 per cent in 2016 and 2.8 per cent in 2017.

### Annual growth (per cent)



### Level (constant year 2011 £ billion)



Annual growth (per cent)				Level (constant year 2011 £ billion)			
	2015	2016	2017		2015	2016	2017
Average	3.3	3.0	2.8	Average	157	162	167
Lowest	2.3	2.5	2.7	Lowest	156	160	164
Highest	4.3	3.7	3.1	Highest	159	165	170

### History: Annual growth (per cent)

2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
7.6	6.1	4.6	3.6	3.6	2.9	3.6	0.6	-1.4	0.0	-0.1	0.2	0.5	2.5

### History: Level (constant year 2011, £ billion)

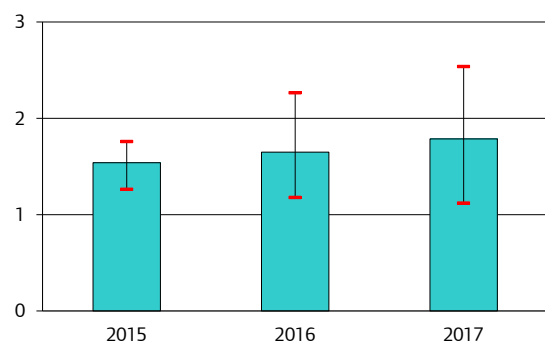
2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
108.9	117.2	124.3	130.1	134.7	139.6	143.6	148.7	149.6	147.5	147.5	147.4	147.7	148.5	152.2



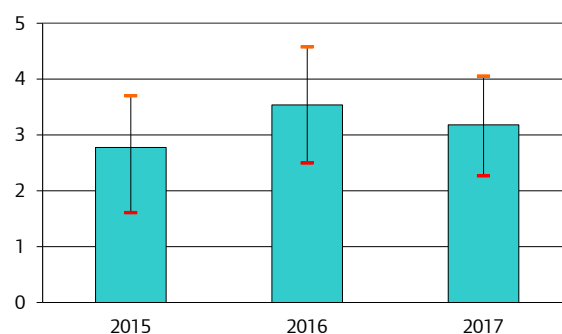
## Output growth by sector (per cent annual change)

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

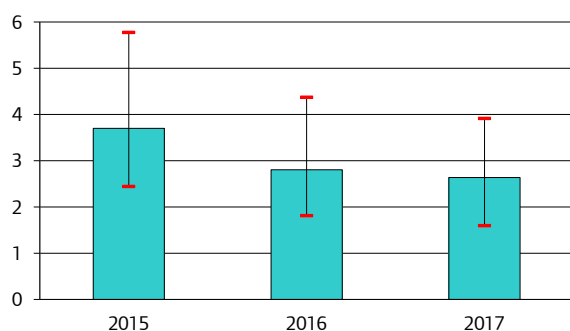
### Manufacturing



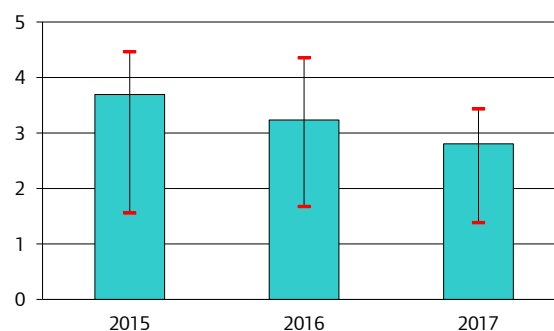
### Construction



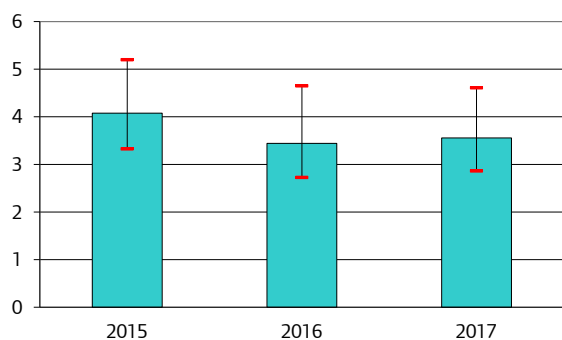
### Distribution, accommodation and food service activities



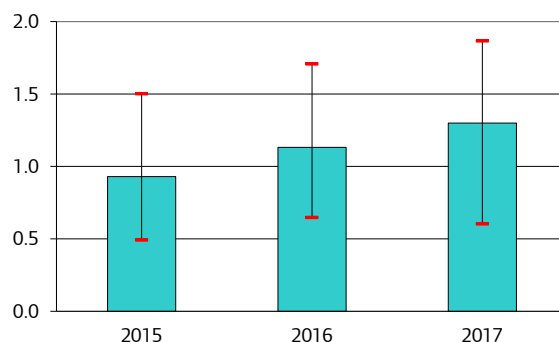
### Transportation and storage



### Finance and business



### Other (public & private) services

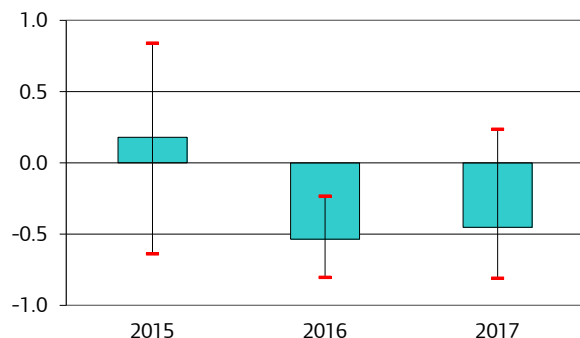


		2015	2016	2017			2015	2016	2017
<b>Manufacturing</b>	<i>Average</i>	1.5	1.6	1.8	<b>Construction</b>	<i>Average</i>	2.8	3.5	3.2
	<i>Lowest</i>	1.3	1.2	1.1		<i>Lowest</i>	1.6	2.5	2.3
	<i>Highest</i>	1.8	2.3	2.5		<i>Highest</i>	3.7	4.6	4.1
<b>Distribution, accommodation and food service activities</b>	<i>Average</i>	3.7	2.8	2.6	<b>Transportation and storage</b>	<i>Average</i>	3.7	3.2	2.8
	<i>Lowest</i>	2.4	1.8	1.6		<i>Lowest</i>	1.6	1.7	1.4
	<i>Highest</i>	5.8	4.4	3.9		<i>Highest</i>	4.5	4.4	3.4
<b>Finance and business</b>	<i>Average</i>	4.1	3.4	3.6	<b>Other (public &amp; private) services</b>	<i>Average</i>	0.9	1.1	1.3
	<i>Lowest</i>	3.3	2.7	2.9		<i>Lowest</i>	0.5	0.6	0.6
	<i>Highest</i>	5.2	4.6	4.6		<i>Highest</i>	1.5	1.7	1.9

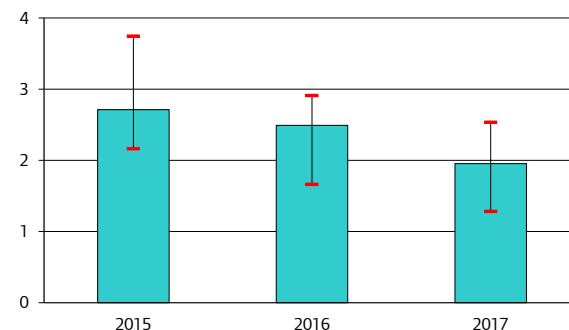
## Employment growth by sector (per cent annual change)

Forecast employment growth is positive for all sectors, excluding the other (public & private) services sector, where employment is expected to fall this year and the manufacturing sector which is expected to decline in 2016 and 2017.

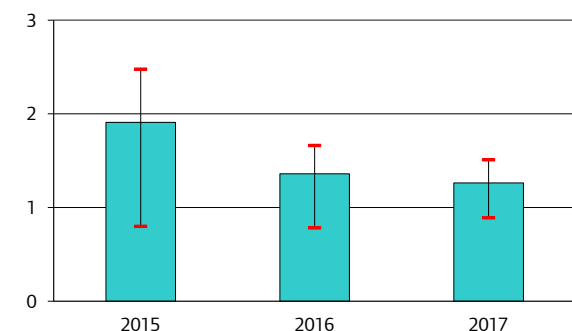
### Manufacturing



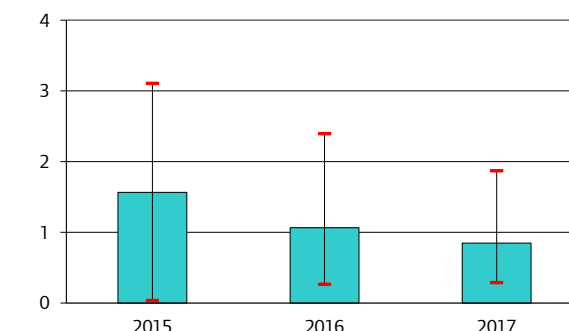
### Construction



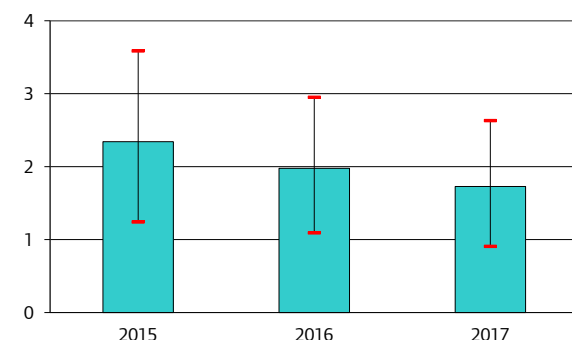
### Distribution, accommodation and food service activities



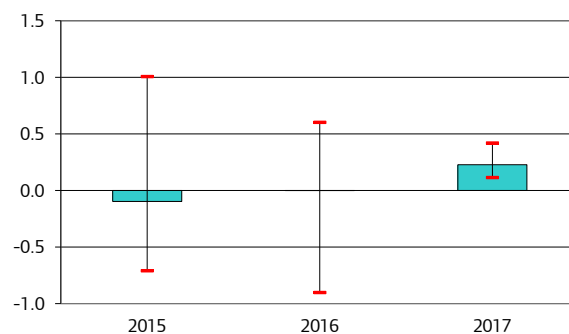
### Transportation and storage



### Finance and business



### Other (public & private) services



		2015	2016	2017			2015	2016	2017
<b>Manufacturing</b>	Average	0.2	-0.5	-0.5	<b>Construction</b>	Average	2.7	2.5	2.0
	Lowest	-0.6	-0.8	-0.8		Lowest	2.2	1.7	1.3
	Highest	0.8	-0.2	0.2		Highest	3.7	2.9	2.5
<b>Distribution, accommodation and food service activities</b>	Average	1.9	1.4	1.3	<b>Transportation and storage</b>	Average	1.6	1.1	0.8
	Lowest	0.8	0.8	0.9		Lowest	0.0	0.3	0.3
	Highest	2.5	1.7	1.5		Highest	3.1	2.4	1.9
<b>Finance and business</b>	Average	2.3	2.0	1.7	<b>Other (public &amp; private) services</b>	Average	-0.1	0.0	0.2
	Lowest	1.2	1.1	0.9		Lowest	-0.7	-0.9	0.1
	Highest	3.6	3.0	2.6		Highest	1.0	0.6	0.4

## **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.

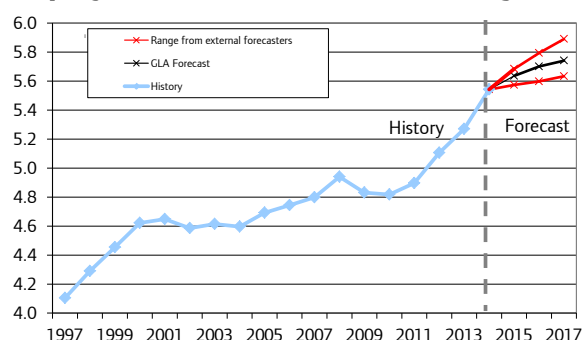
## 5.1 Results

Following the resumption of positive growth in 2010, output is expected to continue to rise between 2015 and 2017. Employment growth is forecast to be positive but to slow over the forecast period.

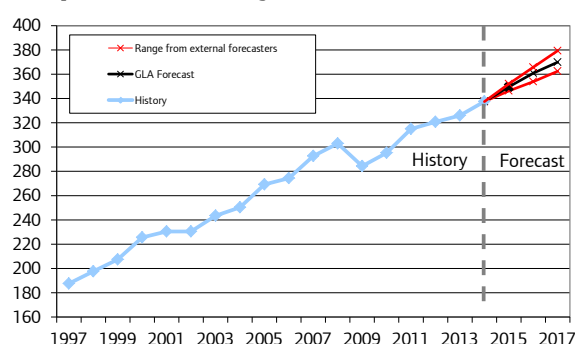
Household spending is expected to continue to grow between 2015 and 2017. Household income growth is also expected to be positive over the forecast period.

**Figure 5.1: Trend and forecast employment and output**

**Employment (millions of workforce jobs)**



**Output (constant year 2011, £ billion)**



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

**Table 5.1: Forecast and historical growth rates**  
(Annual % change)

	2009	2010	2011	2012	2013	2014	2015	2016	2017
GVA	-6.1	3.8	6.7	1.8	1.6	3.5	3.6	3.2	2.5
Workforce jobs	-2.2	-0.3	1.6	4.3	3.2	5.2	1.7	1.2	0.7
Household spending	-1.4	0.0	-0.1	0.2	0.5	2.5	3.0	2.9	2.4
Household income	3.8	1.5	-1.2	2.0	0.2	2.3	3.0	2.9	2.8

**Table 5.2: Forecast and historical levels**  
(constant year 2011, £ billion except jobs)

	2009	2010	2011	2012	2013	2014	2015	2016	2017
GVA	284.3	295.2	314.9	320.7	325.9	337.5	349.5	360.9	369.9
Workforce jobs (millions)	4.83	4.82	4.90	5.11	5.27	5.54	5.64	5.70	5.74
Household spending	147.5	147.5	147.4	147.7	148.5	152.2	156.8	161.4	165.3
Household income	177.1	179.7	177.6	181.1	181.5	185.6	191.3	196.8	202.3

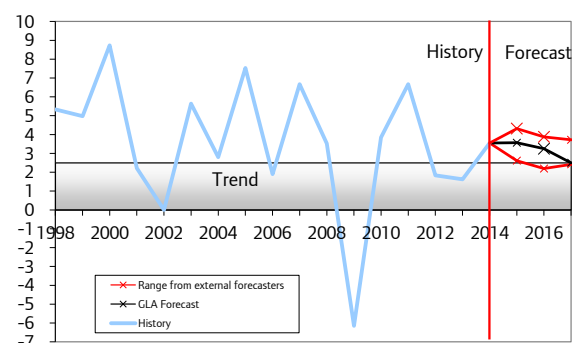
## Output

(London GVA, constant year 2011, £ billion)

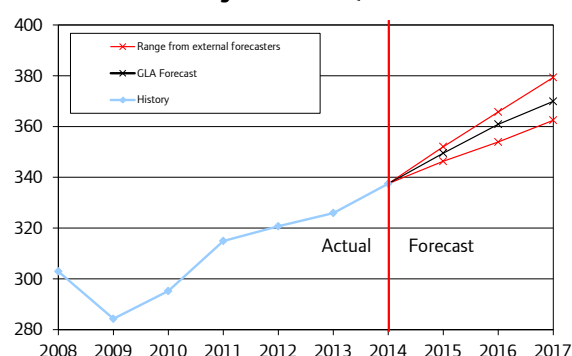
London's real GVA is forecast to grow between 2015 and 2017. Forecast growth rates are 3.6 per cent in 2015, 3.2 per cent in 2016 and 2.5 per cent in 2017.

The GLA Economics' forecast is more optimistic than the consensus average forecast in 2015 and 2016, but more pessimistic in 2017.

## Annual growth (per cent)



## Level (constant year 2011, £ billion)



Growth (annual per cent)					Level (constant year 2011, £ billion)				
	2014	2015	2016	2017		2014	2015	2016	2017
GLA	3.5	3.6	3.2	2.5	GLA	337	350	361	370
Consensus		3.3	2.9	2.9	Consensus		349	359	369

## History: Annual growth (per cent)

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
5.3	5.0	8.7	2.2	0.0	5.6	2.8	7.5	1.9	6.7	3.5	-6.1	3.8	6.7	1.8	1.6	3.5

## History: Level (constant year 2011, £ billion)

1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
187.6	197.6	207.4	225.5	230.5	230.5	243.5	250.3	269.2	274.3	292.6	302.9	284.3	295.2	314.9	320.7	325.9	337.5

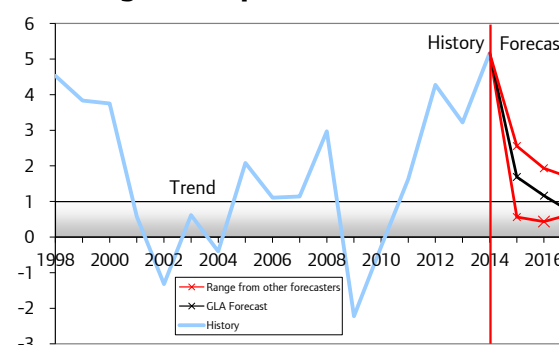
## Employment

(London workforce jobs)

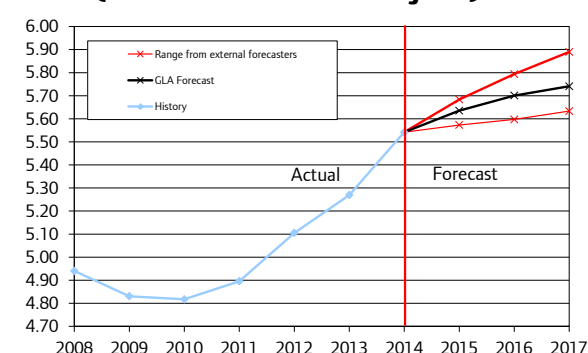
London's employment is forecast to rise between 2015 and 2017.

GLA Economics' forecast for employment growth is higher than the consensus average forecast in 2015 but more pessimistic for 2016-2017.

### Annual growth (per cent)



### Level (millions of workforce jobs)



Growth (annual per cent)					Level (millions of workforce jobs)				
	2014	2015	2016	2017		2014	2015	2016	2017
GLA	5.2	1.7	1.1	0.7	GLA	5.54	5.64	5.70	5.74
Consensus		1.5	1.2	1.1	Consensus		5.63	5.69	5.76

### History: Annual growth (per cent)

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
4.5	3.8	3.8	0.6	-1.3	0.6	-0.4	2.1	1.1	1.1	3.0	-2.2	-0.3	1.6	4.3	3.2	5.2

### History: Level (millions)

1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
4.10	4.29	4.45	4.62	4.65	4.59	4.61	4.60	4.69	4.74	4.80	4.94	4.83	4.82	4.90	5.11	5.27	5.54

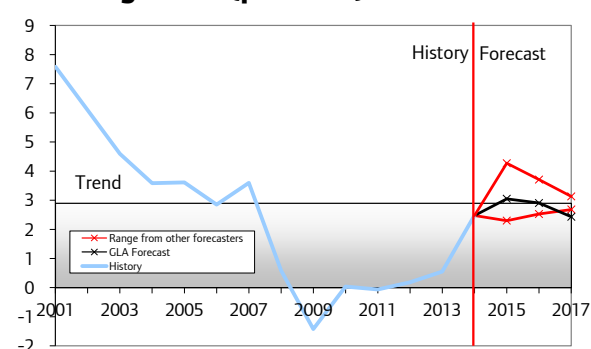
## Household expenditure

(London household spending, constant year 2011, £ billion)

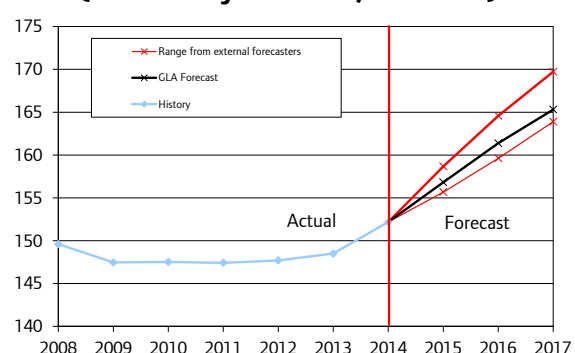
Growth in London's household spending is forecast to be positive over the forecast period.

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

### Annual growth (per cent)



### Level (constant year 2011, £ billion)



Growth (annual per cent)					Level (constant year 2011, £ billion)				
	2014	2015	2016	2017		2014	2015	2016	2017
GLA	2.5	3.0	2.9	2.4	GLA	152	157	161	165
Consensus		3.3	3.0	2.8	Consensus		157	162	167

### History: Annual growth (per cent)

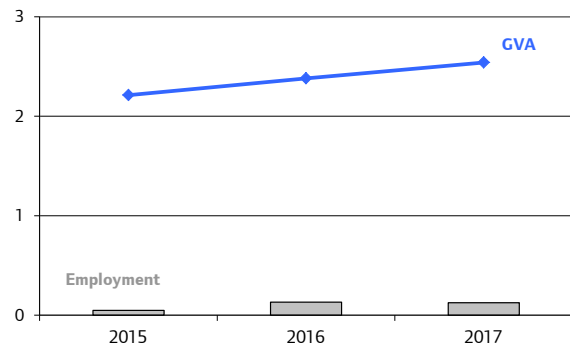
2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
7.6	6.1	4.6	3.6	3.6	2.9	3.6	0.6	-1.4	0.0	-0.1	0.2	0.5	2.5

### History: Level (constant year 2011, £ billion)

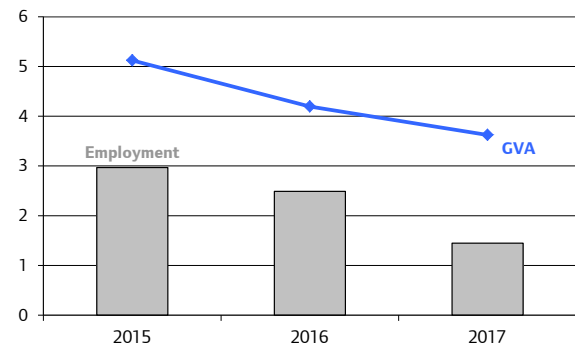
2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
108.9	117.2	124.3	130.1	134.7	139.6	143.6	148.7	149.6	147.5	147.5	147.4	147.7	148.5	152.2

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

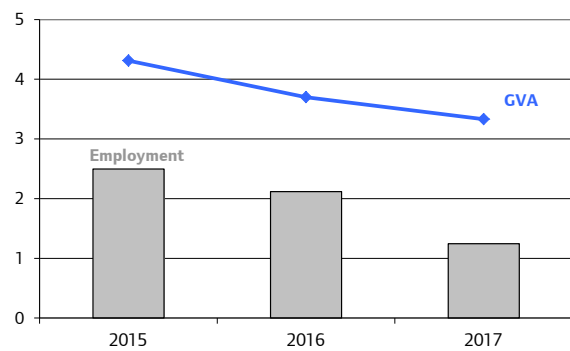
### Financial services



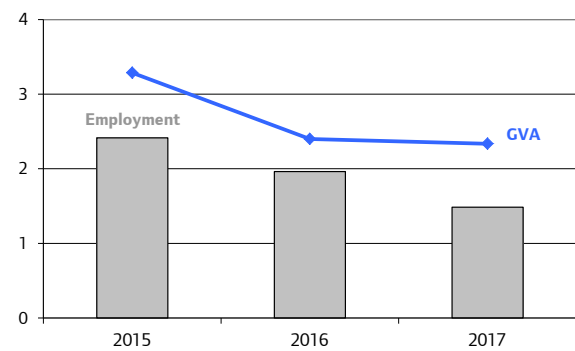
### Business services



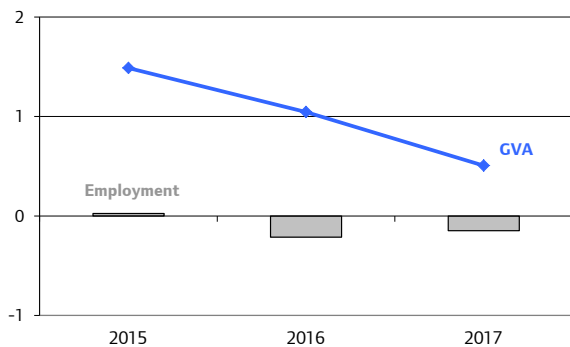
### Finance and business (combined)



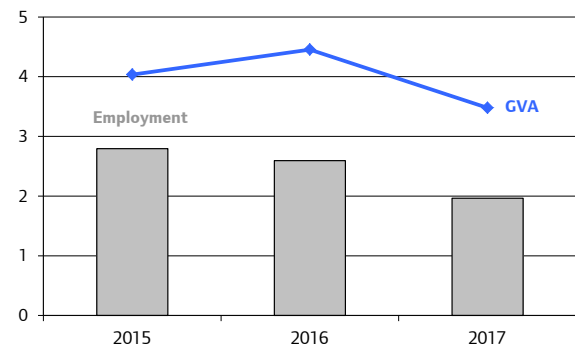
### Distribution, accommodation and food service activities



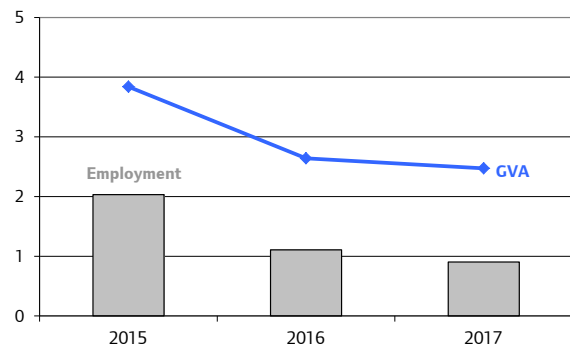
### Manufacturing



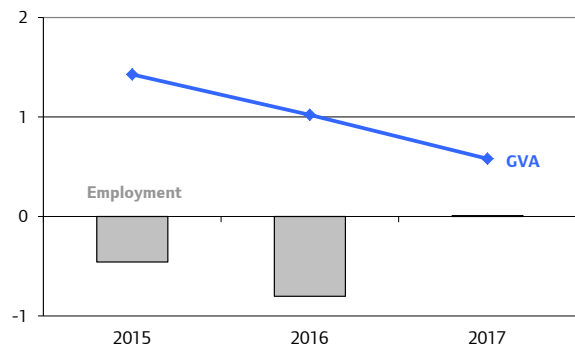
### Construction



### Transportation and storage



### Other (public & private) services





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

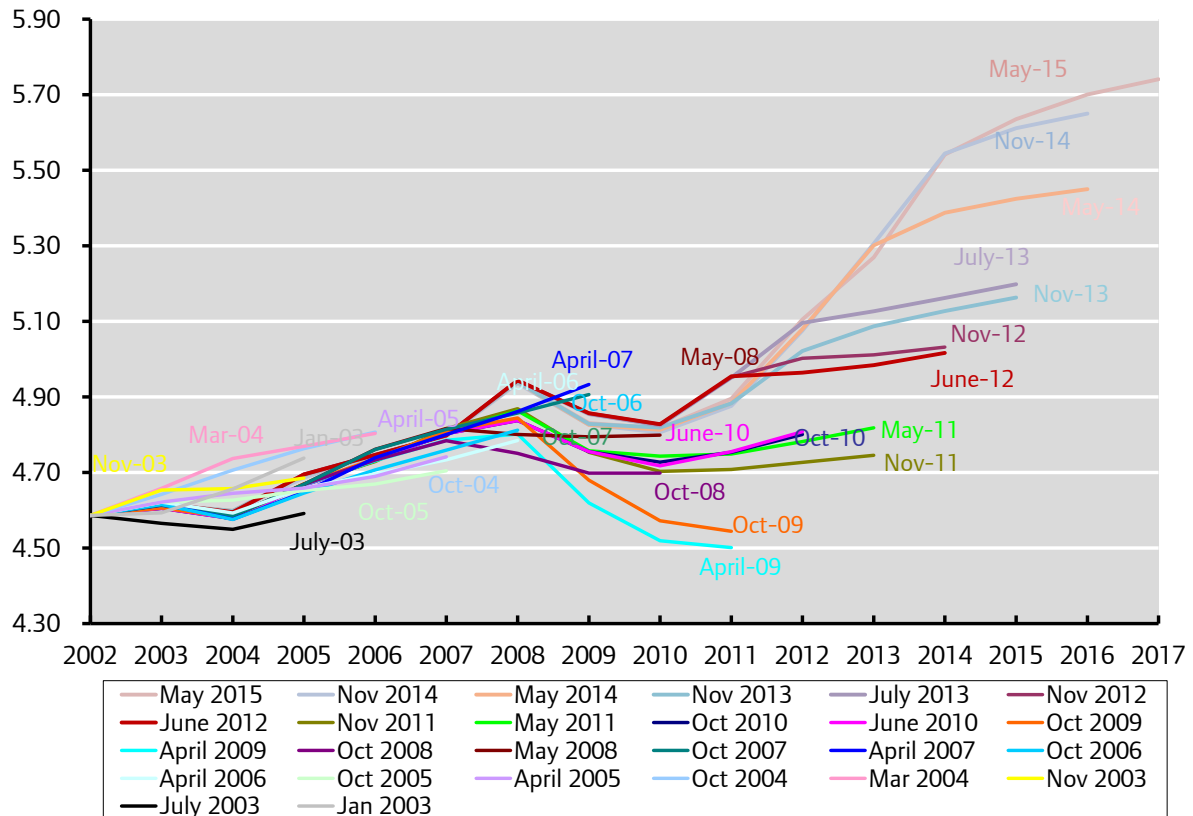
	2015	2016	2017
<b>Financial services</b>			
Output	2.2	2.4	2.5
Employment	0.0	0.1	0.1
<b>Business services</b>			
Output	5.1	4.2	3.6
Employment	3.0	2.5	1.4
<b>Financial and business services combined</b>			
Output	4.3	3.7	3.3
Employment	2.5	2.1	1.2
<b>Distribution, accommodation and food service activities</b>			
Output	3.3	2.4	2.3
Employment	2.4	2.0	1.5
<b>Transportation and storage</b>			
Output	3.8	2.6	2.5
Employment	2.0	1.1	0.9
<b>Other (public &amp; private) services</b>			
Output	1.4	1.0	0.6
Employment	-0.5	-0.8	0.0
<b>Manufacturing</b>			
Output	1.5	1.0	0.5
Employment	0.0	-0.2	-0.1
<b>Construction</b>			
Output	4.0	4.5	3.5
Employment	2.8	2.6	2.0
<b>(Memo: non-manufacturing)</b>			
Output	3.6	3.3	2.5
Employment	1.7	1.2	0.7

## 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 higher than in the November 2014 forecast.

**Figure 5.2: Employment – latest forecast growth rates compared with previous forecasts**

(millions of workforce jobs)

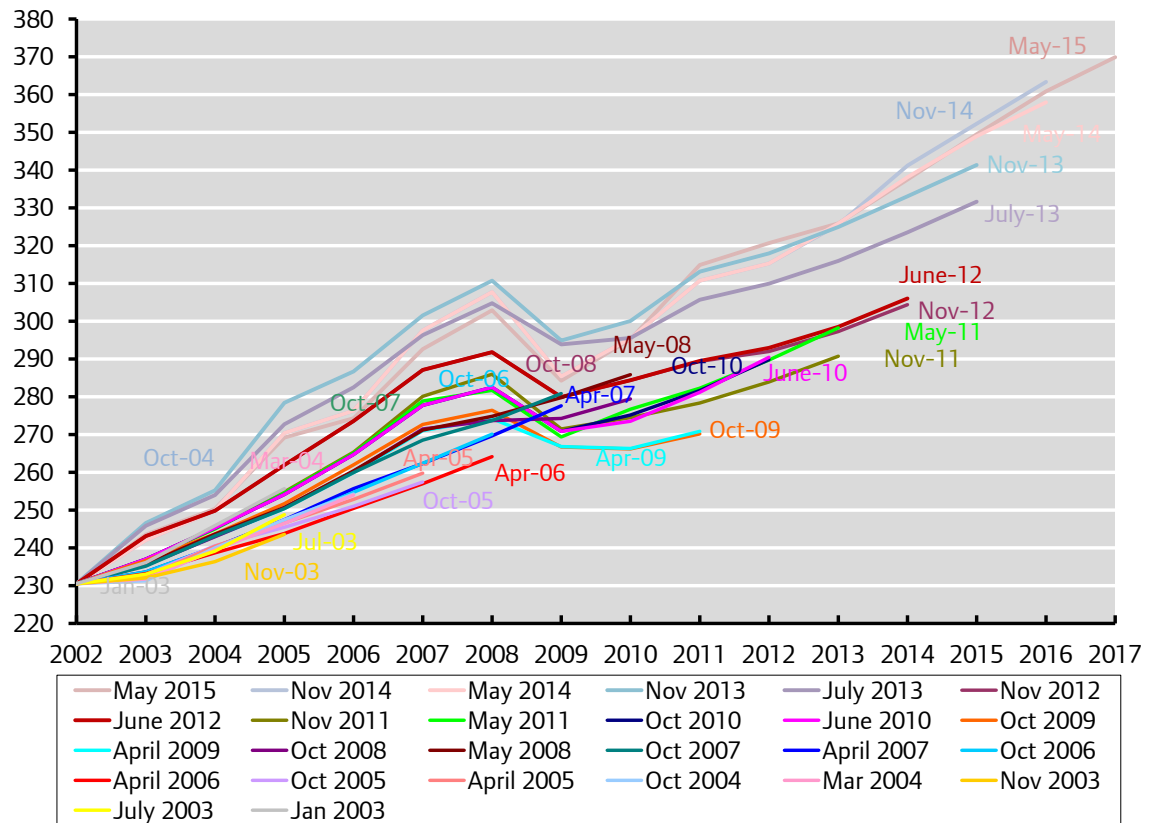


Source: Various London's Economic Outlooks

**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	2017
May 2015	0.6%	-0.4%	2.1%	1.1%	1.1%	3.0%	-2.2%	-0.3%	1.6%	4.3%	3.2%	5.2%	1.7%	1.2%	0.7%
Nov 2014												4.5%	1.2%	0.7%	
May 2014												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 growth rates compared with previous forecasts**  
(constant year 2011, £ 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	2017
May 2015	5.6%	2.8%	7.5%	1.9%	6.7%	3.5%	-6.1%	3.8%	6.7%	1.8%	1.6%	3.5%	3.6%	3.2%	2.5%
Nov 2014												4.8%	3.3%	3.1%	
May 2014												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 2007<sup>92</sup>

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.

<sup>92</sup> 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 2013 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 2010<sup>93</sup>. 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.

---

<sup>93</sup> Office for National Statistics, 'UK Relative Regional Consumer Price Levels for Goods and Services for 2010', 12 July 2011.



## **Appendix C: Glossary of acronyms**

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

## **Appendix D: Bibliography**

Bank for International Settlements, 'Global liquidity: selected indicators', February 2015

Bank for International Settlements, 'International monetary policy transmission', August 2014

Bank for International Settlements, 'The transmission of unconventional monetary policy to the emerging markets – An overview', August 2014

Bank of England, 'Agents' summary of business conditions April 2015', April 2015

Bank of England, 'Inflation Report – May 2015'.

Bank of England, 'Inflation Report Press Conference – Opening remarks by the governor', May 2015

Bureau of Economic Analysis, 'National Income and Product Accounts: Gross Domestic Product: First Quarter 2015 (advance estimate)', April 2015

Bureau of Labor Statistics, 'Economic News Release: Employment Situation Summary', April 2015

Bureau of Labor Statistics, 'News Release: Consumer Price Index – March 2015', April 2015

Cambridge Econometrics, 2014, 'Regional Economic Prospects', September 2014

Centre for Economic and Business Research, 2015, 'The Prospects Service, London, City and Regional Prospects', May 2015

European Central Bank, 'Euro area economic outlook, the ECB's monetary policy and current policy challenges'; statement by Mario Draghi, April 2015

European Central Bank, 'Inflation forecasts', April 2015

European Central Bank; 'Introductory statement to the press conference', Mario Draghi, April 2015

European Central Bank, 'March 2015 ECB staff macroeconomic projections for the euro area', March 2015

Experian Economics, 2015, 'Regional Planning Service', March 2015

Federal Reserve Bank of Philadelphia, 'First Quarter 2015 Survey of Professional Forecasters', February 2015

Federal Reserve, 'Transcript of Chair Yellen's FOMC Press Conference, March 18, 2015', March 2015

Federal Reserve, 'Economic Projections of Federal Reserve Board Members and Federal Reserve Bank Presidents, March 2015', March 2015

GLA Economics, 'London's Economy Today: Issue 152', April 2015

H M Treasury, 2015, 'Forecasts for the UK Economy: A comparison of independent forecasts', May 2015

International Monetary Fund, 'Assessing Sustainability', May 2002

International Monetary Fund, 'Emerging Market Volatility: Lessons from the Taper Tantrum', IMF Discussion Note, September 2014

International Monetary Fund, 'Fiscal Monitor - Now is the Time: Fiscal Policies for Sustainable Growth', April 2015

International Monetary Fund, 'Global Financial Stability Report, April 2015: Navigating Monetary Policy Challenges and Managing Risks', April 2015

International Monetary Fund, 'World Economic Outlook: Uneven Growth: Short- and Long-Term Factors', April 2015

International Monetary Fund, Lagarde, C., 'Spillovers from Unconventional Monetary Policy – Lessons for Emerging Markets', March 2015

Knight Frank, 'Central London Quarterly – Offices Q1 2015'

London Chamber of Commerce, 'Q1 2015 Capital 500', April 2015

OECD, 'Economic Outlook', November 2014

Office for Budget Responsibility, 'Economic and fiscal outlook', March 2015

Office for National Statistics, 'Consumer Price Inflation April 2015', May 2015

Office for National Statistics, 'Economic Review, May 2015', May 2015

Office for National Statistics, 'Gross Domestic Product Preliminary Estimate of GDP, Q1 2015, April 2015

Office for National Statistics, 'Regional Labour Market, May 2015', May 2015

Office for National Statistics, 'UK Labour Market, May 2015', May 2015

Organization of the Petroleum Exporting Countries, 'OPEC 166<sup>th</sup> Meeting concludes', November 2014

Oxford Economics, 2015, 'Regional Economic Outlook', April 2015

Sun, Y. 'Africa in China's Foreign Policy', John L. Thornton China Center and the Africa Growth Initiative at Brookings, April 2014.

The Economist, 'Defusing a bomb', March 2015

The National People's Congress of the People's Republic of China, 'Report on China's economic, social development plan', March 2015

United Nations Conference on Trade and Development, 'State of Commodity Dependence 2012', Special Unit on Commodities.

World Bank, 'Commodity Markets Outlook', April 2015

World Bank, 'Global Economic Prospects', January 2015

# 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](mailto:glaeconomics@london.gov.uk)

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

**MAYOR OF LONDON**