GLAECONOMICS

London's Economic Outlook: Spring 2017
The GLA's medium-term planning projections

June 2017

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1. Executive summary

GLA Economics' 30th London forecast[1] suggests that:

London's Gross Value Added (GVA) growth rate is forecast to be 2.3 per cent in 2017 with the growth rate increasing slightly to 2.4 per cent in 2018 and 2.9 per cent in 2019.

London is forecast to see rises in employment in 2017, 2018 and 2019.

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)	2016[2]	2017	2018	2019
London GVA[3] (constant 2013, £ billion)	2.4	2.3	2.4	2.9
Consensus (average of independent forecasts)		1.8	1.9	2.0
London civilian workforce jobs	1.9	0.7	0.5	0.7
Consensus (average of independent forecasts)		0.5	0.8	0.8
London household spending (constant 2013, £ billion)	3.2	1.6	1.2	2.5
Consensus (average of independent forecasts)		2.0	1.3	2.0
London household income (constant 2013, £ billion)	3.1	1.5	1.3	2.5
Memo: Projected UK RPI[4] (Inflation rate)	1.7	3.2	3.2	2.9
Projected UK CPI[5] (Inflation rate)	0.7	2.4	2.6	2.2

Sources: GLA Economics' Spring 2017 forecast and consensus calculated by GLA Economics

The UK voted to leave the European Union (EU) in a referendum on 23 June 2016 and a summary of some of the short and long-term issues for the London economy, in light of this decision, was covered in the November 2016 London's Economic Outlook (LEO)[6]. At the time of writing, although the triggering of the up-to-two-year Article 50 process of the Lisbon Treaty to leave the EU occurred on 29 March, uncertainty about any final exit deal with the EU remains.

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[1] The forecast is based on an in-house model built by GLA Economics, more details of which are given in: Douglass, G. & van Lohuizen, A., November 2016, 'The historic performance of the GLA's medium-term economic forecast model'. Current Issues Note 49. GLA Economics.
[2] Historic data for London GVA and workforce jobs is based on GLA Economics 'now-casting' estimates, while household spending and household income is based on Experian Economics data. It should be noted that the 2016 figures for London GVA and civilian workforce jobs are estimates.
[3] The methodology used to estimate London's GVA is outlined in: Keijonen, M., & van Lohuizen, A., December 2016, 'Modelling real quarterly GVA data for London'. Current Issues Note 50. GLA Economics.
[4] RPI = Retail Price Index. Although not part of the GLA Economics forecast for London, for reader information HM Treasury Consensus Forecast, June 2017 of the UK RPI inflation rate are reported.
[5] CPI = Consumer Price Index. Although not part of the GLA Economics forecast for London, for reader information HM Treasury Consensus Forecast, June 2017 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.
[6] GLA Economics, November 2016, 'London's Economic Outlook: Autumn 2016 The GLA's medium-term planning projections'.

Box 3.1 in Section 3 of this forecast summarises what has occurred in the 'Brexit' process since the publication of the Autumn 2016 LEO.

The UK currently remains part of the EU and the evidence for a strong instant impact of the referendum is relatively low, beyond the large depreciation of sterling seen in the aftermath of the vote. However, the strength in a number of economic indicators is weaker than it was a year or so ago. Looking at a variety of economic indicators, the majority show a continuing expansion of London's economy, but with signs of some slowing in growth compared to that seen in recent years. This moderated but continuing growth is also reflected at the UK level; for example, the Bank of England's agents found in the second quarter of 2017 that the "moderate underlying growth in activity had continued overall. Annual sales growth in volume terms had continued to slow. Export volume growth had continued to increase, supported by the lower sterling exchange rate and stronger world growth"[7]. And "investment intentions had strengthened a little further, including investment in technology and to support increased export demand. However, heightened uncertainty remained a drag on some businesses' willingness to invest"[8]. In May the Banks' agents found that "in the labour market, recruitment conditions had tightened a little further, with skills shortages reported in a wider range of activities. Labour costs growth had edged up in manufacturing. But pay awards remained clustered around 2%–2½% across the economy"[9].

In terms of credit conditions the Bank noted that "banks continued to have ready access to affordable funding in Q1. The cost of funding fell a little in 2017 Q1, on account of wholesale funding and retail deposit spreads over relevant reference rates being, on average, somewhat lower in Q1 than in the previous quarter. In recent discussions, most major UK lenders thought that the Bank of England's Term Funding Scheme had contributed to this reduction in spreads". They also however observed that, "annual growth in consumer credit remains high relative to recent years at 10.5% in February, similar to growth of 10.9% in November 2016". With them further adding that "lending to businesses continued to grow in early 2017, albeit at a somewhat more subdued rate, which probably reflects some weakness in corporates' demand"[10]. In London, after falling sharply after the EU referendum, consumer confidence has recovered to an extent although it remains below the highs seen in the year or so prior to June 2016[11]. Companies in London also show growth in business activity as measured by the Purchasing Managers' Index, having resumed growth after a post referendum fall but at a generally more subdued level[12].

Statistics from the Office for National Statistics (ONS) show that the UK economy continues to grow but at a more subdued pace, with output increasing by 0.2 per cent in Q1 2017.This was a smaller increase than the 0.7 per cent seen in Q4 2016. Output in Q1 2017 was 2.0 per cent higher than a year earlier with UK GDP having grown by seventeen consecutive quarters[13]. Inflation, having been low for a couple of years, has risen due in part to the large recent depreciation of sterling and now stands above the Bank of England's central symmetrical inflation target. Consumer Prices Index (CPI) inflation stood at 2.9 per cent in May 2017

[7] Bank of England, 21 June 2017, 'Agents' Summary of Business Conditions, 2017 Q2'.
[8] Ibid.
[9] Bank of England, 17 May 2017, 'Agents' Summary of Business Conditions, May 2017 Update'.
[10] Bank of England, 13 April 2017, 'Credit Conditions Survey 2017 Q1'.
[11] Douglass, G. & Wingham, M., 25 May 2017, 'London's Economy Today: Issue 177'.
[12] Ibid.
[13] ONS, 25 May 2017, 'Second estimate of GDP: Jan to Mar 2017'.

compared to a year earlier, higher than the 2.7 per cent seen in April 2017[14] and the highest rate since 2013. Thus given the marked depreciation of sterling and the mild but increasing inflationary pressures that this has caused, it is less likely than in the immediate aftermath of the referendum that the Bank will further relax monetary policy. Although even when monetary policy eventually begins to tighten again it is likely to remain extremely accommodating for some time to come. The Bank of England therefore faces a balancing act between higher inflation and a more challenging growth environment for the UK economy. In their May 2017 Inflation Report the Bank observed that the Monetary Policy Committee (MPC) expects inflation to overshoot its central symmetrical target in the coming years. However they further observe that "monetary policy cannot prevent either the necessary real adjustment as the United Kingdom moves towards its new international trading arrangements or the weaker real income growth that is likely to accompany that adjustment over the next few years. Attempting to offset fully the effect of weaker sterling on inflation would be achievable only at the cost of higher unemployment and, in all likelihood, even weaker income growth"[15]. However they also note that "there are limits to the extent to which above-target inflation can be tolerated. The continuing suitability of the current policy stance depends on the trade-off between above-target inflation and slack in the economy, as well as the prospects for inflation to return sustainably to target"[16].

The growth in workforce jobs in London has recently been more slow than of late; a similar situation is seen in the UK as a whole as well. Thus in London the number of jobs increased to 5.751 million in Q1 2017, a 64,000 (1.1 per cent) increase from a year earlier[17]; this is however the highest level seen since the series began in 1996. The employment rate in London stood at 73.3 per cent in the three months to April 2017, down from record levels seen in earlier quarters. Real wages in the UK have recently fallen[18]. With inflation expected to pick up a touch further on the back of the large depreciation of sterling there has been mounting speculation as to how long this fall may continue.

Risks to the economy have perhaps eased slightly compared to those seen in November 2016 although a number remain in part related to the ongoing uncertainty around the impact of the 'Brexit' process. However, other risks have moderated; for instance the prospects for global economic growth appear to have picked up a notch compared to that seen in the past year or so. Further, the expected economic uncertainty and drag from the referendum outcome and 'Brexit' process has so far been generally more modest than had been anticipated by some forecasters/bodies prior to the vote. In part this may reflect the calming influence of Bank of England monetary policy decisions in the immediate aftermath of the vote. However, the current uncertainty about the UK's future trading arrangements would appear – according to some business surveys - to have dampened, to an extent, some business investment and other decisions. Finally, as observed in the past couple of LEOs it should be noted that the longer-term impact of the vote remains hard to model with competing claims by a variety of commentators with the exact long-term growth prospects likely to be highly dependent on what post 'Brexit' economic relationships and policies are followed.

[14] ONS, 13 June 2017, 'UK consumer price inflation: May 2017'.
[15] Bank of England, 11 May 2017, 'Inflation Report: May 2017'.
[16] Ibid.
[17] ONS, 14 June 2017, 'Regional labour market statistics in the UK: June 2017'.
[18] ONS, 14 June 2017, 'Analysis of real earnings: June 2017'.

Other risks to the economy remain. As has been highlighted over a number of years now, sluggish although somewhat improved growth in Europe, the continuing high levels of sovereign debt and the structural problems facing individual countries remain concerns. All these are concerns due to the impact they could have on the UK and London's trade and therefore growth. Still, despite these ongoing risks, the prospects of further deflation in the Eurozone have receded while economic growth has also shown some recent resilience within the Zone. Whilst global growth appears to be picking up, the high levels of debt seen in China have remained a concern for the economic stability of that country and the concurrent impact this would have on the global economy. Moreover, the disruptive effects on the world economy of an intensification of the current regional conflicts or radical changes to the economic policies of key trading partners cannot be discounted.

Despite continuing to rise slightly, relatively low oil and commodity prices are still acting as a drag on some emerging market economies whilst providing support to a number of developed economies. Monetary policy normalisation has begun in the United States and may have negative effects on emerging market economies, (ie, due to the input on their borrowing costs) and knock on effects on the global economy. This could be especially the case if differing stages in the various countries monetary policy cycle interact to exasperate this issue. However, although the tightening in US monetary policy has occurred three times since December 2015 and is expected to continue, it may take some time yet to return to more historically normal levels.

In summary, although the economic environment is more uncertain in the first half of 2017 than in the first half of 2016, the outlook for the London economy remains generally positive for the coming few years. A higher but still moderate level of inflation over the coming year or so is quite likely given the inflationary impact of the depreciation of sterling. Given this it is possible that growth in real income will be less strong in the coming few years than in the previous couple of years and puts a slight restraint on household spending which has been a significant driver of economic growth until now. Still, and unlike what was expected a year or so ago, UK monetary policy is likely to remain loose by historical standards for longer than was thought thus continuing to support the economy. Sterling remains low and businesses and consumers remain generally confident about the short-term future economic outlook after suffering some jitters immediately after the referendum. The Government's fiscal consolidation is also likely to be slower than was expected at the time of the last Comprehensive Spending Review. Of the sectors of the UK economy, Business services and finance continues to grow and given its size in London, this should provide some foundation to London's economy. Taking account of all these factors both output and employment should see continued growth in the next few years although at a rate reduced to that which was expected at the beginning of last year.

2. Introduction

The spring 2017 edition of *London's Economic Outlook* (LEO) is GLA Economics' 30th 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. Since the spring 2016 LEO, GLA Economics' forecast is based on an in-house model built by GLA Economics[19]. Before that, previous forecasts were 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)[20]
- 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.

[19] The production of the forecast model is described in more detail in: Douglass, G. & van Lohuizen, A., November 2016, 'The historic performance of the GLA's medium-term economic forecast model'. Current Issues Note 49. GLA Economics.
[20] CEBR does not provide a forecast for employment in the sectors of the London economy or for household expenditure in London.

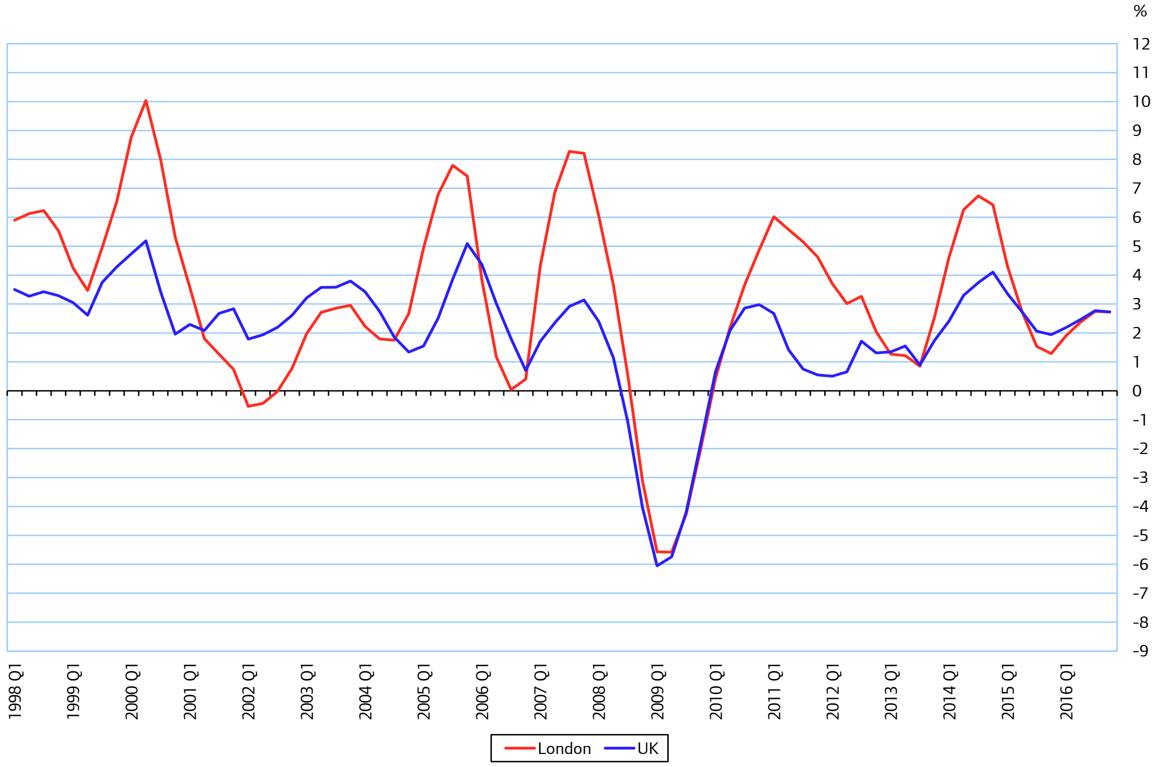
3. Economic background: Continuing but moderate growth seen in the London and UK economies as world growth picks up

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 2.7 per cent in the fourth quarter of 2016, the same as that of the UK (see Figure 3.1). London's economic expansion continues with most other economic indicators continuing to suggest that the London economy has grown more strongly than the UK throughout 2016.

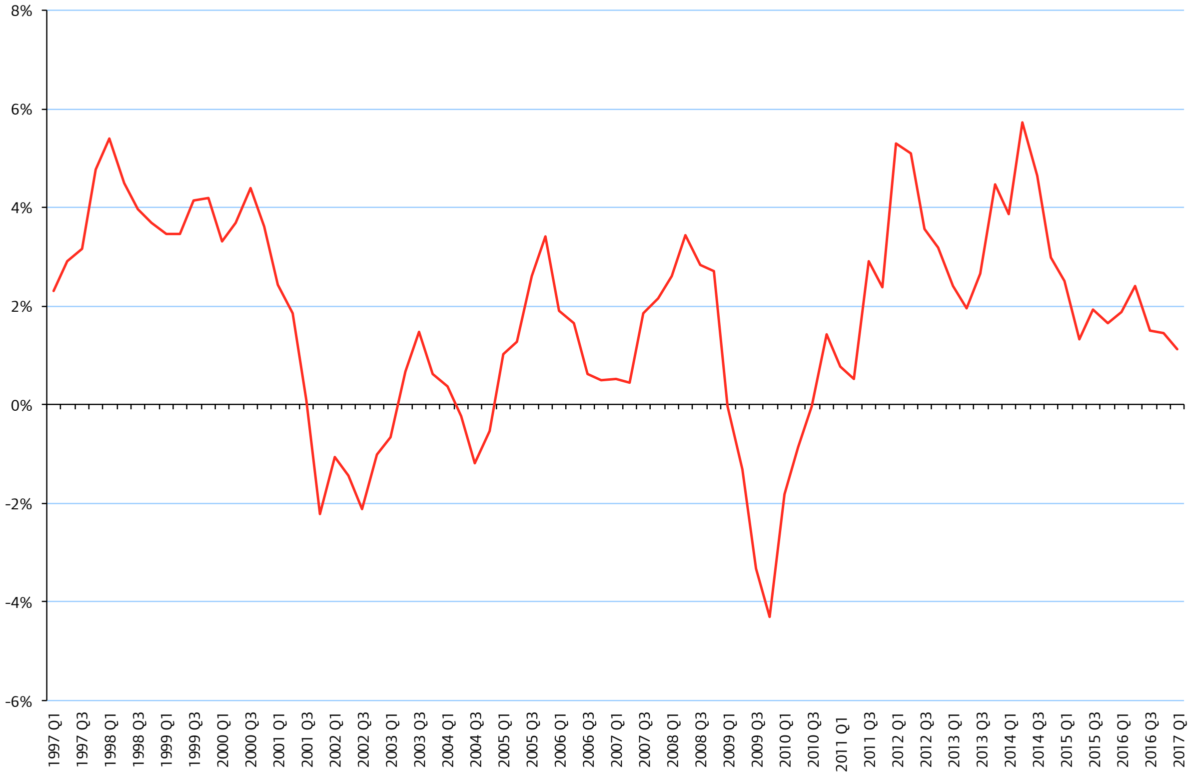
Figure 3.1: Output growth – London and UK
Real GVA, annual % change, last data point is Q4 2016



Source: GLA Economics calculations for London and ONS for the UK

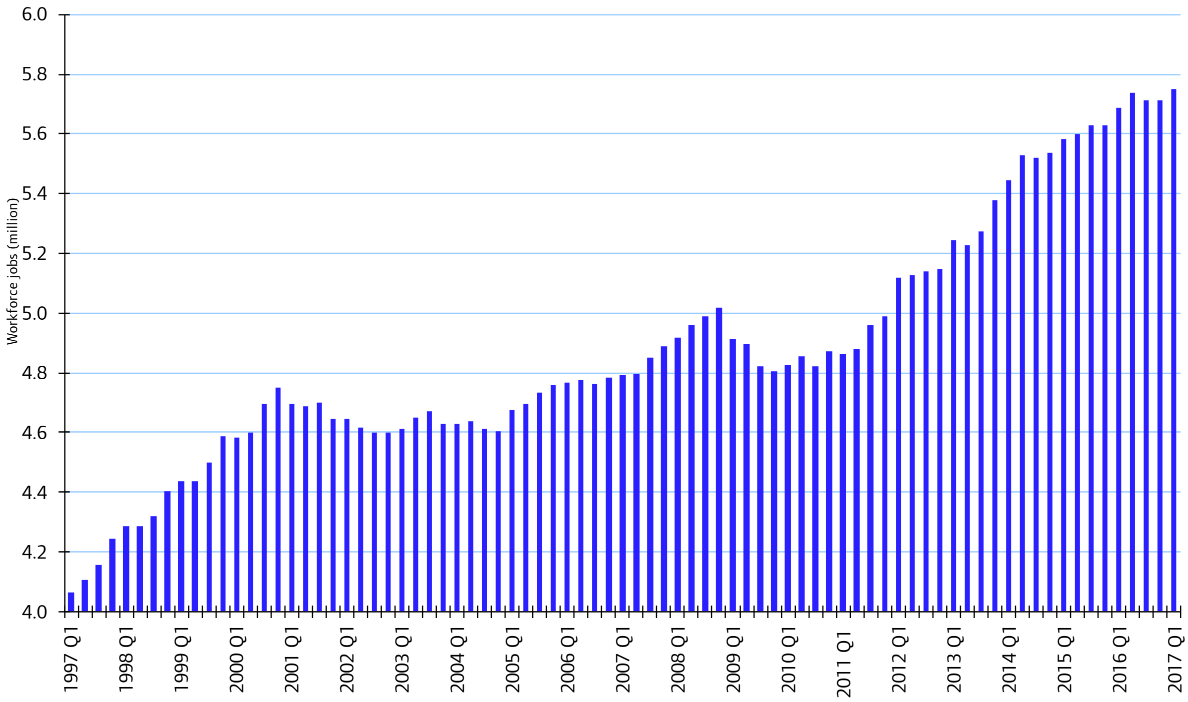
In the year to Q1 2017, there was a 1.1 per cent increase in the number of workforce jobs in London (see Figure 3.2), with the total number of workforce jobs in the capital standing at 5.751 million, a record high (see Figure 3.3). London's employment rate (ie, the proportion of London's resident working age population in employment) has however fallen back slightly from the record levels recently seen. In the period February – April 2017 London's employment rate stood at 73.3 per cent, down 0.2 percentage points on the quarter and 0.1 percentage points on the year; for the UK the rate stood at 74.8 per cent, an increase of 0.2 percentage points on the quarter and 0.6 percentage points on the year. London's ILO unemployment rate is up 0.1 percentage points on the year, standing at 6.0 per cent in the three months to April; this compares to an ILO unemployment rate for the UK as a whole of 4.6 per cent, down 0.5 percentage points on the year.

Figure 3.2: London civilian workforce jobs (annual percentage change)
Last data point is Q1 2017



Source: Office for National Statistics

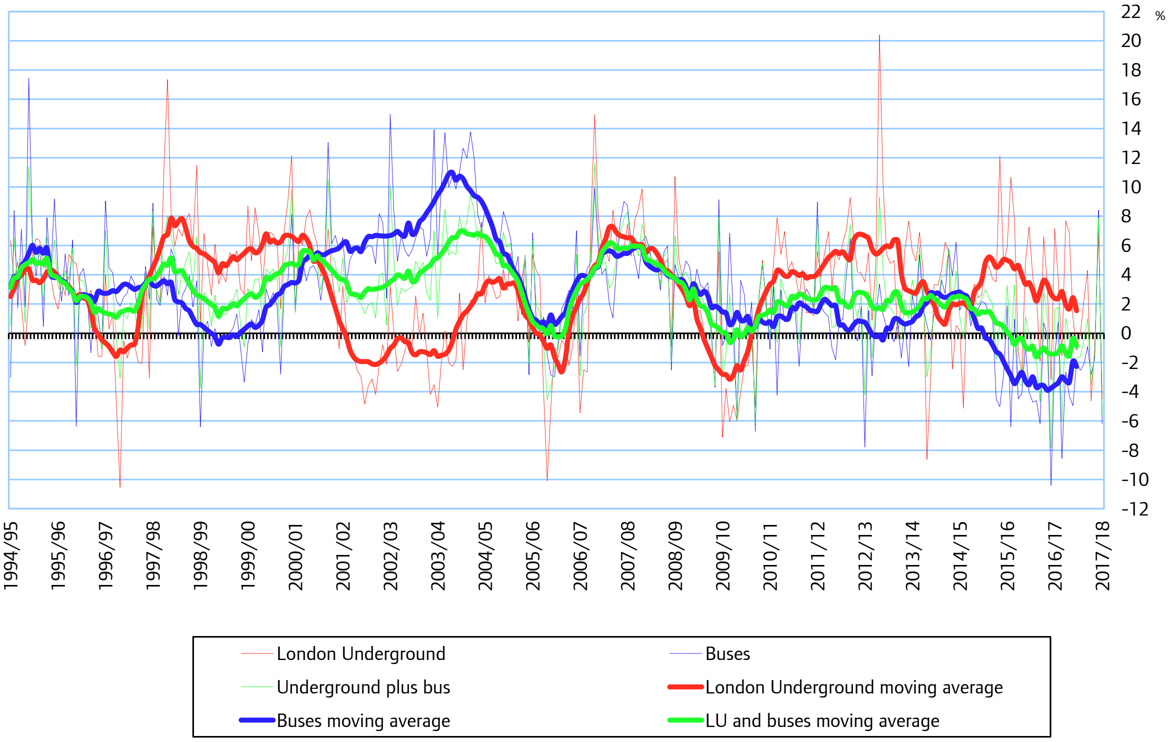
Figure 3.3: London civilian workforce jobs (level)
Last data point is Q1 2017



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 a positive annual growth in the moving average of Underground usage but that the moving average of bus usage remains negative.

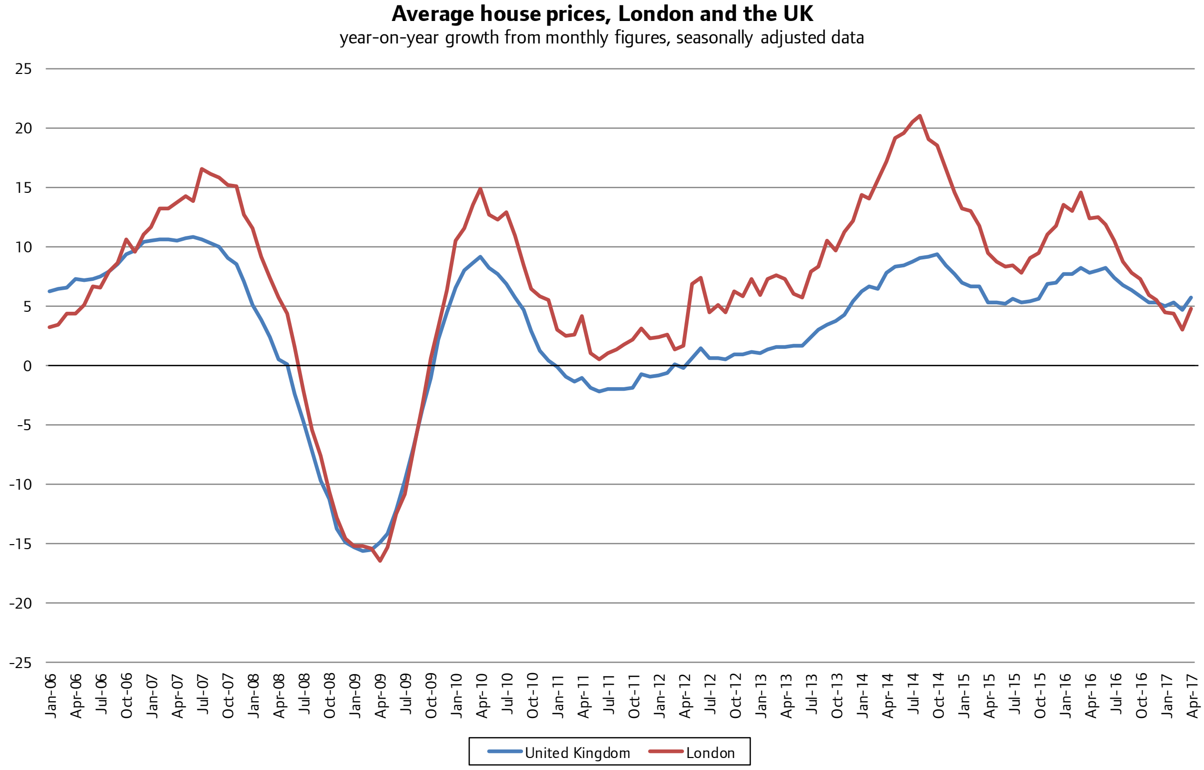
Figure 3.4: London public transport usage
Annual % change in passengers using London Underground and buses (adjusted for odd days). Last data point is the 29-day period ending 29/4/2017



Source: Transport for London

Most evidence points to a continuation of the moderation in the London housing market into the first half of 2017 that was seen throughout 2016, as is shown by house price inflation measured by the Land Registry & ONS (see Figure 3.5). Slightly more timely data from the Royal Institution of Chartered Surveyors (RICS) Residential Market Survey showed that after falling for most of 2016, for all of 2017 so far both the current measure of house prices and the expectation of future prices were negative, with a net balance of surveyors in London as a whole reporting both falling house prices and expecting house prices to continue to fall in May 2017. As of January 2017, annual house price inflation in London has been lower than in the UK as a whole with it estimated as standing at 4.8 per cent in London in April 2017 on the Land Registry measure; while it is estimated to stand at 5.7 per cent for the UK as a whole.

Figure 3.5: House price inflation in London and the UK
Annual % change, last data point is April 2017



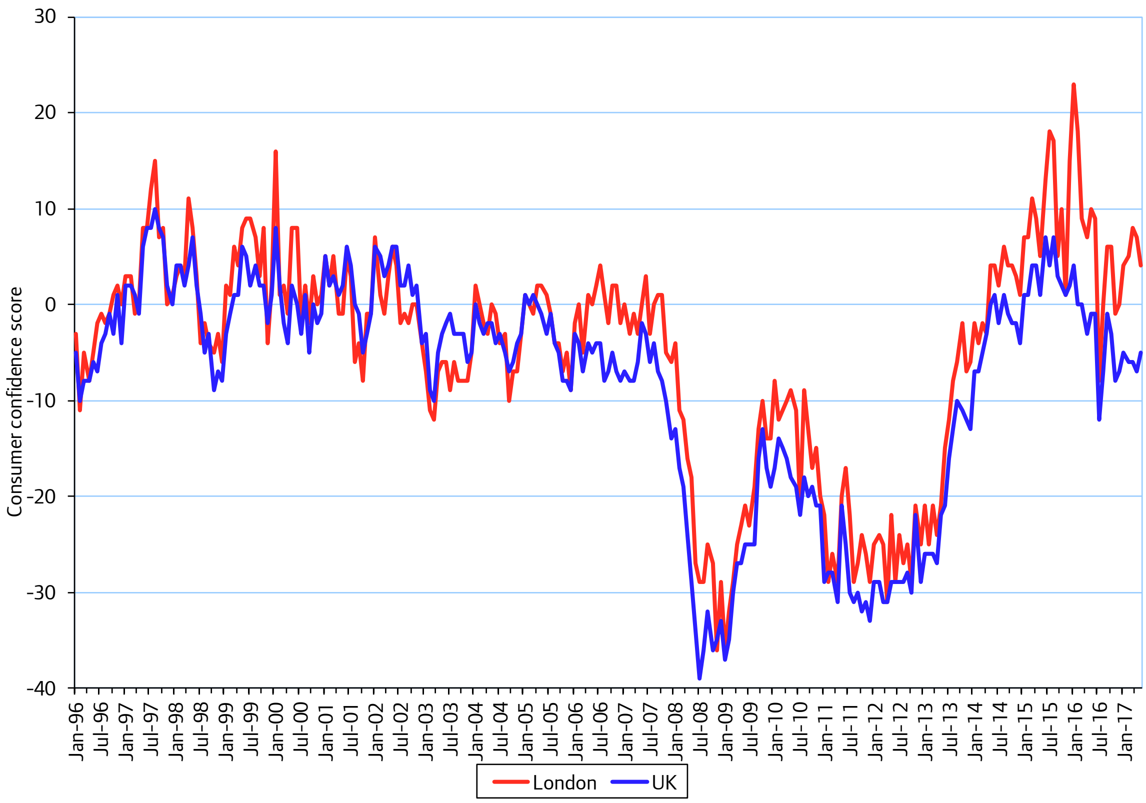
Sources: Land Registry and ONS

Knight Frank's Q1 2017 'Central London Quarterly' for commercial property found that "after the strong take-up recorded in Q4 last year, it would have been reasonable to expect a weak first quarter for occupier demand in Central London. Yet take-up has come in exactly at the long-term average – 3.10m sq ft". They further added that "as in the previous quarter, the better than-expected performance owes much to the on-going change in the composition of demand. In Q1, the Tech and Creative sector took over 700,000 sq ft of office space, towering over the finance sector at around 270,000 sq ft". In the **West End** the "take-up in the first quarter of 2017 reached 1.47m sq ft, a rise of 44% on the previous quarter, and 27% ahead of the long-term quarterly average". While "availability across the West End totalled 6.19m sq ft at the end of the first quarter of 2017, a fall of 12% on the previous quarter, and the first time West End supply has fallen for five consecutive quarters", and "investment turnover in Q1 2017 totalled £2.13bn, 42% ahead of the previous quarter and 78% above the long-term quarterly average of £1.20bn". In the **City** "take-up for the first quarter of 2017 totalled 1.62m sq ft, 19% below the level recorded in Q4 2016, but just 6% below the long-term average of 1.73m sq ft". While "City availability increased 12% from 7.70m sq ft at the end of 2016 to 8.60m sq ft by the end of Q1 2017, however levels are still 8% below the long-term average", and "investment turnover in the City was £2.59bn on par with the previous quarter and 42% above the long-term average". In relation to **Docklands** they observed that "total take-up for Q1 2017 totalled just over 30,000 sq ft, the lowest figure for some years and well below the long-term average of 245,000 sq ft". While supply levels "increased by 44% quarter-on-quarter"[21].

[21] Knight Frank, April 2017, 'Central London Quarterly – Offices Q1 2017'.

Data from the UK Consumer Confidence Barometer, produced by GfK-NOP (Figure 3.6) turned negative in London immediately after the 23 June 2016 referendum on the UK's membership of the EU although less so than the UK as a whole. Since then consumer confidence in London rebounded somewhat and has been generally positive although not reaching the heights seen prior to the referendum. At the UK level the data, although rebounding from the lows seen immediately after the referendum, has recovered slightly but less strong than London. In May consumer confidence was positive in London standing at 4 but negative in the UK as a whole standing at -5. 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.

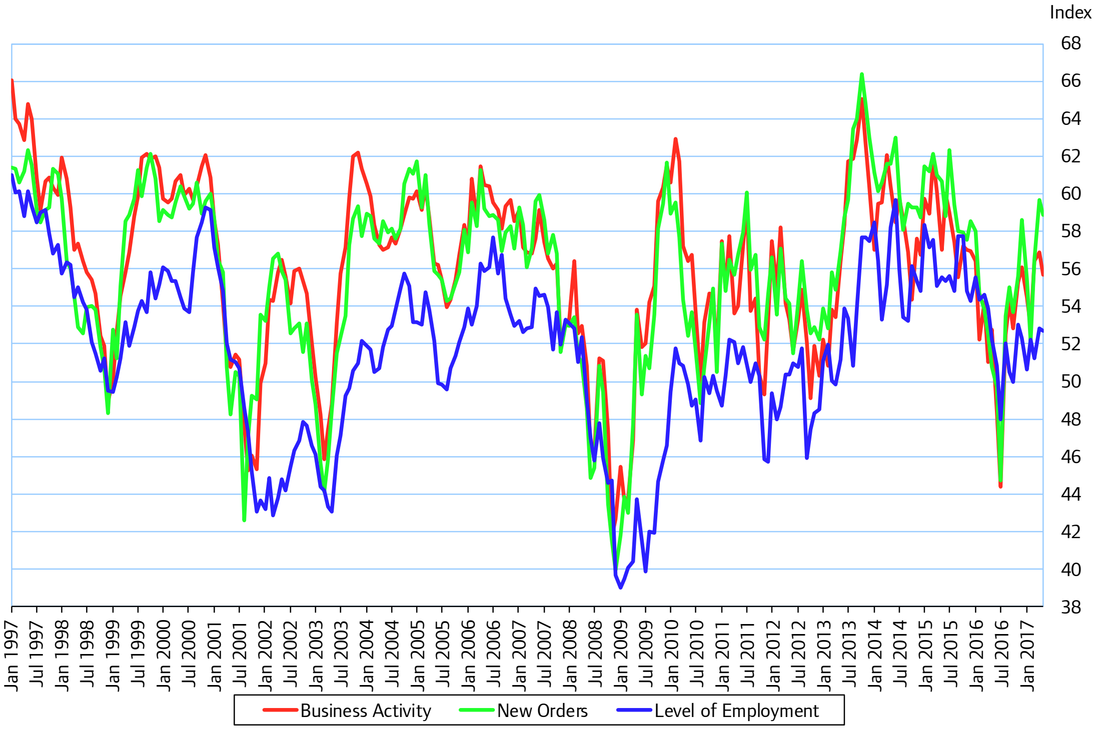
Figure 3.6: UK Consumer Confidence Barometer
Consumer confidence score, last data point is May 2017



Sources: GfK NOP on behalf of the European Commission

The Purchasing Managers' Index (PMI) business survey experienced volatility in light of the 'Brexit' referendum result with it indicating a contraction in both business activity and new orders in June and July 2016 before showing them increasing again in following months although generally at a slightly more subdued rate than seen in the couple of years prior to the referendum. Employment in London firms followed a somewhat similar pattern although with marginal growth indicated in June 2016 and the decline shown in July 2016 being less marked than for the other two indicators, while since then this indicator although rebounding has been weaker (see Figure 3.7).

Figure 3.7: Recent survey evidence on London's economic climate
Purchasing Managers' Index (PMI) survey, last data point May 2017
Seasonally adjusted index (above 50 indicates increase, below 50 indicates decrease)



Sources: IHS Markit

3.2 The UK economy

On 23 June 2016 the UK voted in a referendum to leave the EU, Box 3.1examines what progress has occurred on the 'Brexit' process since the publication of the Autumn 2016 LEO.

Box 3.1: 'Brexit' so far

Since the Autumn 2016 LEO, the UK Government formally triggered Article 50 of the Treaty of Lisbon on 29 March 2017 starting the two-year process for the withdrawal of the UK from the European Union (EU). If all goes according to plan, the UK should leave the EU sometime in 2019.

Negotiations have now just formally begun on 19 June 2017 after the UK general election which took place on 8 June 2017, though both the UK and EU had already announced their broad negotiation positions. As part of the Article 50 letter[22], the UK Prime Minister, Theresa May, called for the negotiation process to be fair and with little disruption to businesses, investors and citizens. It also emphasised the need to maintain a Common Travel Area between the Republic of Ireland and the UK and to protect and advance shared liberal and democratic values. Perhaps most importantly, it argued for "a deep and special partnership that takes in both economic and security cooperation" between the EU and the UK which should be agreed alongside the terms of withdrawal. It even proposed an ambitious Free Trade Agreement which "should be of greater scope and ambition than any such agreement before it so that it covers sectors crucial to our linked economies such as financial services and network industries".

[22] HM Government, 29 March 2017. 'Prime Minister's letter to Donald Tusk triggering Article 50'.

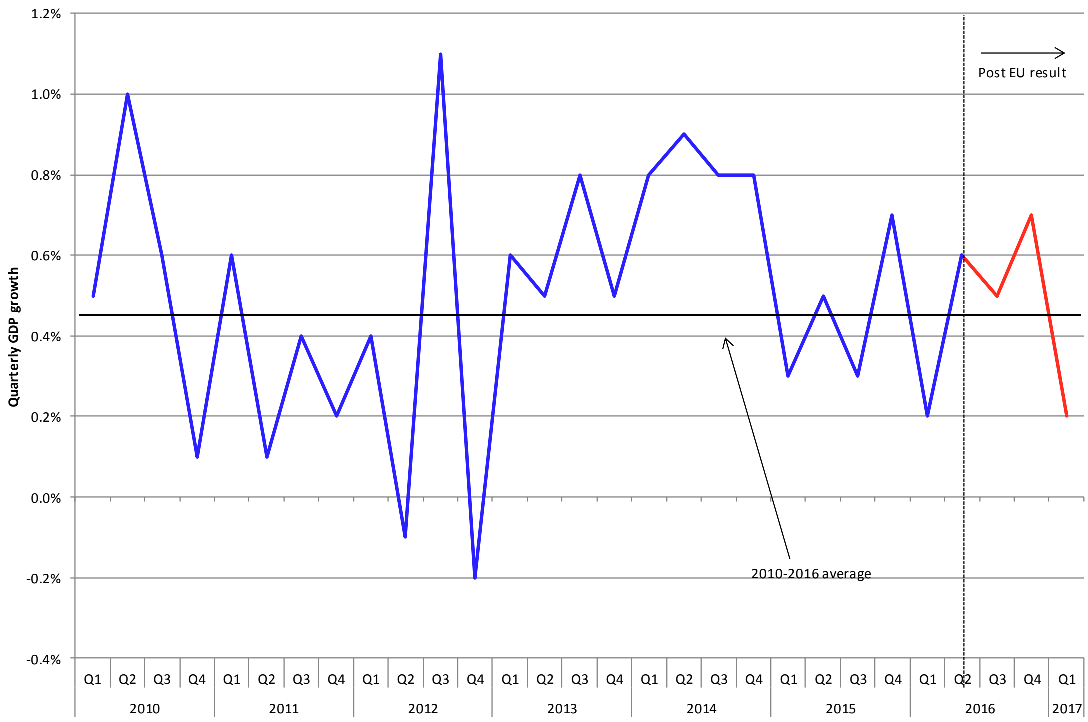
However, the European Council negotiation guidelines[23] – agreed unanimously by the remaining 27 EU leaders on 29 April 2017 – calls for a phased approach to the talks. This would mean that any discussion on the future relationship could only commence once "sufficient progress" has been made on the withdrawal. It also reiterated that there can be no "cherry picking" of the four core principles of the single market and that any future agreement will be based on a "balance of rights and obligations". This suggests that the UK cannot participate in the single market without also participating in the free movement of people and would seem to rule out any sector specific deals. The guidelines also called for the protection of EU citizens' rights to be a priority, that all EU27 member states will negotiate as a single block, and the avoidance of a 'hard border' in Ireland. Finally, they suggested that the UK should pay a single financial settlement to cover all commitments and liabilities. While the European Council has not officially announced how much this would be, figures ranging from €60 billion to €100 billion have been quoted.

In anticipation of 'Brexit', some businesses have announced plans to move some operations out of the UK to other EU member states. This is particularly true for firms in the Finance and insurance industry that have concerns regarding the potential loss of 'passporting' rights. Finance firms including Lloyds of London, AIG, UBS, Goldman Sachs and JPMorgan among others have all announced plans to set up subsidiaries in other European cities over the coming years. However, in the case for Lloyds of London, this will involve moving "fewer than 100" people; while JPMorgan envisions this to affect "up to 1,000" jobs. It is not yet known what the economic consequences of this will be for the UK but, given the importance of this sector to the capital (contributing 16.3 per cent of London's GVA in 2015), it could disproportionately affect London's economy.

Besides the current negotiations, the recent economic performance of the UK economy since the EU referendum has been generally better than many expected. While many forecasters predicted that the impact of 'Brexit' would be negative prior to and immediately following the referendum result, the UK economy has been relatively resilient. For example, as noted earlier in this chapter, consumer confidence at the UK level has recovered somewhat from the lows reported immediately following the referendum result (though still remaining negative), as did the PMI indicators, while the employment rate for the UK is at record-highs. This has meant that UK GDP growth in the second-half of 2016 has been at or above the average rate since the 2008-09 recession (0.5 per cent), though the rate of expansion slowed to 0.2 per cent in the first quarter of 2017 (see Figure 3.8).

[23] European Council, 29 April 2017, 'European Council (Art. 50) guidelines for Brexit negotiations'.

Figure 3.8: Quarterly rates of real GDP growth for the UK



Source: ONS GDP estimates

In light of this performance, many forecasters have revised up their estimates of real GDP growth in the UK for 2017 (see Table 3.1). Previously, the consensus prior to the EU referendum was that the impact of a vote to leave would be negative for the UK economy. For example, the OECD's assessment was for UK GDP growth to be reduced by 0.5 percentage points in both 2017 and 2018 and by 1.5 percentage points in 2019[24]. In addition, bespoke analysis by HM Treasury modelled two scenarios of the potential impact of a vote to leave – a 'shock' and a 'severe shock' scenario[25]. Under the former, the Treasury predicted that "a vote to leave would result in a recession, a spike in inflation and a rise in unemployment", with the headline finding that GDP would be 3.6 per cent lower compared with a vote to remain.

While forecasters have since revised up estimates of economic growth for 2017, at the same time, some have subsequently revised down forecasts for 2018 and 2019. The explanations given for these downward revisions mostly relate to an expected weakness in consumer spending. Previously, household expenditure had been one of the strongest sources of recent economic growth, with the ONS noting that consumer-focussed services contributed 0.8 percentage points to the 2.5 per cent annual output GVA growth in 2016[26]. However, the predicted weakness in consumer spending in the near-term is largely expected to be a result of a squeeze on real earnings due to rising inflationary pressures. This itself reflects higher import prices as a result of the depreciation of sterling following the EU referendum and shown in Figure 3.9 later in this chapter. In fact, the Bank of England noted in their May Inflation Report

[24] OECD, 27 April 2016, 'The Economic Consequences of Brexit: A Taxing Decision', OECD Economic Policy Paper No. 16.
[25] HM Treasury, 23 May 2016, 'HM Treasury analysis: the immediate economic impact of leaving the EU'.
[26] Massey, F., 28 April 2017, 'Monthly economic commentary: Apr 2017'. Office for National Statistics.

that household consumption growth already appeared to be slowing in response to the weakness in real income and to a greater extent than what was previously expected[27].

Table 3.1: Summary of real GDP growth forecasts for the UK*

		2016	2017	2018	2019	2020	2021	2022
IMF World Economic Outlook								
Pre vote	Apr-16	1.9%	2.2%	2.2%	2.1%	2.1%	2.1%	..
Post vote	Oct-16	1.8%	1.1%	1.7%	1.8%	1.9%	1.9%	..
Latest	Apr-17	1.8%	2.0%	1.5%	1.6%	1.9%	1.9%	1.9%
Bank of England Inflation Report								
Pre vote	May-16	2.0%	2.3%	2.3%	..	..	..	..
Post vote	Aug-16	2.0%	0.8%	1.8%	..	..	..	..
Latest	May-17	..	1.9%	1.7%	1.8%	..	..	..
Office for Budget Responsibility Economic and Fiscal Outlook								
Pre vote	Mar-16	2.0%	2.2%	2.1%	2.1%	2.1%	..	..
Post vote	Nov-16	2.1%	1.4%	1.7%	2.1%	2.1%	2.0%	..
Latest	Mar-17	1.8%	2.0%	1.6%	1.7%	1.9%	2.0%	..
HM Treasury Summary of Independent Forecasts								
Pre vote	Jun-16	1.8%	2.1%	..	..	..	..	..
Post vote	Oct-16	1.9%	1.0%	..	..	..	..	..
Latest	Apr-17	..	1.7%	1.3%	..	..	..	..

**As noted in the text above, some forecasters produced bespoke analysis looking at the impact of the vote to leave the EU. While these are not all reflected in this table, the consensus of opinion was that the potential impact of a leave vote would be negative.*

Source: IMF World Economic Outlook, Bank of England Inflation Report, Office for Budget Responsibility Economic and Fiscal Outlook, HM Treasury Summary of Independent Forecasts

The medium-term forecasts are a lot more uncertain and will be dependent on what future relationship the UK has with the EU. At this stage, there is no way of knowing what this relationship will look like meaning that all the economic forecasts have been made using various assumptions as to what this could be. For example, the IMF forecasts are based on the assumptions that the negotiation process does not produce excessive uncertainty or result in a large increase in trade and migration barriers. Similarly, the OBR noted that "there is no meaningful basis for predicting the precise end-point of the negotiations… [And] there is also considerable uncertainty about the economic and fiscal implications of different outcomes"[28]. Nonetheless, their forecasts are based on the assumptions that the UK leaves the EU by April 2019, the new trade agreements slows the rates of import and export growth, and there is less migration. However, if the future relationship turns out different to these assumptions underpinning the medium-term forecasts – especially as the negotiations proceed – it could lead to significantly different projections than those shown in Table 3.1.

A more thorough, though still high-level, assessment of the potential long-term impact of 'Brexit' on the UK economy is discussed in the Autumn 2016 LEO. In particular, it looked at the potential effects in terms of trade, regulation, labour and investment. Meanwhile, GLA Economics will continue to monitor the 'Brexit' process and report on its impact on London in both future LEOs and our monthly publication on the state of London's economy 'London's Economy Today', both of which can be found on the GLA Economics' publications page.

[27] Bank of England, 11 May 2017, 'Inflation Report: May 2017'. pg.29-32.
[28] Office for Budget Responsibility, March 2017, 'Economic and fiscal outlook'. pg.34.

The Office for National Statistics (ONS) estimated that the UK economy continued to grow in the first quarter of 2017, but at a slower rate than in the previous few quarters. Having grown by 0.7 per cent in Q4 2016, output rose by 0.2 per cent in Q1 2017, which is the 17th consecutive quarter of rising UK output. UK output was 2.0 per cent higher in Q1 2017 than in Q1 2016[29]. The International Monetary Fund (IMF) now forecasts that the UK economy will grow by 2.0 per cent in 2017 (a 0.5 percentage points upgrade on their January forecast) and by 1.5 per cent in 2018 (a 0.1 percentage points upgrade on their previous forecast)[30]. Table 3.2 shows a summary of forecasts for the UK economy. It should however also be noted that different measures of the economy's performance in the post financial crisis era are available and this point is examined in more detail in Box 3.2.

Table 3.2: Office for Budget Responsibility and HM Treasury consensus forecasts for the UK economy

Annual % change, unless otherwise indicated

	Average of Independent Forecasters		Spring Budget 2017	
	2017	2018	2017	2018
GDP growth (per cent)	1.6	1.4	2.0	1.6
Claimant unemployment (mn)	0.8	0.9	0.83	0.86
Current account (£bn)	-62.2	-51.2	-69.6	-66.2
PSNB (2017-18; 2018-19: £bn)	58.9	47.2	58.3	40.8

Note: mn = million, bn = billion
Sources: HM Treasury Comparison of Independent Forecasts, June 2017.
Office for Budget Responsibility, Economic and fiscal outlook, March 2017.

As can be seen in Table 3.3 annual growth was positive in Q1 2017 in most sectors except for Agriculture, forestry, and fishing and Electricity, gas and water supply which were negative. Moderate growth is observed in most service sectors, but at a rate slower than in previous quarters. Business services and finance (a sector of importance for London) showed 2.7 per cent annual growth in Q1 2017 in keeping with the moderation in growth seen in the later part of 2015 and through 2016. Most forecasts for the UK economy however expect a slowdown in growth in the rest of 2017 and into 2018 across a number of sectors.

[29] ONS, 25 May 2017, 'Second estimate of GDP: Jan to Mar 2017'.
[30] IMF, April 2017, 'World Economic Outlook: Gaining Momentum?'

Table 3.3: Recent growth in broad industrial sectors of the UK economy
Annual % change

	2015		2016				2017
Industrial sectors	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**
Agriculture, forestry, and fishing	3.2%	2.3%	0.8%	-1.4%	-1.7%	-3.8%	-4.2%
Mining & quarrying inc oil & gas extraction	1.7%	9.4%	13.4%	9.3%	4.6%	-0.9%	1.9%
Manufacturing	1.1%	0.0%	-0.8%	-0.9%	-1.1%	1.2%	0.9%
Electricity gas and water supply	3.8%	0.6%	-1.2%	-1.3%	-2.9%	5.0%	-0.7%
Construction	7.6%	6.3%	2.7%	3.4%	1.9%	2.1%	2.7%
Distribution hotels and catering	5.3%	4.6%	4.2%	3.8%	4.7%	4.7%	5.1%
Transport, storage and communication	5.0%	4.0%	3.0%	2.9%	3.0%	2.7%	4.8%
Business services and finance	4.2%	3.1%	2.4%	1.9%	2.1%	2.6%	2.7%
Government and other services	0.6%	0.3%	0.2%	0.9%	1.9%	1.6%	1.6%

Source: Office for National Statistics (as of 25 May 2017)

Table 3.4 shows that household annual spending growth was positive and quite strong throughout most of the sample period, with all other measures also being positive in Q1 2017. Investment, however, moderated in 2016 and the beginning of 2017 compared with the previous few years. Looking forward, most commentators expect investment to remain relatively subdued.

Table 3.4: UK domestic expenditure growth
Annual % change

	2015		2016				2017
Expenditure	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**
Households	2.2%	2.7%	2.7%	3.0%	2.6%	2.9%	2.6%
Non-profit institutions	-0.5%	0.7%	1.1%	0.4%	2.1%	2.2%	1.1%
General Government	1.6%	1.7%	1.7%	1.0%	0.3%	0.4%	0.8%
Gross fixed capital formation	4.3%	2.6%	1.1%	0.1%	-0.1%	1.0%	2.2%

Source: Office for National Statistics (as of 25 May 2017)

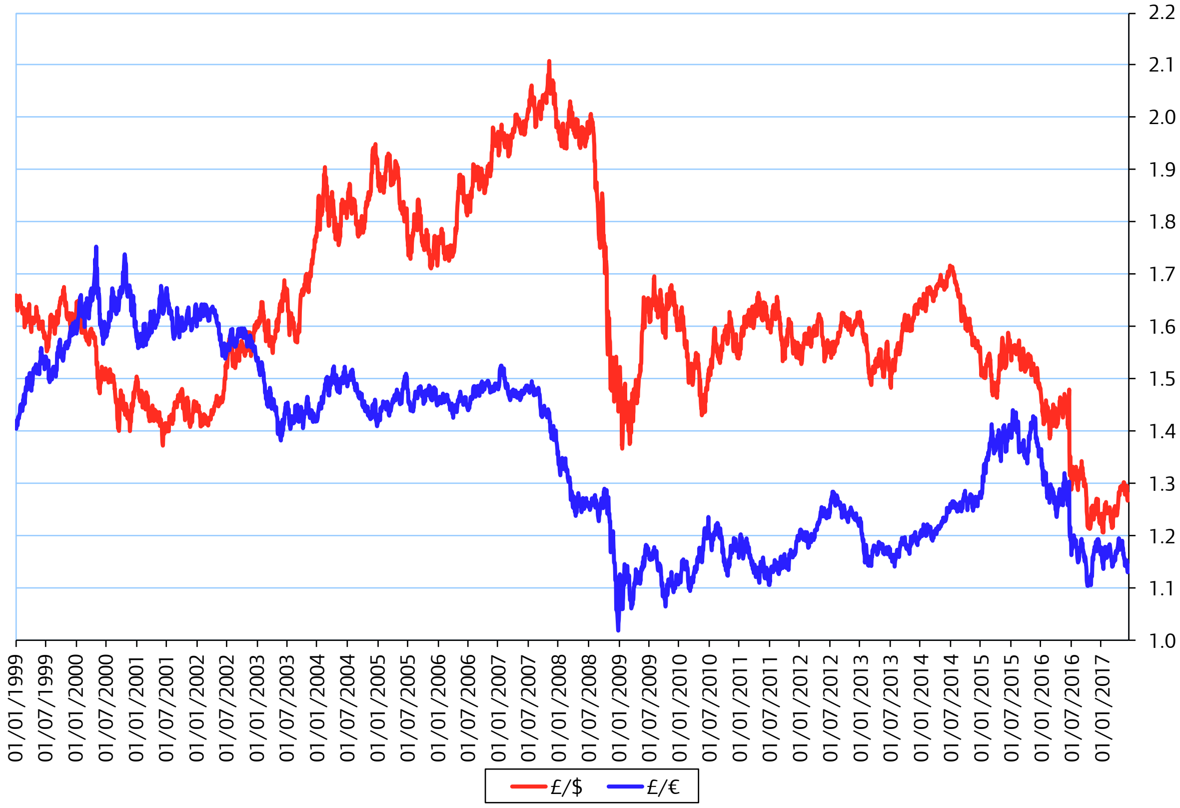
Inflation rose above the Bank of England's central symmetrical target for Consumer Price Index (CPI) inflation in February 2017, after remaining low in both 2015 and 2016. Given the large depreciation of sterling it is likely that inflation will remain higher than it has been in the recent past for the remainder of 2017. In May 2017 CPI including owner occupiers' housing costs (CPIH)[31] inflation stood at 2.7 per cent. This was up from 2.6 per cent in April with the rate having been "steadily increasing following a period of relatively low inflation in 2015 and is at its highest since April 2012"[32]. The ONS observed that "price movements for all the broad categories of goods and services had an upward effect on the Consumer Prices Index including owner occupiers' housing costs (CPIH) 12-month rate in May 2017. The largest upward contribution came from housing and household services, largely from rises in owner occupiers'

[31] CPIH is a new measure of CPI inflation including housing costs. The ONS observes that: "The Consumer Prices Index including owner occupiers' housing costs (CPIH) is the most comprehensive measure of inflation. It extends the Consumer Prices Index (CPI) to include a measure of the costs associated with owning, maintaining and living in one's own home, known as owner occupiers' housing costs (OOH), along with Council Tax. Both of these are significant expenses for many households and are not included in the CPI".
[32] ONS, 13 June 2017, 'UK consumer price inflation: May 2017'.

housing costs and, to a lesser extent, from Council Tax and electricity price rises. Electricity prices rose by 7.7% in the year to May following a series of increases from different companies in recent months"[33]. The Bank of England in their May 2017 Inflation Report observed that in the Bank's forecast "CPI inflation is projected to rise to only a little below 3% this year, as higher import prices continue to be passed through to consumer prices. The contribution of import prices falls back over the forecast period but they are expected still to be pushing inflation above the 2% target at the end"[34]. However, they also noted that "the continuing suitability of the current policy stance depends on the trade-off between above-target inflation and slack in the economy. These projections depend importantly on three main judgements: that the lower level of sterling continues to boost consumer prices broadly as projected, and without adverse consequences for inflation expectations further ahead; that regular pay growth remains modest in the near term but picks up significantly over the forecast period; and that more subdued household spending growth is largely balanced by a pickup in other components of demand"[35].

Following the results of the EU referendum on 23 June 2016 sterling saw a marked depreciation against both the dollar and euro over the following months which have, to an extent, carried on into 2017 (see Figure 3.9).

Figure 3.9: £ to $ and £ to euro exchange rates
Last data point is 20/6/2017



Source: Bank of England

33 Ibid.
34 Bank of England, 11 May 2017, 'Inflation Report: May 2017'.
35 Ibid.

This depreciation is also seen against a number of other currencies as is shown by the sterling effective exchange rate index (EERI) (see Figure 3.10). The depreciation of sterling may: help exporters (by making their goods less expensive and therefore more competitive in the global market); make imports more expensive (potentially boosting some domestic competitors); make the UK a more attractive tourist location; and help address the UK's large current account deficit whilst providing a boost to the overall economy. However, as of yet there is limited evidence for the depreciation having much impact on the deficit although historically the impact of depreciations has taken some time to feed through fully to the current account.

Figure 3.10: Sterling EERI rate
Last data point is 20/6/2017

Source: Bank of England

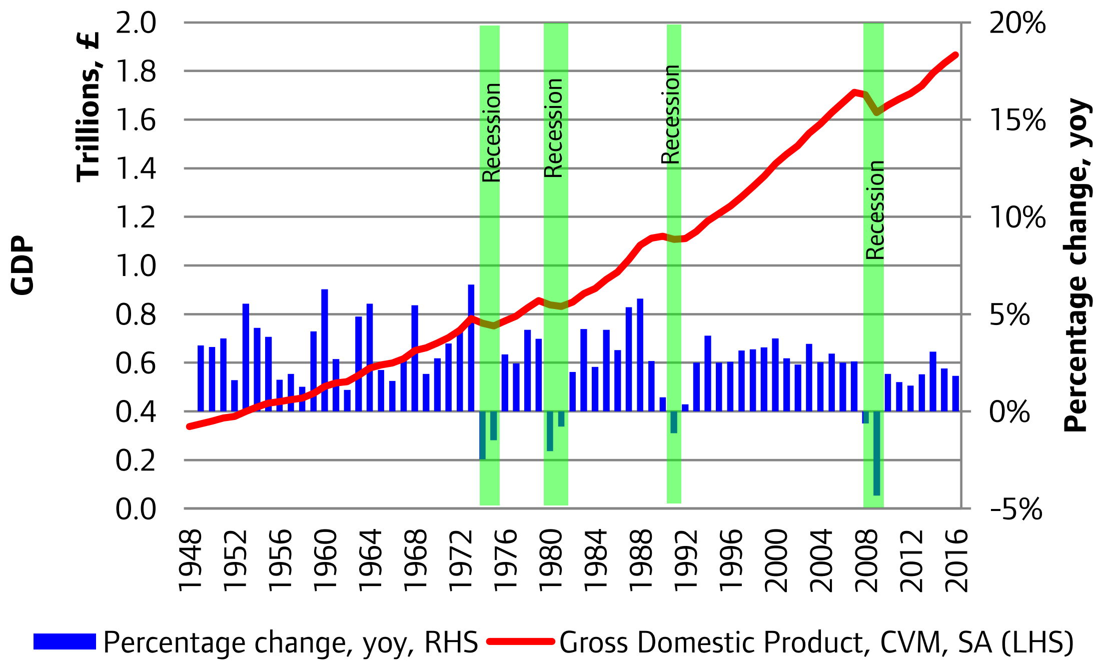
Box 3.2: Examining different measures of economic growth

Since the end of the recession, quarter-on-quarter Gross Domestic Product (GDP) growth has generally been rising. The recent news that first quarter growth in 2017 was just 0.2 per cent (below the levels predicted by many forecasters) grabbed headlines, but why are we so concerned with GDP?

GDP is the main measure of UK economic growth and is based on the value of goods and services produced during a given time period (typically quarterly or annually). GDP is often used to compare the size of different countries' economies, with growth in GDP used to judge their relative performance.

Figure 3.11 shows the historic annual performance of UK GDP, highlighting the periods of recession. As can be seen, there is an obvious dip caused by the 2008/09 financial crisis; GDP has since started to recover somewhat and has now overtaken the previous peak prior to the crisis in Q2 2013. However, as can also be seen on the chart by looking at the bars before and after the crisis, the rate of real growth in the post-2009 period is generally slower than that prior to 2008. Table 3.5 shows compound annual growth rates before and after each major recession since the 1940s. The table shows that between 1948 and 2007, UK GDP showed a compound rate of real growth of 2.8 per cent a year, but since 2009 this has fallen to 2 per cent.

Figure 3.11: UK GDP (CVM, Chained Volume Measure)[36], 1948-2016



Source: ONS

Table 3.5: Comparison of UK real growth rates, various periods

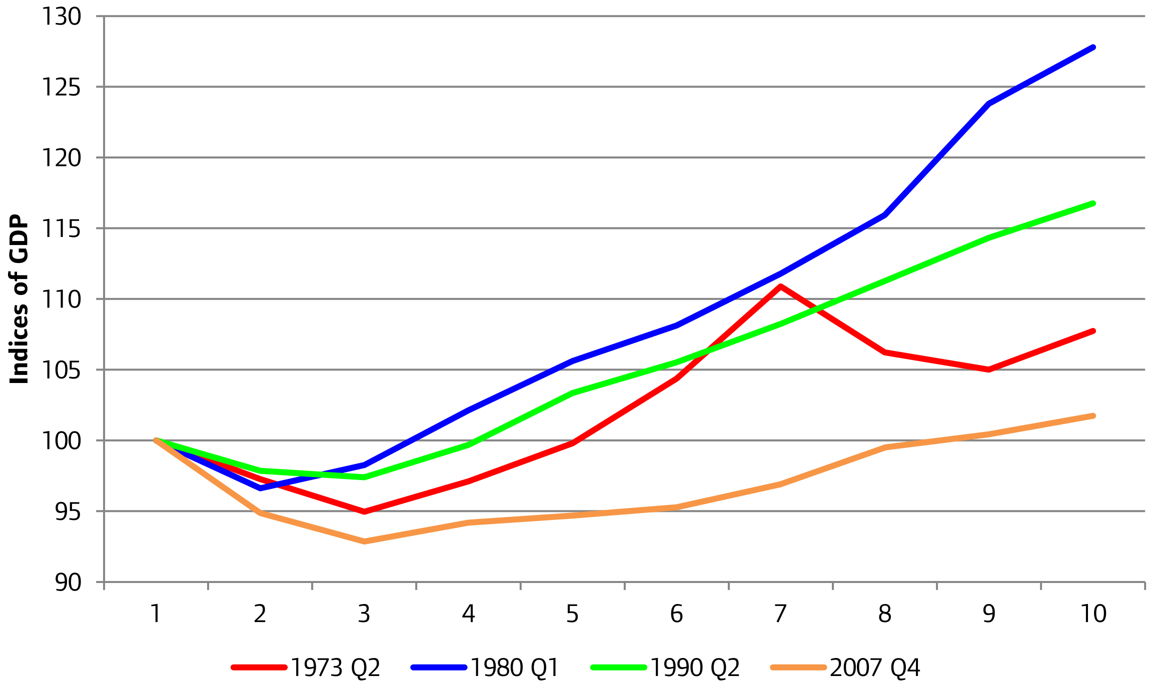
Recession period	Pre-recession growth	Post-recession growth
Mid-1970s	3.4% (1948-1973)	2.2% (1975-2016)
Early 1980s	3.1% (1948-1979)	2.3% (1981-2016)
Early 1990s	2.9% (1948-1990)	2.1% (1991-2016)
Great Recession	2.8% (1948-2007)	2.0% (2009-2016)

Source: ONS and GLA Economics analysis

The comparative lack lustre performance of the most recent recovery is shown more clearly in Figure 3.12, which shows GDP per head (CVM) indexed to the start of each recession. The orange line shows that the 2008-09 crash was not only a deeper recession, but took almost twice the time as other recessions to reach pre-crisis levels.

[36] With chained volume measures (CVM), the base year is updated annually, meaning that, in practice, every series presented in real terms is estimated in current prices, and prices of the previous year. CVM provides the most accurate picture of changes in the economy.

Figure 3.12: UK GDP per head (CVM), 10 indexed years from start of each recession



Source: ONS

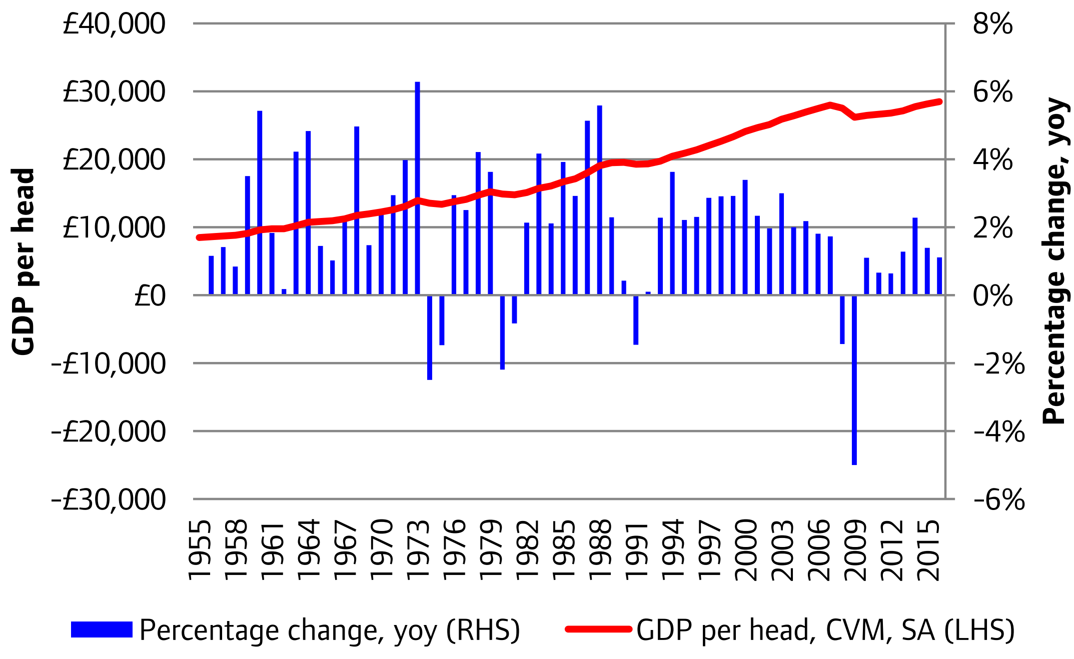
While future GDP trends may be some cause for concern, UK GDP in fact grew at the second fastest rate among all G7 economies in 2016. Growth since the EU referendum has been stronger than many forecasters predicted where some previously predicted the economic impact of a leave vote would be noticeably negative. That said, the first quarter of 2017 saw a slowdown in economic growth with the UK economy expanding by only 0.2 per cent (quarter-on-quarter), compared to 0.7 per cent growth in the last quarter of 2016.

Although GDP is usually taken as the headline measure of an economy's success, as a measure of economic progress it is nevertheless flawed. GDP fails to measure all of the work done in an economy, such as housework, and values output on an equal basis whether or not it is for socially accepted purposes (ie, spending on war is valued equally to spending on education). There are also measurement issues associated with GDP, such as failing to allow for depreciation and the problems in accurately measuring financial services.

While acknowledging these important criticisms, of more relevance to this discussion is the fact that GDP tells us little about economic welfare. As a domestic measure, GDP measures what is produced within a geographic border, regardless of who it is produced for and why. It is therefore assumed that all goods produced in an economy, benefit all people within that economy, which is often not the case (think especially of resource producers, ie, oil producing economies or rare metals exporters). Alternatively, GDP per head is often used to measure the material wellbeing of a population. This factors in population growth along with economic growth, giving a more accurate picture of changes in wellbeing than GDP alone. Consequently, this is often used as a proxy for the impact on people's standard of living. On this basis, GDP per capita (CVM) in the UK has risen from £26,158 in 2009 to £28,456 in 2016 suggesting an improvement in economic welfare. However, the average rate of growth per head during this period was only 1.2 per cent per annum (compared with a pre-crisis (1955 – 2007) rate of 2.3

per cent) meaning GDP per capita did not recover to its pre-recession level until Q2 2015 (see Figure 3.13). Overall, growth in GDP per head has been slower than GDP as a whole (see above).

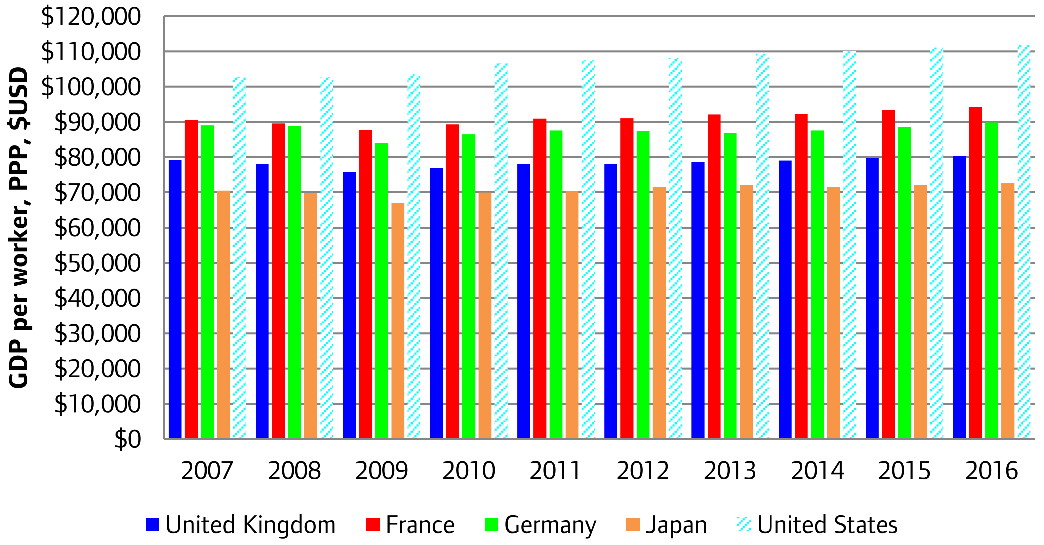
Figure 3.13: UK GDP per head (CVM), 1948-2016



Source: ONS

When comparing GDP per worker with other major economies, the UK generally lags behind its competitors as can be seen in Figure 3.14. For example, in 2016 UK GDP per worker (constant 2011 PPP) was $80,371, which compared favourably with Japan ($72,619), but poorly against France ($94,178), Germany ($89,805) and the US ($111,712).

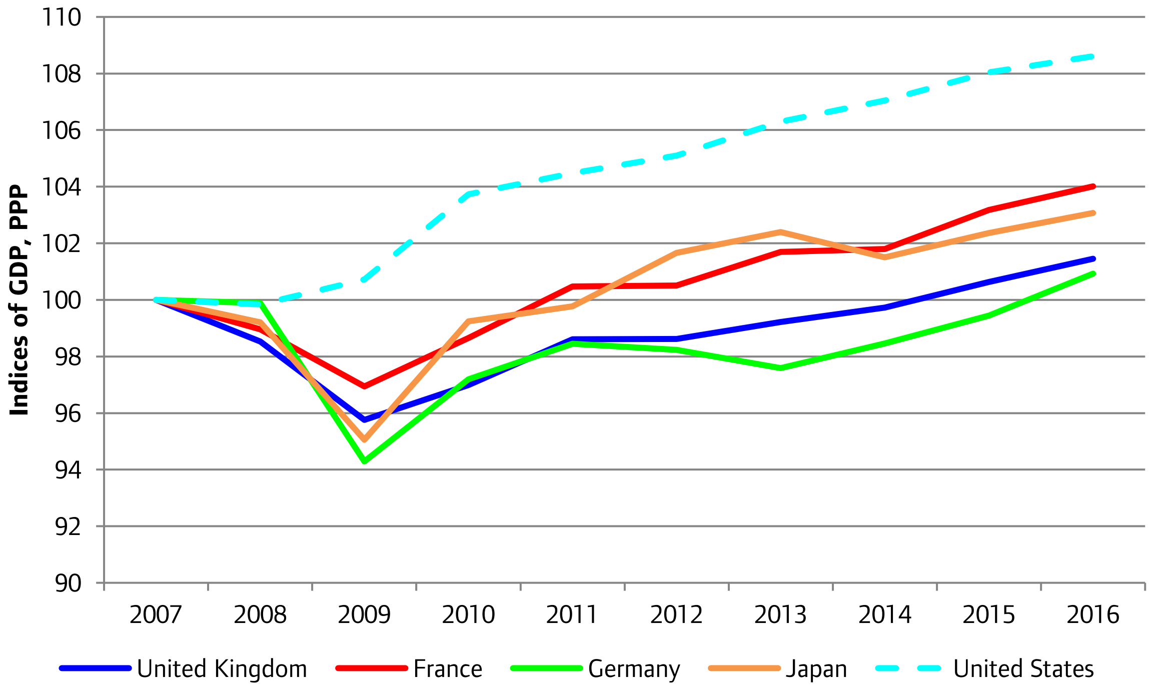
Figure 3.14: GDP per worker, major economies (constant 2011 PPP) $USD, 2007 - 2016



Source: World Bank

By indexing GDP for each country (Figure 3.15), we see a clearer picture for how each country's performance compares, with UK performance weak over the time period, but just ahead of Germany, rather than Japan.

Figure 3.15: GDP per worker, major economies (constant 2011 PPP), Index=2007



Source: World Bank and GLA Economics

While these comparisons are useful, GDP per worker still fails to be an accurate indicator of economic welfare. It does not account for who or why goods and services are produced or how the income is distributed. It also excludes many necessary components of welfare including crime rates, infant mortality and poverty. Consequently, over the last decade, economists and policy makers have increasingly started to look at GDP (and GDP per capita or worker) as just one of a range of indicators to judge economic growth and welfare, particularly when making international comparisons. Other indicators include:

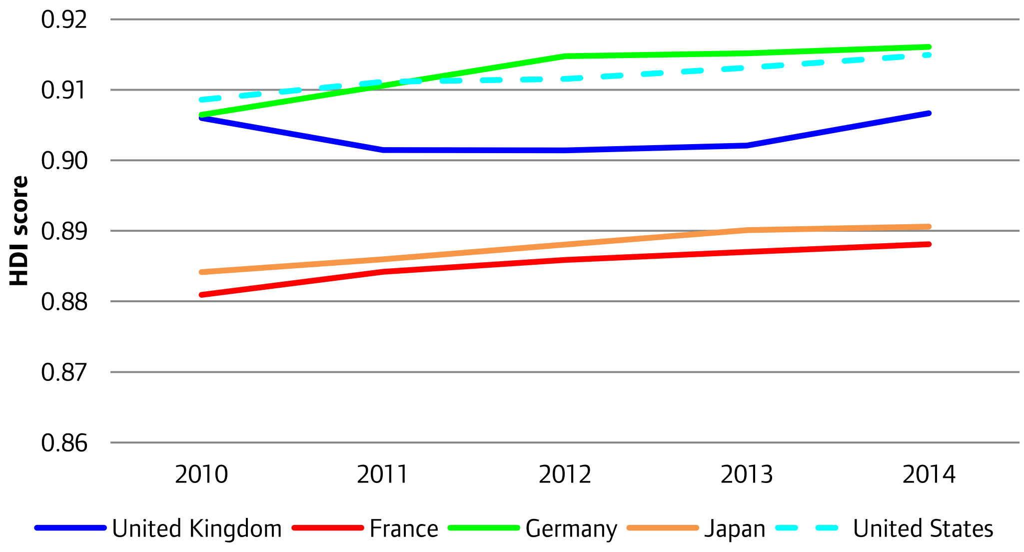
- UN Human Development Index (HDI)
  This is probably the most recognised alternative indicator of economic welfare. It was created to give a stronger emphasis on assessing development through people and their capabilities. It is a summary measure of average achievement in key dimensions of human development. For example, the HDI helps to show how two countries that have similar levels of output (i.e. GDP) but different human development outcomes.

- Genuine Progress Indicator (GPI)
  The GPI seeks to replace GDP by incorporating additional social and environmental factors to give a fuller measure of the wellbeing of a nation.

- Gross Sustainable Development Project (GSDP)
  The GSDP was developed by the Global Community Assessment Centre and Society for World Development. It is defined as the total value of production within a region over time and measures the cost of growth and development.

Figure 3.16 shows the HDI for the UK and other major economies. This suggests that while the UK may currently be performing relatively well against international competitors in some measures of GDP, in other areas such as the HDI, it has weakened in the rankings.

Figure 3.16: HDI of major economies



Source: UN

At a domestic level, the ONS has for some time been expanding its own measures of output to include datasets on Gross National Income (GNI) per head. GNI is similar to GDP but also includes net receipts from abroad of wages, salaries, and property incomes. It is generally considered a more accurate measure of welfare than GDP as it is based on the wealth of the citizens, rather than the country.

In many countries (including the UK) GNI and GDP show very little difference, whereas in others (such as Ireland) they can vary widely (see Table 3.6).

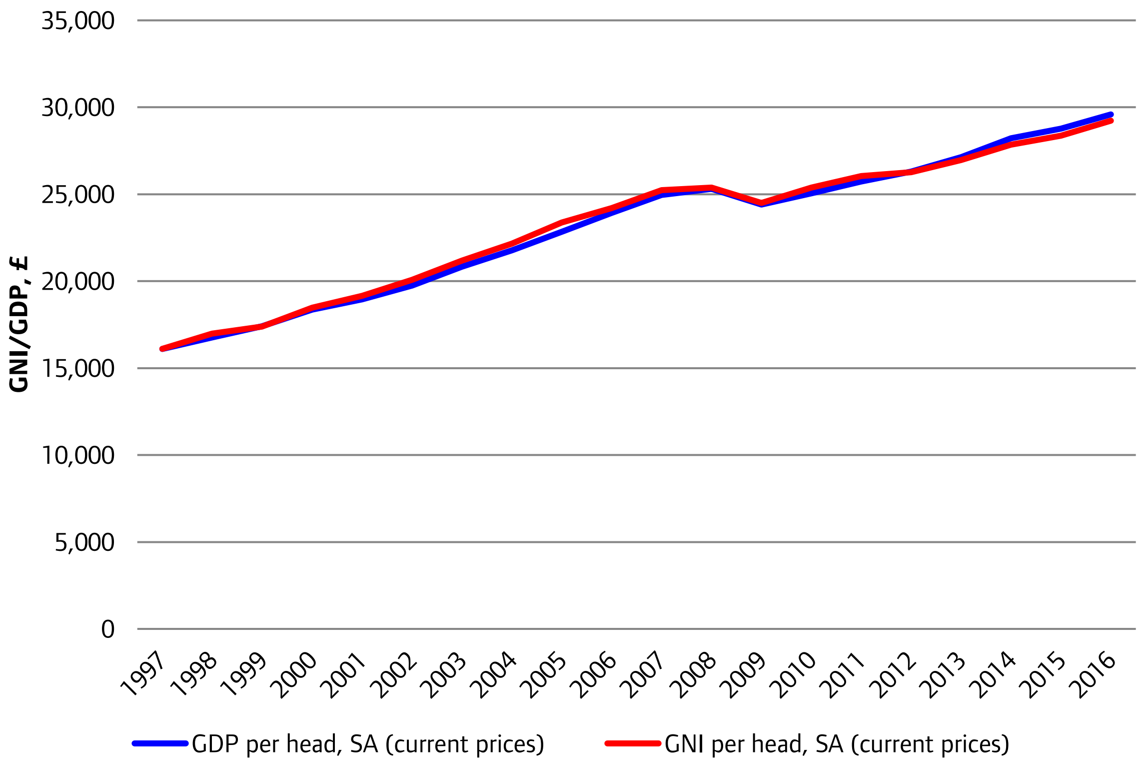
Table 3.6: GDP and GNI per capita (current prices, PPP), various economies, $USD

Country	1990			2015		
	GDP	GNI	Difference	GDP	GNI	Difference
UK	$16,740	$16,800	0.4%	$41,800	$41,230	1.4%
USA	$23,960	$23,730	1.0%	$54,540	$57,540	5.5%
Ireland	$13,740	$12,760	7.1%	$68,510	$54,610	20.3%
China	$990	$990	0.0%	$14,450	$14,320	0.9%

Source: World Bank and GLA Economics analysis

As Figure 3.17 shows, UK GNI per head has also been increasing since 2009. Between 1955 and 2007, compound annual growth of GNI per head was 4.6 per cent. Since 2009, this has slowed to 2.6 per cent. While representative of a slowing, this rate is marginally higher than for the GDP measures and implies a higher level of welfare.

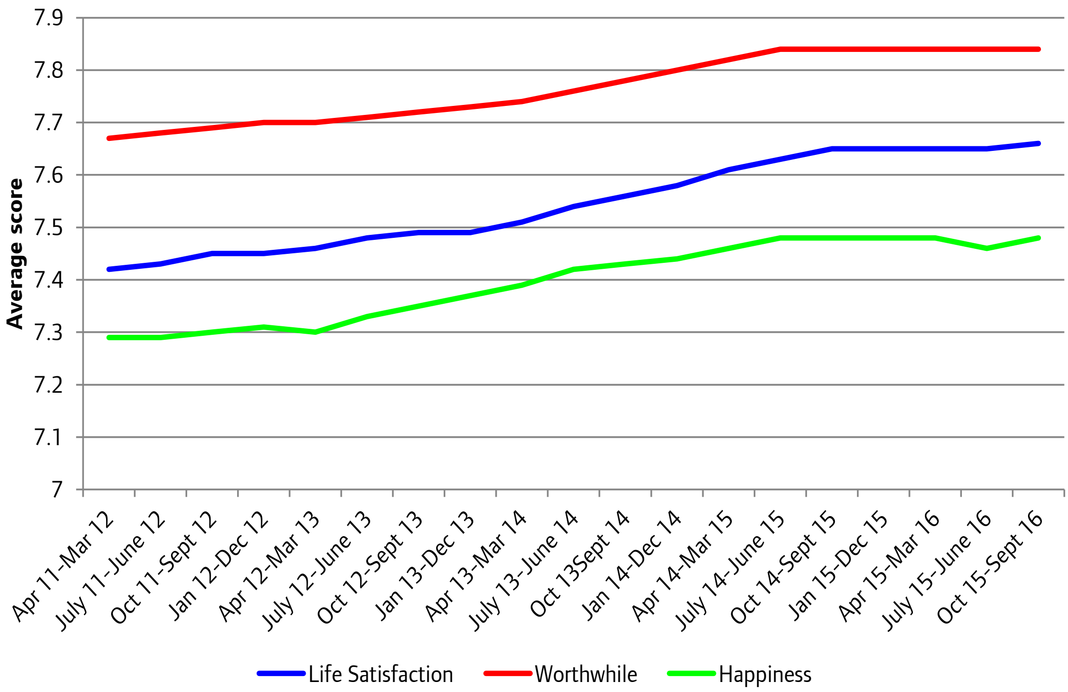
Figure 3.17: GNI and GDP per head, SA (current prices), 1997 - 2016



Source: ONS

In addition, the ONS has begun, in recent years, to measure wellbeing in isolation from output. This is assessed by surveying average life satisfaction, worthwhile, and happiness ratings. Figure 3.18 reproduces these ratings for year ending March 2012 to year ending September 2016.

Figure 3.18: UK life satisfaction, worthwhile and happiness ratings, 2012 - 2016



Source: ONS

Overall, as is evident from each of these measures, the UK's post-recession economy has been slow to recover – even by historic standards. While growth has slowed under every measure, the relative severity of this differs between the measures. In addition, when compared to our closest competitors, our relative success in the international economy differs, meaning that the UK can appear to be outperforming other advanced economies, or somewhere in the middle of the pack. Which measure to focus on is also an important decision for policy makers due to the welfare element; in the US the GNI measure suggests a higher standard of living, whereas in the UK, GDP gives the greater value. While these other measures are interesting, and indeed tell us something unique about the UK economy, for now GDP continues to be the dominant measure of output growth.

3.3 The world economy

In April, the IMF released their latest World Economic Outlook[37], in which they forecast that the world economy will grow by 3.5 per cent for 2017, and 3.6 per cent for 2018 (an upward revision of 0.1 percentage points for 2017 on their January forecast and unchanged for 2018). Advanced economies are forecast to grow by 2.0 per cent in both 2017 and 2018 (an upward revision of 0.1 percentage points for 2017 on their January forecast and unchanged for 2018), with the US forecast to grow by 2.3 per cent this year and 2.5 per cent next year (both years unchanged on the January forecast), while the Eurozone is forecast to grow by 1.7 per cent in 2017 and 1.6 per cent in 2018 (an upward revision of 0.1 percentage points for 2017 on their previous forecast and unchanged for 2018).

[37] IMF, April 2017, '[World Economic Outlook: Gaining Momentum?](#)'

In relation to their forecast the IMF noted that "higher commodity prices have provided some relief to commodity exporters and helped lift global headline inflation and reduce deflationary pressures. Financial markets are buoyant and expect continued policy support in China and fiscal expansion and deregulation in the United States. If confidence and market sentiment remain strong, short-term growth could indeed surprise on the upside"[38]. Still they further observe that "these positive developments should not distract from binding structural impediments to a stronger recovery and a balance of risks that remains tilted to the downside, especially over the medium term. Structural problems—such as low productivity growth and high income inequality— are likely to persist. Inward-looking policies threaten global economic integration and the cooperative global economic order, which have served the world economy, especially emerging market and developing economies, well. A faster-than-expected pace of interest rate hikes in the United States could tighten financial conditions elsewhere, with potential further U.S. dollar appreciation straining emerging market economies with exchange rate pegs to the dollar or with material balance sheet mismatches. More generally, a reversal in market sentiment and confidence could tighten financial conditions and exacerbate existing vulnerabilities in a number of emerging market economies, including China—which faces the daunting challenge of reducing its reliance on credit growth. A dilution of financial regulation may lead to stronger near-term growth but may imperil global financial stability and raise the risk of costly financial crises down the road. In addition, the threat of deepening geopolitical tensions persists, especially in the Middle East and North Africa"[39].

The IMF also published their latest Global Financial Stability Report in April, which observed that "financial stability has continued to improve since the October 2016 Global Financial Stability Report"[40]. They added that the prospects for economic activity have improved "amid broadly accommodative monetary and financial conditions, spurring hopes for reflation. Longer-term interest rates have risen, helping to boost earnings of banks and insurance companies. Gains in many asset prices reflect a more optimistic outlook. Equity markets in the United States hit record highs in March on investors' hopes for tax reform, infrastructure spending, and regulatory rollbacks. Markets outside the United States have also risen steadily over the past six months, driven in part by stronger growth expectations and higher commodity prices. At the same time, risk premiums and volatility have declined"[41]. They however warn that "new threats to financial stability are emerging from elevated political and policy uncertainty around the globe. In the United States, if the anticipated tax reforms and deregulation deliver paths for growth and debt that are less benign than expected, risk premiums and volatility could rise sharply, undermining financial stability. A shift toward protectionism in advanced economies could reduce global growth and trade, impede capital flows, and dampen market sentiment. In Europe, political tensions combined with a lack of progress on structural challenges in banking systems and high debt levels could reignite financial stability concerns. The potential for a broad rollback of financial regulations—or a loss of global cooperation— could undermine hard-won gains in financial stability"[42].

The **US** economy continued to grow in the first quarter of 2017 but at a subdued pace with output increasing by an annualized rate of 1.2 per cent in Q1 2017, compared to an annualised

[38] Ibid.
[39] Ibid.
[40] IMF, April 2017, 'Global Financial Stability Report: Getting the Policy Mix Right'.
[41] Ibid.
[42] Ibid.

rate of increase of 2.1 per cent in Q4 2016[43]. Still US consumer confidence although declining somewhat in both April and May indicated that "consumers' assessment of present-day conditions held steady, suggesting little change in overall economic conditions"[44]; and jobs growth in the US is relatively strong with it adding 138,000 jobs in May, with unemployment standing at 4.3 per cent[45]. Interest rates in the US have continued their path to normalisation, which they started in December 2015, and have risen three more times since the Autumn 2016 LEO to stand at a target range of between 1.0 and 1.25 per cent, with an expectation of further rises to come. The evidence thus continues to point towards an ongoing expansion of the US economy. This is shown by the May 2017 Beige Book from the Federal Reserve which stated that "most of the twelve Federal Reserve Districts reported that their economies continued to expand at a modest or moderate pace from early April through late May"[46].

The economy of the **Eurozone**, although having experienced a number of quarters of moderate and improving growth, remains a downside risk to the UK economy due to underlying structural issues[47]. At an aggregate level growth in the Eurozone continued throughout 2016 and into the start of 2017, with output growth standing at 0.6 per cent in Q1 2017 after growing by 0.5 per cent in Q4 2016[48]. Inflation has picked up from its recent lows with it standing at 1.4 per cent in May 2017, down from 1.9 per cent in April but significantly improved on the -0.1 per cent seen a year earlier[49]. However, although falling and standing at its lowest level since March 2009 unemployment remains relatively high with it standing at 9.3 per cent in April 2017. While unemployment is now below 20 per cent in Spain it remains at above 20 per cent in Greece[50].

Japan's economy has now experienced its longest period of growth for a decade with annualised growth standing at 2.2 per cent in Q1 2017, a rate above analyst expectations. The Tankan survey of business conditions in the first quarter showed that business conditions at Japan's large companies improved over the first three months of the year, with this also holding for medium and small-sized enterprises as well. Inflation, however, although slightly positive at 0.3 per cent in April 2017, still remains far below the Bank of Japan's target of 2 per cent. Still, the IMF's latest forecast for GDP growth has been upwardly revised to 1.2 per cent growth in 2017 and 0.6 per cent growth in 2018 (upgrades of 0.4 and 0.1 percentage points respectively on their January forecast)[51].

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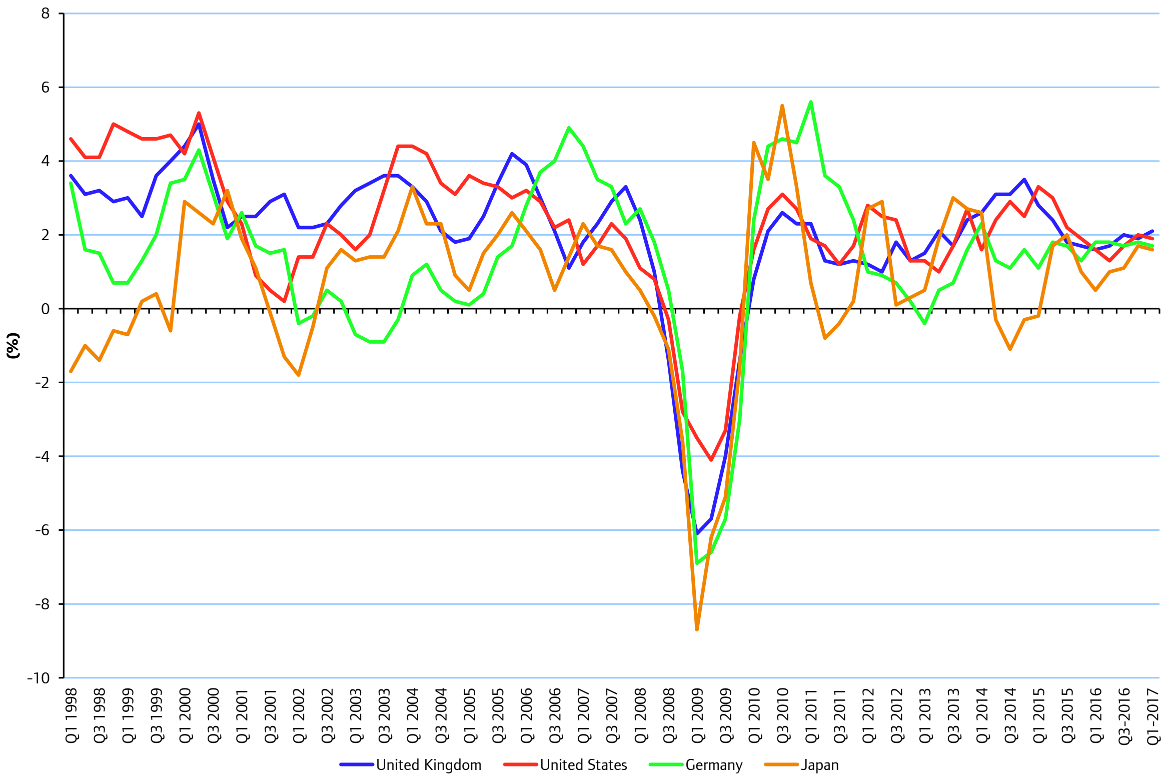
[43] Bureau of Economic Analysis, 26 May 2017, 'National Income and Product Accounts - Gross Domestic Product: First Quarter 2017 (Second Estimate)'.
[44] The Conference Board, 30 May 2017, 'The Conference Board Consumer Confidence Index Declined in May'.
[45] Bureau of Labor Statistics, 2 June 2017, 'News Release: The Employment Situation – May 2017'.
[46] The Federal Reserve Board, 31 May 2017, 'The Beige Book: Summary of Commentary on Current Economic Conditions by Federal Reserve District'.
[47] These weaknesses have been outlined in numerous previous editions of LEO and can be found at the GLA Economics publications page.
[48] Eurostat, 8 June 2017, 'GDP and main aggregates estimate for the first quarter of 2017: GDP up by 0.6% in both the euro area and the EU28'.
[49] Eurostat, 16 June 2017, 'May 2017: Annual inflation down to 1.4% in the euro area - Down to 1.6% in the EU'.
[50] Eurostat, 31 May 2017, 'April 2017: Euro area unemployment at 9.3% - EU28 at 7.8%'.
[51] IMF, April 2017, 'World Economic Outlook: Gaining Momentum?'

Figure 3.19: GDP growth in selected industrialised countries
Real GDP, growth rate compared to same quarter of previous year, last data point is Q1 2017



Source: OECD

3.4 Emerging market economies

Emerging market economies showed a modest picture on growth in 2016 although this is expected to improve going forward. The IMF thus observes that "activity is projected to pick up markedly in emerging market and developing economies because conditions in commodity exporters experiencing macroeconomic strains are gradually expected to improve, supported by the partial recovery in commodity prices, while growth is projected to remain strong in China and many other commodity importers."[52]. The IMF now forecasts that emerging market and developing economies will grow by 4.5 per cent in 2017 and 4.8 per cent in 2018 (both forecasts unchanged on their previous forecast).

Of the major emerging markets **China's** economy continues to expand with its growth accelerating to an annualised rate of 6.9 per cent in the first quarter of 2017. Nevertheless the Asian Development Bank (ADB) has observed that "growth in this restructuring economy continued to decelerate in 2016, but the government ensured stability through targeted fiscal and monetary support. Inflation started to rise, and the current account surplus narrowed but remained sizeable. These trends will continue in 2017 and 2018. Structural reform needs to be accelerated to boost productivity and sustain growth as outlined in the current 5-year plan"[53]. The IMF forecasts that China will grow by 6.6 per cent in 2017 and 6.2 per cent in 2018

[52] Ibid.
[53] Asian Development Bank, April 2017, '[Asian Development Outlook 2017: Transcending the middle-income challenge]'.

(upgrades of 0.1 and 0.2 percentage points respectively on their previous forecast)[54], while the ADB forecasts growth of 6.5 per cent in 2017 and 6.2 per cent in 2018[55].

India's economic growth slowed somewhat in the fiscal year 2016 in part due to a government decision to withdraw legal status from Rs500 and Rs1,000 currency notes to counter black market currency hoarding and counterfeiting. This demonetarised 86 per cent of the currency in circulation by value with new notes being issued but their pick up being gradual. The ADB has observed that "dragging on growth were excess production capacity, problems that past overinvestment left on corporate balance sheets, and new bank lending inhibited by too many stressed assets. Moderately higher growth is projected as consumption picks up and government initiatives boost private investment"[56]. The IMF forecasts that Indian growth will be 7.2 per cent this year and 7.7 per cent in 2018 (both unchanged on their previous forecast)[57], while the ADB forecasts growth of 7.4 per cent in 2017 and 7.6 per cent in 2018[58].

Russia's economy continued to contract in 2016; however this is expected to ease in 2017. Thus, the IMF argues that "Russia is poised to exit recession, with growth reaching 1.4 percent in 2017 (following a cumulative contraction of about 3 percent in the previous two years). The pickup in activity reflects firming oil prices and a recovery in domestic demand attributable to easing financial conditions and improved confidence. At the same time, Russia's potential growth will remain subdued at about 1.5 percent barring reforms, slowing a convergence toward advanced economy per capita income levels"[59]. The IMF thus forecasts growth of 1.4 per cent in both 2017 and 2018 (upgrades of 0.3 and 0.2 percentage points respectively on their previous forecast)[60].

3.5 Risks to the economy

Although so far having had a limited impact, the most obvious risk to the UK and London's economy remains domestic and comes from the continued economic uncertainty due to the beginning of the Article 50 process and the doubts this has raised about the long-term economic environment (in terms of trade, skills, labour supply etc.) which the capital will face. There is survey evidence that the 'Brexit' process has slightly dampened business sentiment and this could act as a drag on London's economy until the uncertainty around the final outcome is resolved. The long-term impact of 'Brexit' on the UK and London's economies still remains open to debate with various factors likely to influence the capital's economic prospects in a post EU membership world.

A number of other risks are related and include the current pick up in UK inflation, which could go higher in the coming year, due to the large depreciation of sterling. This will likely see an erosion of household spending power if nominal wages do not rise in compensation. Increased import prices may see large rises in the costs of UK firms using imports in their production processes. Further, while remote, the continuing depreciation of sterling leads to risks that the willingness of foreign investors to hold UK Government debt may be eroded and when combined with this the continued large current account deficit could lead to additional falls in

[54] IMF, April 2017, 'World Economic Outlook: Gaining Momentum?'
[55] Asian Development Bank, April 2017, 'Asian Development Outlook 2017: Transcending the middle-income challenge'.
[56] Ibid.
[57] IMF, April 2017, 'World Economic Outlook: Gaining Momentum?'
[58] Asian Development Bank, April 2017, 'Asian Development Outlook 2017: Transcending the middle-income challenge'.
[59] IMF, April 2017, 'World Economic Outlook: Gaining Momentum?'
[60] Ibid.

the currency. Any reputational damage to London due to a perceived erosion of London's position as a welcoming place in which to do business could dampen both FDI into and business' decisions on the size of their presence in the capital and also collaboration on international projects with foreign partners.

Outside of these risks for London and the UK worries about the size of the Chinese debt burden along with the overall strength of the Chinese economy have been highlighted by some analysts. Any significant slowdown or financial ructions in China is likely to have knock-on effects on some of its key trading partners. The direct impact on the UK and London of a Chinese economic slowdown might be muted, however the indirect effect of this slowdown on economies with which the UK and London heavily trades could lead to a dampening in London's economic growth rate. Further, any financial instability (due to the above mentioned high levels of Chinese debt) that problems in China cause could have detrimental direct impacts on the City.

As has been highlighted by GLA Economics for a number of years another large downside risk to the economy continues to be the structural problems of the Eurozone that the various crises over the years have highlighted and which remain to be properly dealt with. However, these economic risks have become a bit more subdued over the past year or so than those seen in recent years.

Still UK monetary policy is likely to remain very accommodating for longer than was expected before the June 2016 referendum. Expectations of a prolonged period of low interest rates in the UK may thus act to support business and consumer confidence. This however also provides risks to the UK economy along with benefits. The risks stem from when to return monetary policy to more historically normal levels (and reducing the level of quantitative easing) and arise from moving either too early or too late. Raising rates too early can stall economic growth. Conversely, normalising monetary policy too late and too gradually could also lead to risks, with ultra-loose monetary policy potentially lulling markets into a false sense of security and allowing asset bubbles to develop. In relation to this last point recently there has been concerns raised by a number of commentators on the mounting levels of consumer debt which many feel are being partially fuelled by very low interest rates. Still, outside the UK and for advanced economies as a whole, the era of extremely accommodative monetary policy in at least some economies is likely to begin to end over the coming few years or so. This tightening, especially that ongoing in US monetary policy, along with looser rates in other nations may have unexpected knock-on impacts on emerging market economies. For instance, rising interest rates, especially if also accompanied by a fiscal spending boom in the US, could lead to funds flowing out of emerging market economies and into America leading to destabilising effects on some economies.

Geopolitical risks such as the continuing conflicts in Ukraine and the Middle East could also negatively impact on the global economy especially if these raise tensions between globally important economic actors. Linked to this is increasing talk about protectionism, particularly from the US, which could similarly negatively affect global trade. This could impact the UK and London economies directly (in terms of trade with specific countries) and indirectly (in terms of the UK's exports' markets being directly impacted). Additionally, there are ongoing issues with the supply and affordability of housing in the capital adding to longer-term concerns for the impact this may have on London's economy. There is also some evidence that consumer spending which had supported growth in the economy in recent years may be moderating in light of the recent pickup in inflation.

Upside risks to the forecast have increased since the November 2016 LEO and include the possibility that global growth which appears to have picked up a touch may turn out to be stronger than currently expected in the coming year or so. In the Eurozone the economic outlook although still a bit subdued is also generally more optimistic than has been the case in the previous few years. If the economic environment in the Eurozone remains relatively benign, then this could provide a boost to its significant trading partners including both London and the UK. The recent large depreciation of sterling against most currencies could be an upside risk to the UK and London's economy with it making both tourism to London and exports from the capital and domestically produced products more competitive in comparison to foreign produced products. However, on balance, the risks to the economy remain more on the downside over the coming few years.

3.6 Conclusion

The UK economy grew at a modest but relatively decent pace in 2016 although this growth slowed somewhat in the first quarter of 2017. Still most economic indicators suggest continued growth. Monetary policy remains loose and should remain so for a time to come which should provide support to the UK economy. However, inflation has picked up and may rise further over the course of the coming years perhaps overshooting the Bank of England's central symmetrical target. This rising inflation may provide limited room for further monetary policy loosening by the Bank and could also erode households' real incomes, to some extent, and therefore consumption unless nominal wages begin to rise to compensate for the erosion of household spending power. Outside the UK, the Federal Reserve is expected to continue its normalisation of monetary policy in the US and the economic situation in the Eurozone, an important trading partner for the UK, is generally more stable than has been the case for most of this decade.

Overall and despite some economic uncertainty London's economy continues to grow, and most evidence suggests that, at the moment, this growth remains more robust than the UK as a whole. The labour market although slowing from the growth seen in the past few years remains generally solid and consumer and business confidence has picked up although they remain weaker than at the turn of last year. Taken all together London's economy in terms of output, employment and household income is expected to continue its growth over the coming years, although at a generally more subdued rate than seen in recent years.

4. Review of independent forecasts

What the forecasts provide

GLA Economics' forecast of four economic indicators is provided in Chapter 5: workforce jobs, real GVA, private consumption (household expenditure) and household income in London. In this chapter the consensus view, as of 1 June 2017, on the first three of these indicators is summarised[61], drawing on forecasts from outside (independent) organisations[62]. Both annual growth rates and 'standardised' absolute levels are reported. All the data is in real terms (constant prices). The source for the historic data in the following tables and charts is for GVA and workforce jobs GLA Economics modelling using ONS data while the source data for Household Income and Expenditure is EE for the historic growth rates and GLA Economics modelling using EE data for the levels data.

Additionally, both the consensus[63] and GLA Economics' own forecasts provide predictions of employment and output growth in six broad sectors:

- Manufacturing
- Construction
- Transportation and storage
- Distribution[64], accommodation and food service activities
- Finance and business services[65]
- Other (public & private) services[66].

It should be noted, that since our spring 2012 forecast GLA Economics has been using the new Standard Industrial Classification (SIC 2007)[67].

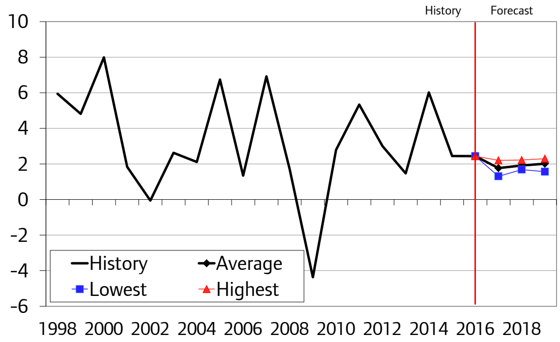
[61] The consensus forecast for GVA and employment is based on the latest available forecast from CE, CEBR, EE and OE, while the consensus forecast for household expenditure is based on the latest available forecast from CE, EE and OE only.
[62] Most forecasters do not yet provide forecasts of household income.
[63] 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.
[64] Distribution is made from the summation of Wholesale and Retail.
[65] 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.
[66] This is made from the summation of Public admin and defence, Education, Health, Arts, entertainment and recreation and Other services.
[67] For more information see Appendix A of: GLA Economics, June 2012, 'London's Economic Outlook: Spring 2012'.

Output

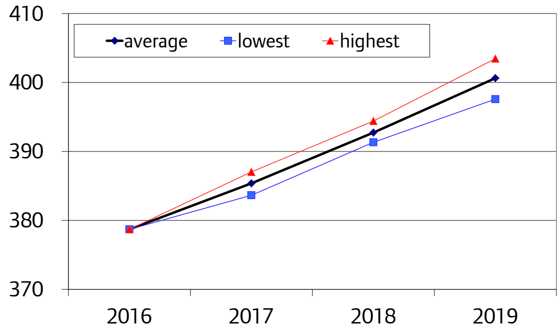
(London GVA, constant prices (base year 2013), £ billion)

The consensus (mean average view) is for real output growth to be 1.8 per cent in 2017, 1.9 per cent in 2018, and 2.0 per cent in 2019.

Annual growth (per cent)



Level (constant year 2013, £ billion)



Annual growth (per cent)					Level (constant year 2013, £ billion)			
	2017	2018	2019			2017	2018	2019
Average	1.8	1.9	2.0		Average	385	393	401
Lowest	1.3	1.7	1.6		Lowest	384	391	398
Highest	2.2	2.2	2.3		Highest	387	394	403

History: Annual growth (per cent)

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
5.9	4.8	8.0	1.8	-0.1	2.6	2.1	6.7	1.3	6.9	1.7	-4.4	2.8	5.3	3.0	1.5	6.0	2.4	2.4

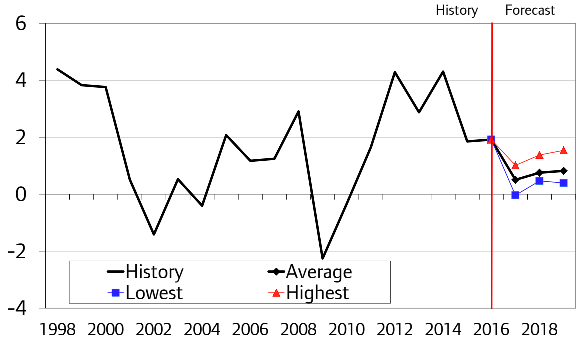
History: Level (constant year 2013, £ billion)

1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
209.0	221.4	232.1	250.7	255.3	255.1	261.8	267.3	285.4	289.2	309.2	314.5	300.8	309.2	325.7	335.4	340.4	360.9	369.7	378.7

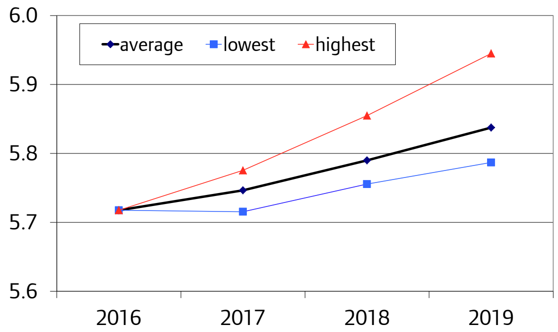
Employment
(London workforce jobs)

The consensus view is for the number of workforce jobs to increase by 0.5 per cent in 2017 and by 0.8 per cent in both 2018 and 2019.

Annual growth (per cent)



Level (millions)



Annual growth (per cent)					Level (millions)			
	2017	2018	2019			2017	2018	2019
Average	0.5	0.8	0.8		Average	5.75	5.79	5.84
Lowest	0.0	0.5	0.4		Lowest	5.72	5.76	5.79
Highest	1.0	1.4	1.5		Highest	5.78	5.85	5.94

History: Annual growth (per cent)

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
4.4	3.8	3.8	0.5	-1.4	0.5	-0.4	2.1	1.2	1.2	2.9	-2.3	-0.3	1.6	4.3	2.9	4.3	1.9	1.9

History: Level (millions)

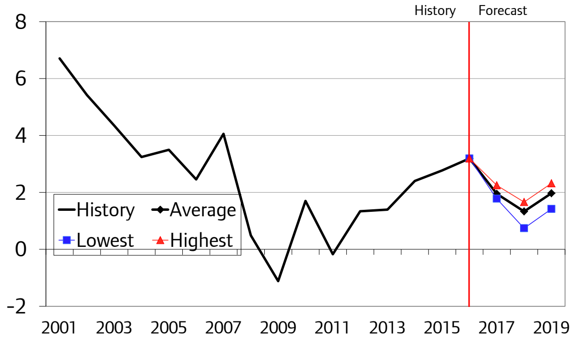
1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
4.14	4.32	4.49	4.66	4.68	4.62	4.64	4.62	4.72	4.77	4.83	4.97	4.86	4.84	4.92	5.13	5.28	5.51	5.61	5.72

Household expenditure

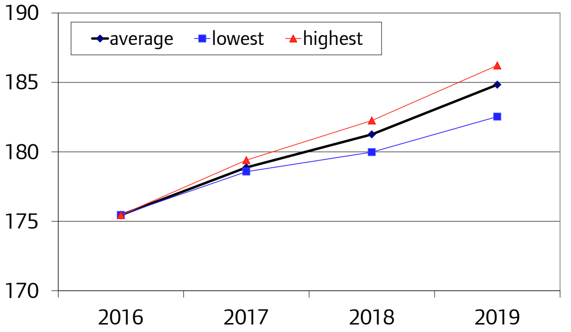
(London household spending, constant year 2013, £ billion)

The consensus view is for positive household expenditure growth of 2.0 per cent in 2017, 1.3 per cent in 2018, and 2.0 per cent in 2019.

Annual growth (per cent)



Level (constant year 2013 £ billion)



Annual growth (per cent)					Level (constant year 2013 £ billion)			
	2017	2018	2019			2017	2018	2019
Average	2.0	1.3	2.0		Average	179	181	185
Lowest	1.8	0.7	1.4		Lowest	179	180	183
Highest	2.3	1.7	2.3		Highest	179	182	186

History: Annual growth (per cent)

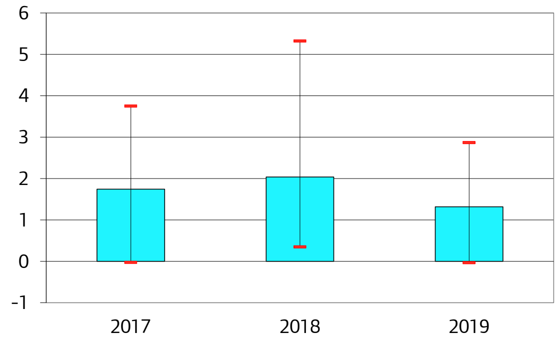
2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
6.7	5.4	4.3	3.2	3.5	2.5	4.1	0.5	-1.1	1.7	-0.2	1.3	1.4	2.4	2.8	3.2

History: Level (constant year 2013, £ billion)

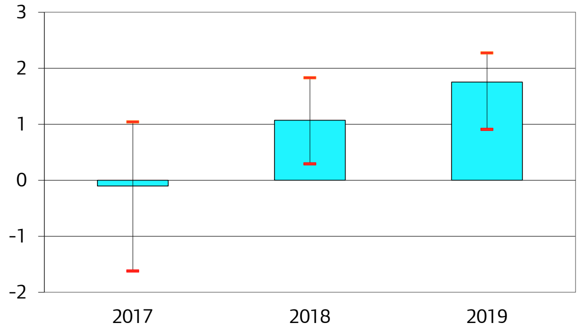
2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
116.6	124.4	131.1	136.8	141.3	146.2	149.8	155.9	156.6	154.9	157.5	157.2	159.3	161.6	165.4	170.0	175.5

Output growth by sector (per cent annual change)
As the economy continues to grow it is expected that there will be positive output growth in all sectors for all years apart from Construction which sees a decline in 2017.

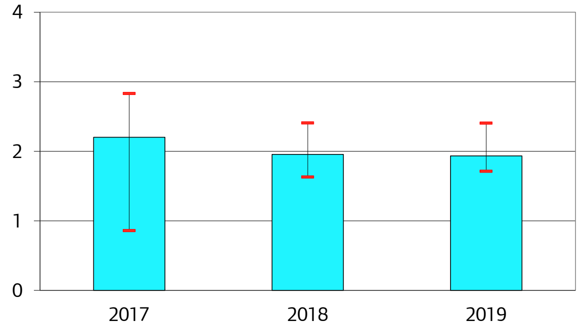
Manufacturing



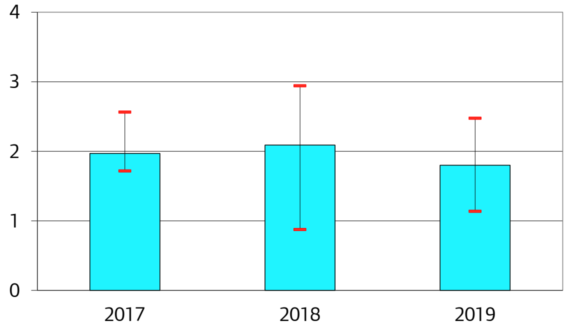
Construction



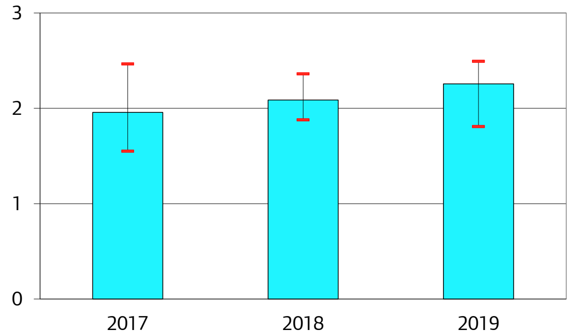
Distribution, accommodation and food service activities



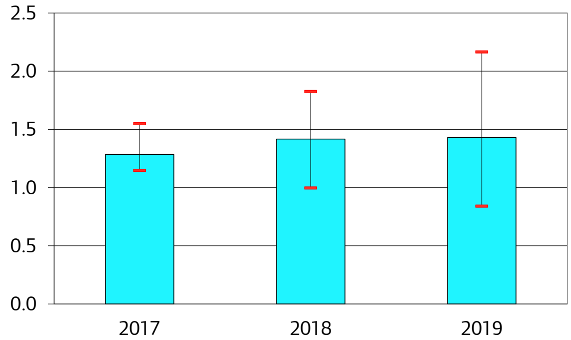
Transportation and storage



Finance and business



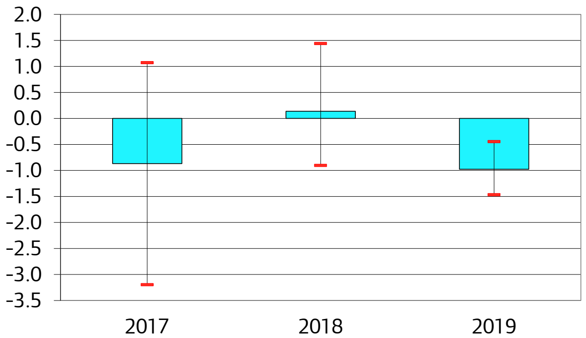
Other (public & private) services



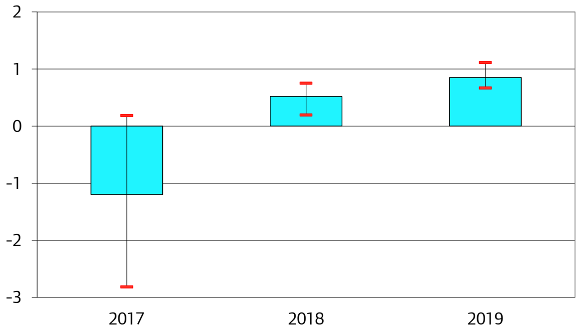
		2017	2018	2019			2017	2018	2019
Manufacturing	*Average*	1.7	2.0	1.3	**Construction**	*Average*	-0.1	1.1	1.8
	Lowest	0.0	0.3	0.0		*Lowest*	-1.6	0.3	0.9
	Highest	3.8	5.3	2.9		*Highest*	1.0	1.8	2.3
Distribution, accommodation and food service activities	*Average*	2.2	2.0	1.9	**Transportation and storage**	*Average*	2.0	2.1	1.8
	Lowest	0.9	1.6	1.7		*Lowest*	1.7	0.9	1.1
	Highest	2.8	2.4	2.4		*Highest*	2.6	2.9	2.5
Finance and business	*Average*	2.0	2.1	2.3	**Other (public & private) services**	*Average*	1.3	1.4	1.4
	Lowest	1.6	1.9	1.8		*Lowest*	1.1	1.0	0.8
	Highest	2.5	2.4	2.5		*Highest*	1.5	1.8	2.2

Employment growth by sector (per cent annual change)
Forecast employment growth is mixed across the sectors with Construction, Manufacturing, and Transportation and storage expected to see some years of declining employment while the other sectors are expected to see employment growth over all forecast years.

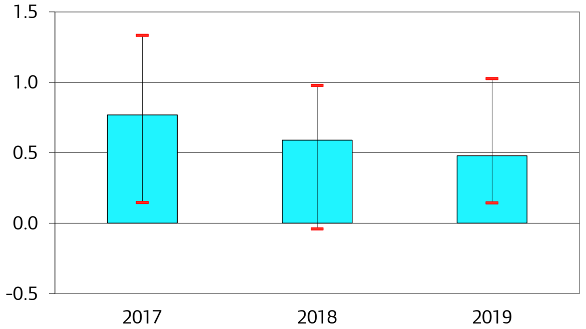
Manufacturing



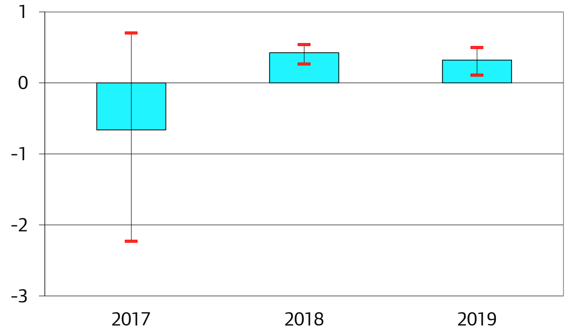
Construction



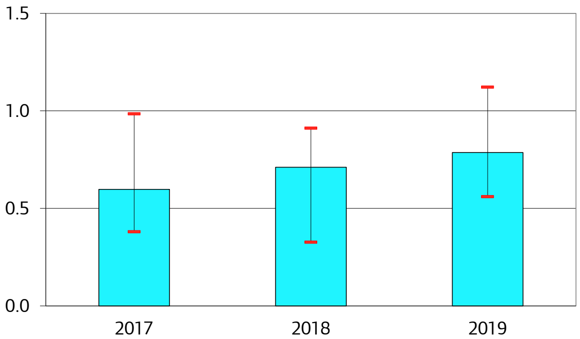
Distribution, accommodation and food service activities



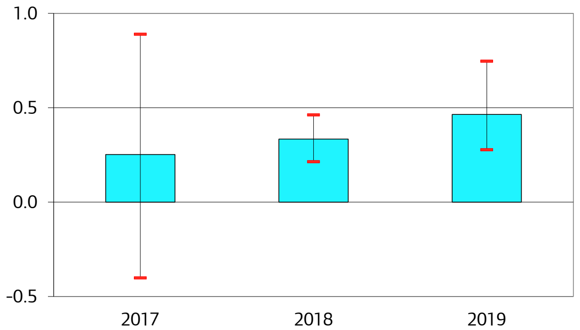
Transportation and storage



Finance and business



Other (public & private) services



		2017	2018	2019			2017	2018	2019
Manufacturing	*Average*	-0.9	0.1	-1.0	**Construction**	*Average*	-1.2	0.5	0.9
	Lowest	-3.2	-0.9	-1.5		*Lowest*	-2.8	0.2	0.7
	Highest	1.1	1.4	-0.4		*Highest*	0.2	0.8	1.1
Distribution, accommodation and food service activities	*Average*	0.8	0.6	0.5	**Transportation and storage**	*Average*	-0.7	0.4	0.3
	Lowest	0.1	0.0	0.1		*Lowest*	-2.2	0.3	0.1
	Highest	1.3	1.0	1.0		*Highest*	0.7	0.5	0.5
Finance and business	*Average*	0.6	0.7	0.8	**Other (public & private) services**	*Average*	0.3	0.3	0.5
	Lowest	0.4	0.3	0.6		*Lowest*	-0.4	0.2	0.3
	Highest	1.0	0.9	1.1		*Highest*	0.9	0.5	0.7

5. The GLA Economics forecast

5.1 The background

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 the historic data in the following tables and charts is for GVA and workforce jobs GLA Economics modelling using ONS data while the source data for Household Income and Expenditure is EE for the historic growth rates and GLA Economics modelling using EE data for the levels data.

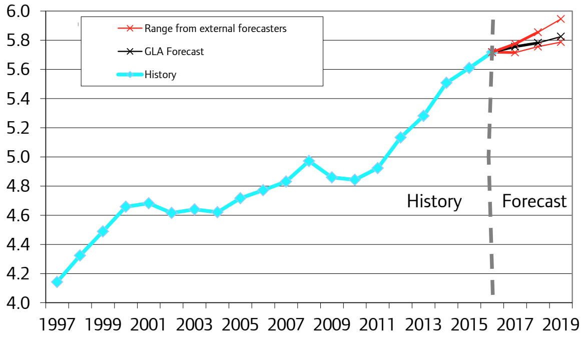
5.2 Results

Following the resumption of positive growth in 2010, output is expected to continue to rise between 2017 and 2019. Employment growth is forecast to be positive over the forecast period.

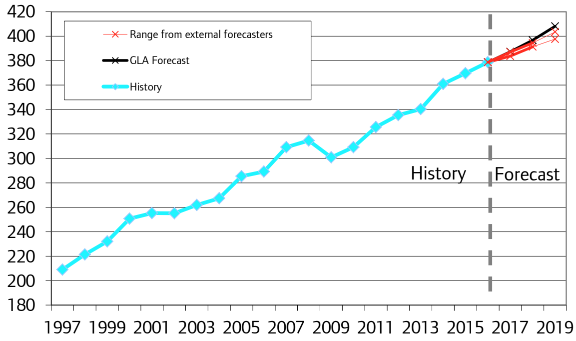
Household spending is expected to continue to grow between 2017 and 2019. Household income growth is also expected to be positive over the forecast period.

Figure 5.1: Trend and forecast employment and output

Employment (millions of workforce jobs)



Output (constant year 2013, £ billion)



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

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

	2011	2012	2013	2014	2015	2016	2017	2018	2019
GVA	5.3	3.0	1.5	6.0	2.4	2.4	2.3	2.4	2.9
Workforce jobs	1.6	4.3	2.9	4.3	1.9	1.9	0.7	0.5	0.7
Household spending	-0.2	1.3	1.4	2.4	2.8	3.2	1.6	1.2	2.5
Household income	-1.3	3.0	1.2	3.7	3.9	3.1	1.5	1.3	2.5

Table 5.2: Forecast and historical levels
(constant year 2013, £ billion except jobs)

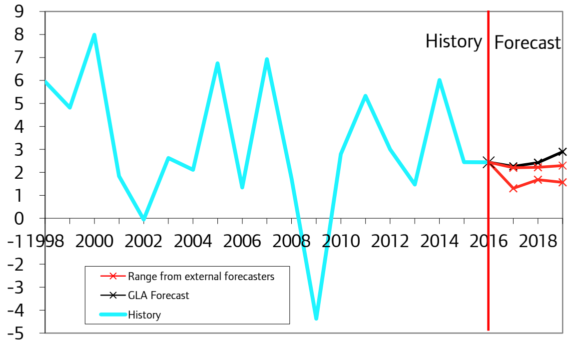
	2011	2012	2013	2014	2015	2016	2017	2018	2019
GVA	325.7	335.4	340.4	360.9	369.7	378.7	387.3	396.6	408.1
Workforce jobs (millions)	4.92	5.13	5.28	5.51	5.61	5.72	5.76	5.78	5.82
Household spending	157.2	159.3	161.6	165.4	170.0	175.5	178.3	180.4	185.0
Household income	187.0	192.7	194.9	202.0	209.9	216.4	219.6	222.6	228.2

Output
(London GVA, constant year 2013, £ billion)

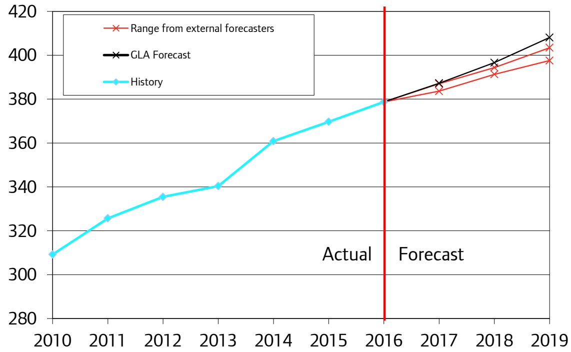
London's real GVA is forecast to grow between 2017 and 2019. Forecast growth rates are 2.3 per cent in 2017, 2.4 per cent in 2018 and 2.9 per cent in 2019.

The GLA Economics' forecast is higher than the consensus average forecast for all years of the forecast period.

Annual growth (per cent)



Level (constant year 2013, £ billion)



Growth (annual per cent)						Level (constant year 2013, £ billion)				
	2016	2017	2018	2019			2016	2017	2018	2019
GLA	2.4	2.3	2.4	2.9		GLA	379	387	397	408
Consensus		1.8	1.9	2.0		Consensus		385	393	401

History: Annual growth (per cent)

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
5.9	4.8	8.0	1.8	-0.1	2.6	2.1	6.7	1.3	6.9	1.7	-4.4	2.8	5.3	3.0	1.5	6.0	2.4	2.4

History: Level (constant year 2013, £ billion)

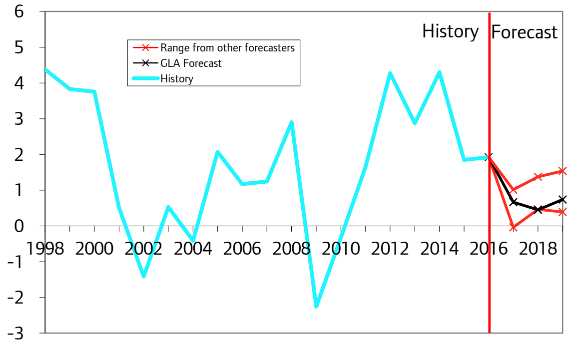
1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
209.0	221.4	232.1	250.7	255.3	255.1	261.8	267.3	285.4	289.2	309.2	314.5	300.8	309.2	325.7	335.4	340.4	360.9	369.7	378.7

Employment
(London workforce jobs)

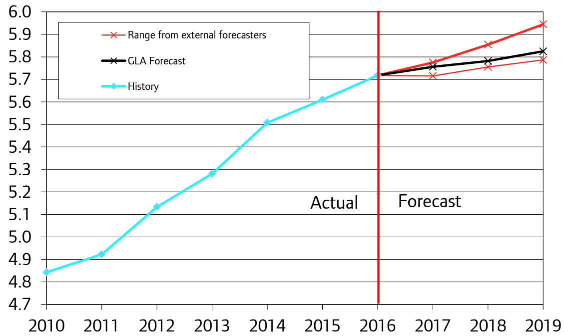
London's employment is forecast to rise between 2017 and 2019.

GLA Economics' forecast for employment growth is higher than the consensus average forecast for 2017 but lower in 2018 and 2019.

Annual growth (per cent)



Level (millions of workforce jobs)



Growth (annual per cent)				
	2016	2017	2018	2019
GLA	1.9	0.7	0.5	0.7
Consensus		0.5	0.8	0.8

Level (millions of workforce jobs)				
	2016	2017	2018	2019
GLA	5.72	5.76	5.78	5.82
Consensus		5.75	5.79	5.84

History: Annual growth (per cent)

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
4.4	3.8	3.8	0.5	-1.4	0.5	-0.4	2.1	1.2	1.2	2.9	-2.3	-0.3	1.6	4.3	2.9	4.3	1.9	1.9

History: Level (millions)

1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
4.14	4.32	4.49	4.66	4.68	4.62	4.64	4.62	4.72	4.77	4.83	4.97	4.86	4.84	4.92	5.13	5.28	5.51	5.61	5.72

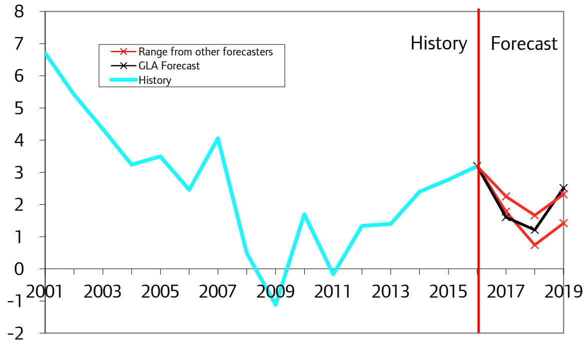
Household expenditure

(London household spending, constant year 2013, £ billion)

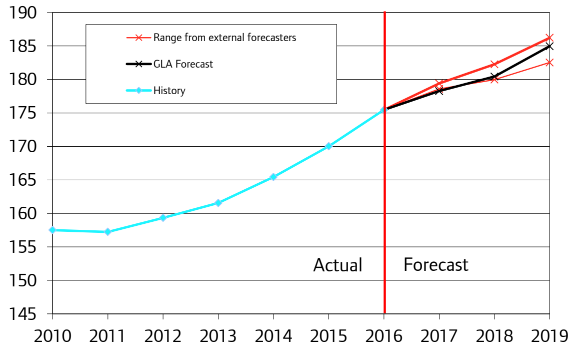
Growth in London's household spending is forecast to be positive over the forecast period.

GLA Economics' household spending growth forecast is lower than the consensus average in 2017 and 2018 but higher the consensus average in 2019.

Annual growth (per cent)



Level (constant year 2013, £ billion)



Growth (annual per cent)						Level (constant year 2013, £ billion)				
	2016	2017	2018	2019			2016	2017	2018	2019
GLA	175	178	180	185		GLA	3.2	1.6	1.2	2.5
Consensus		179	181	185		Consensus		2.0	1.3	2.0

History: Annual growth (per cent)

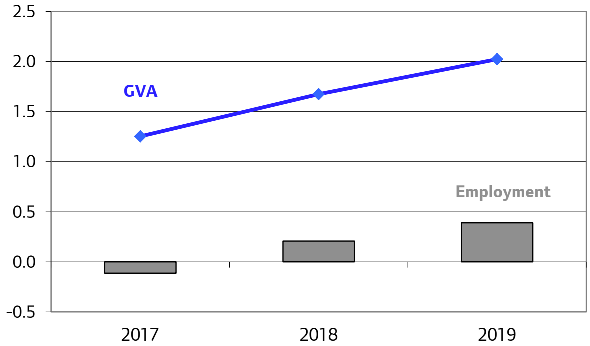
2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
6.7	5.4	4.3	3.2	3.5	2.5	4.1	0.5	-1.1	1.7	-0.2	1.3	1.4	2.4	2.8	3.2

History: Level (constant year 2013, £ billion)

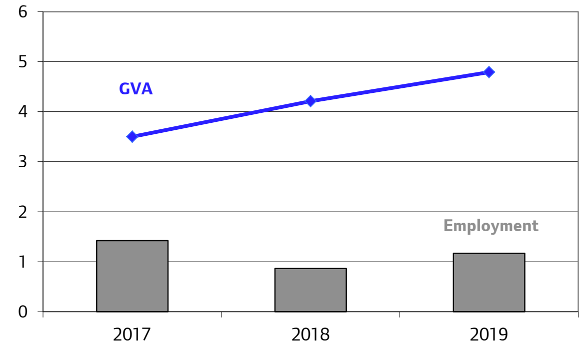
2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
116.6	124.4	131.1	136.8	141.3	146.2	149.8	155.9	156.6	154.9	157.5	157.2	159.3	161.6	165.4	170.0	175.5

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

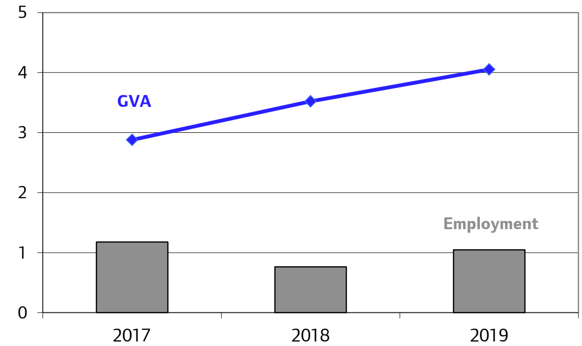
Financial services



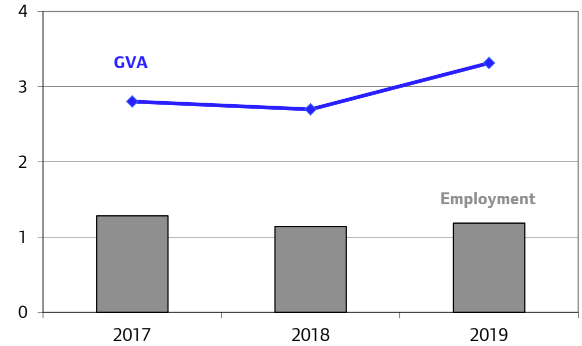
Business services



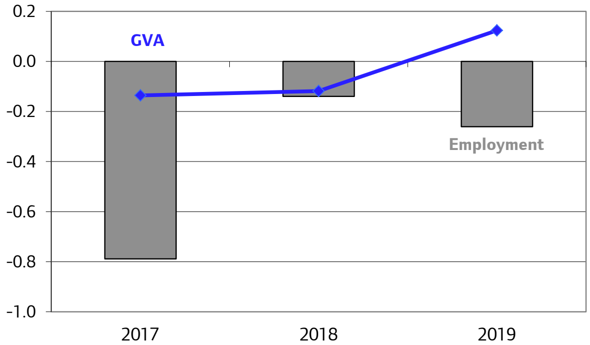
Finance and business (combined)



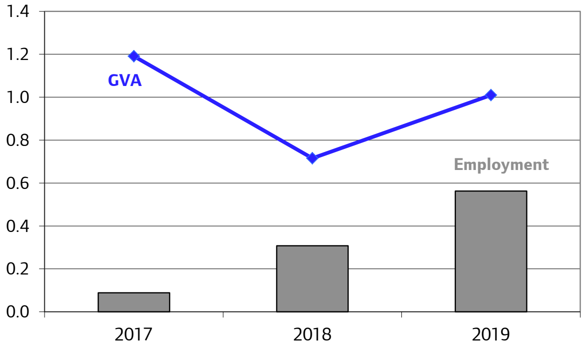
Distribution, accommodation and food service activities



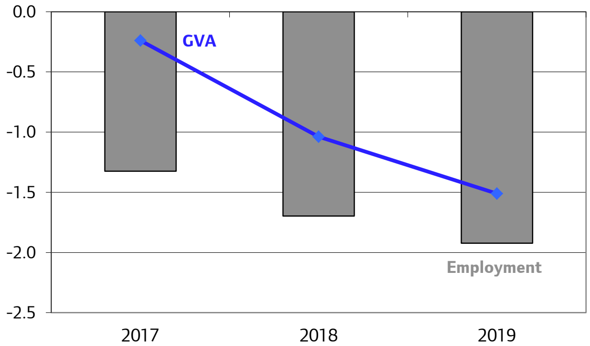
Transportation and storage



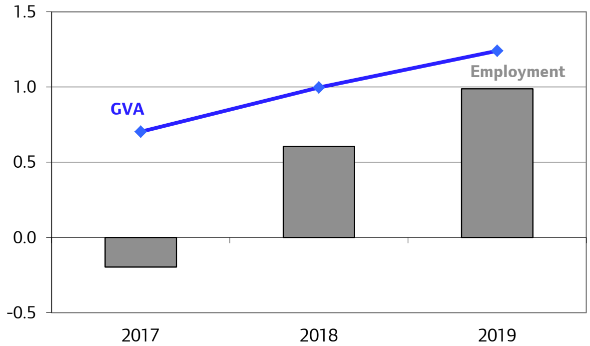
Other (public & private) services



Manufacturing



Construction



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

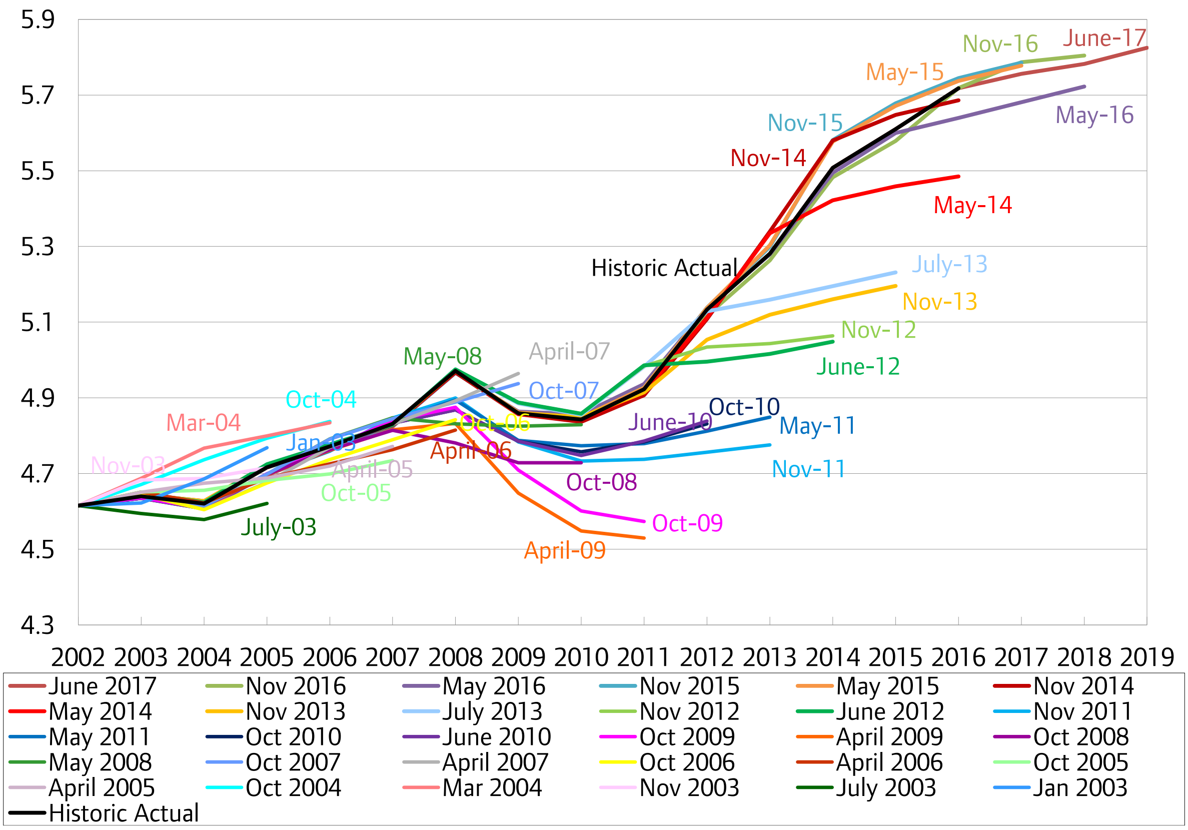
	2017	2018	2019
Financial services			
Output	1.3	1.7	2.0
Employment	-0.1	0.2	0.4
Business services			
Output	3.5	4.2	4.8
Employment	1.4	0.9	1.2
Financial and business services combined			
Output	2.9	3.5	4.1
Employment	1.2	0.8	1.0
Distribution, accommodation and food service activities			
Output	2.8	2.7	3.3
Employment	1.3	1.1	1.2
Transportation and storage			
Output	-0.1	-0.1	0.1
Employment	-0.8	-0.1	-0.3
Other (public & private) services			
Output	1.2	0.7	1.0
Employment	0.1	0.3	0.6
Manufacturing			
Output	-0.2	-1.0	-1.5
Employment	-1.3	-1.7	-1.9
Construction			
Output	0.7	1.0	1.2
Employment	-0.2	0.6	1.0
(Memo: non-manufacturing)			
Output	2.3	2.5	3.0
Employment	0.7	0.5	0.8

5.3 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 is lower than in the November 2016 forecast for this year but higher for 2018 and higher for both years for GVA.

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

(millions of workforce jobs)



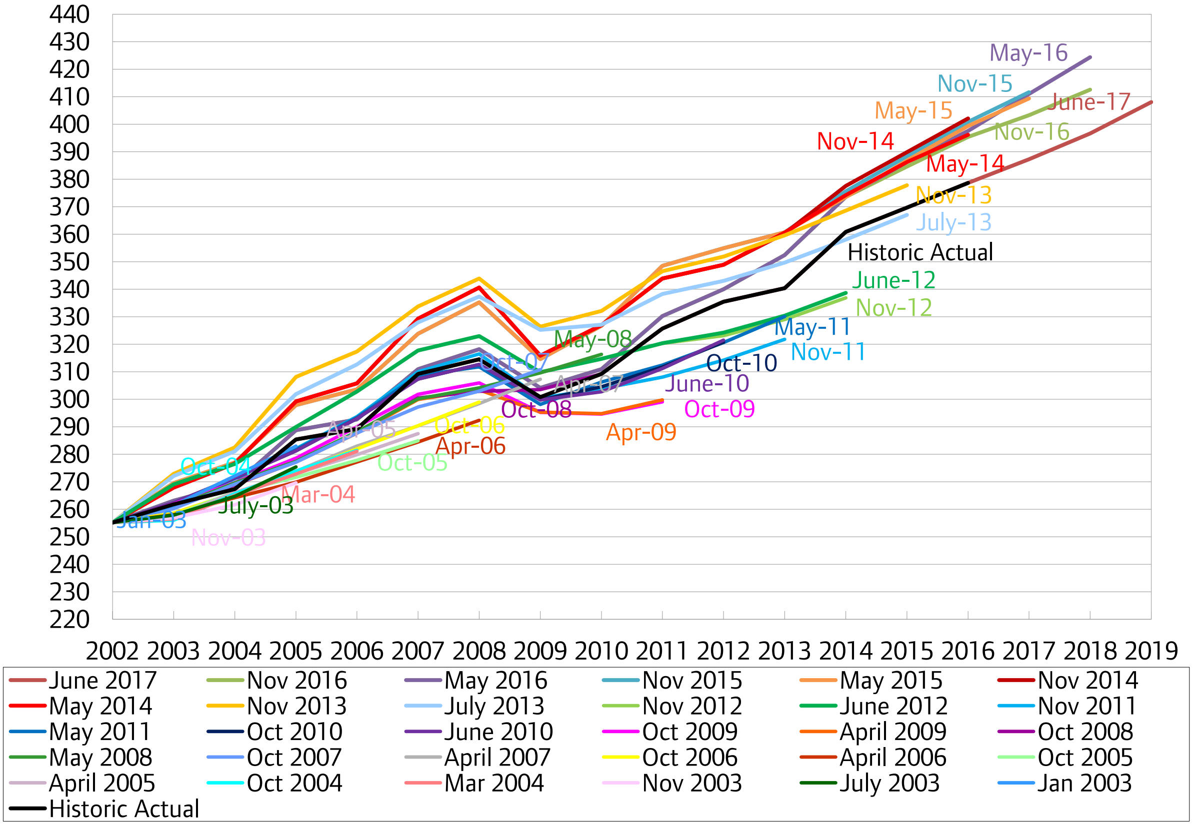
Source: Various London's Economic Outlooks

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	2018	2019
June 2017	**0.5%**	**-0.4%**	**2.1%**	**1.2%**	**1.2%**	**2.9%**	**-2.3%**	**-0.3%**	**1.6%**	**4.3%**	**2.9%**	**4.3%**	**1.9%**	**1.9%**	**0.7%**	**0.5%**	**0.7%**
Nov 2016														2.5%	1.2%	0.3%	
May 2016														0.7%	0.7%	0.7%	
Nov 2015													1.7%	1.2%	0.7%		
May 2015													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 2013, £ 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	2018	2019
June 2017	**2.6%**	**2.1%**	**6.7%**	**1.3%**	**6.9%**	**1.7%**	**-4.4%**	**2.8%**	**5.3%**	**3.0%**	**1.5%**	**6.0%**	**2.4%**	**2.4%**	**2.3%**	**2.4%**	**2.9%**
Nov 2016														2.8%	2.0%	2.3%	
May 2016														2.9%	3.4%	3.3%	
Nov 2015													3.4%	3.2%	2.7%		
May 2015													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: 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 2015 from the ONS[68]. So far only experimental official estimates of real regional GVA[69] are available because of the difficulties in producing authoritative regional price deflators, although the ONS has produced regional price indexes for the year 2010[70]. Most regional forecasters supply their own estimates of London's real GVA. The historic real London GVA figures used in this GLA Economics' forecast are estimates produced by GLA Economics using ONS data.

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.

[68] ONS, 15 December 2016, 'Regional Gross Value Added (Income Approach): 1997 to 2015'.
[69] ONS, 16 December 2016, 'Regional Gross Value Added (Production Approach): 1998 to 2014'.
[70] ONS, 12 July 2011, 'UK Relative Regional Consumer Price Levels for Goods and Services for 2010'.

Appendix B: Glossary of acronyms

ADB	Asian Development Bank
BIS	The Bank for International Settlements
bn	Billion
CE	Cambridge Econometrics
CEBR	The Centre for Economic and Business Research
CPI	Consumer Price Index
DCLG	Department for Communities and Local Government
ECB	European Central Bank
EE	Experian Economics
EERI	Effective Exchange Rate Index
EU	European Union
Fed	Federal Reserve
FT	Financial Times
GDP	Gross Domestic Product
GLA	Greater London Authority
GVA	Gross Value Added
HM Treasury	Her Majesty's Treasury
IFS	Institute for Fiscal Studies
ILO	International Labour Organisation
IMF	International Monetary Fund
LEO	London's Economic Outlook
LFS	Labour Force Survey
LHS	Left Hand Scale
mn	Million
MPC	Monetary Policy Committee
OBR	Office for Budget Responsibility
OE	Oxford Economics
OECD	Organisation for Economic Co-operation and Development
ONS	Office for National Statistics
PMI	Purchasing Managers' Index
Q2	Second Quarter
QE	Quantitative Easing
RHS	Right Hand Scale
RICS	Royal Institution of Chartered Surveyors
RPI	Retail Price Index
TfL	Transport for London

Appendix C: Bibliography

Asian Development Bank. Asian Development Outlook 2017: Transcending the middle-income challenge. April 2017.

Bank of England. Agents' Summary of Business Conditions - 2017 Q1. March 2017.

Bank of England. Agents' Summary of Business Conditions - 2017 Q2. June 2017.

Bank of England. Agents' Summary of Business Conditions, May 2017 Update. May 2017.

Bank of England. Credit Conditions Survey – 2017 Q1. April 2017.

Bank of England. Inflation Report – February 2017. February 2017.

Bank of England. Inflation Report – May 2017. May 2017.

Bank of England. Monetary policy summary and minutes of the Monetary Policy Committee meeting ending on 1 February, 15 March, & 10 May 2017.

Bureau of Economic Analysis. National Income and Product Accounts: Gross Domestic Product - First Quarter 2017 (Second Estimate). May 2017.

Bureau of Labor Statistics. News Release: The Employment Situation – May 2017. June 2017.

Cambridge Econometrics, 2016. Economic Prospects for the nations and regions of the UK. December 2016.

Centre for Economic and Business Research, 2016. The Prospects Service, London, City and Regional Prospects. April 2017.

Douglass, G., & Wingham, M. London's Economy Today: Issue 177. GLA Economics, May 2017.

Conference Board. The Conference Board Consumer Confidence Index Declined in May. May 2017.

Douglass, G. & van Lohuizen, A., The historic performance of the GLA's medium-term economic forecast model. Current Issues Note 49. GLA Economics. November 2016.

Eurostat. April 2017: Euro area unemployment at 9.3% - EU28 at 7.8%. May 2017.

Eurostat. GDP and main aggregates estimate for the first quarter of 2017: GDP up by 0.6% in both the euro area and the EU28. June 2017.

Eurostat. May 2017: Annual inflation down to 1.4% in the euro area - Down to 1.6% in the EU. June 2017.

Experian Economics, 2017. UK Regional Forecast Quarterly. March 2017.

European Council. European Council (Art. 50) guidelines for Brexit negotiations. April 2017.

Federal Reserve Board. The Beige Book - Summary of Commentary on Current Economic Conditions by Federal Reserve District. May 2017.

GLA Economics. London's Economic Outlook: Autumn 2003. December 2003.

GLA Economics, London's Economic Outlook: Autumn 2016. November 2016.

GLA Economics, London's Economic Outlook: Spring 2012. June 2012.

HM Government. Prime Minister's letter to Donald Tusk triggering Article 50. March 2017.

H M Treasury, 2017. Forecasts for the UK Economy - A comparison of independent forecasts. February. June 2017.

International Monetary Fund. United Kingdom: selected issues, Country report No, 16/169. June 2016.

International Monetary Fund. Fiscal Monitor: Achieving More with Less. April 2017.

International Monetary Fund. Global Financial Stability Report: Getting the Policy Mix Right. April 2017.

International Monetary Fund. World Economic Outlook: Gaining Momentum? April 2017.

Keijonen, M., & van Lohuizen, A. Modelling real quarterly GVA data for London. Current Issues Note 50. GLA Economics. December 2016.

Knight Frank. Central London Quarterly – Offices Q1 2017. April 2017.

Massey, F. Monthly economic commentary: Apr 2017. April 2017. Office for National Statistics.

Office for Budget Responsibility. Economic and fiscal outlook. March 2017.

Office for National Statistics. Regional Gross Value Added (Income Approach): 1997 to 2015. December 2016.

Office for National Statistics. Regional Gross Value Added (Production Approach): 1998 to 2014. December 2016.

Office for National Statistics. Analysis of real earnings: June 2017. June 2017.

Office for National Statistics. Regional labour market statistics in the UK: June 2017. June 2017.

Office for National Statistics. Second estimate of GDP: Jan to Mar 2017. May 2017.

Office for National Statistics. UK consumer price inflation: May 2017. June 2017.

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

Office for National Statistics. UK Labour Market: May 2017. May 2017.

Oxford Economics, 2017. Regional Forecasts. May 2017.

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