GLAECONOMICS

Forecast report

London's Economic Outlook: Autumn 2018
The GLA's medium-term planning projections

November 2018

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1. Executive summary

GLA Economics' 33rd London forecast[1] suggests that:

- London's Gross Value Added (GVA) growth rate is forecast to be 1.9% in 2018. The growth rate is expected to slow slightly to 1.6% in 2019, before reaching 1.9% in 2020.

- London is forecast to see increases in the number of workforce jobs[2] in 2018, 2019 and 2020.

- London's household income and spending are both forecast to increase over the next three years, albeit at a relatively slow rate.

Table 1.1 summarises this report's forecast growth rates for GVA, jobs, household spending and household income. It also provides an average of independent forecasts for the first three of these economic indicators.

Table 1.1: Summary of forecasts

Annual growth rates (per cent)	2017[3]	2018	2019	2020
London GVA[4] (constant 2015, £ billion)	2.7	1.9	1.6	1.9
Consensus (average of independent forecasts)		1.6	1.8	2.0
London civilian workforce jobs	1.4	1.5	0.5	0.7
Consensus (average of independent forecasts)		1.4	0.8	0.9
London household spending (constant 2015, £ billion)	0.7	1.4	0.8	1.6
Consensus (average of independent forecasts)		2.1	1.6	2.0
London household income (constant 2015, £ billion)	0.2	1.9	0.9	1.5
Memo: Projected UK RPI[5] (Inflation rate)	3.6	3.4	3.2	3.1
Projected UK CPI[6] (Inflation rate)	2.7	2.5	2.1	2.0

Sources: GLA Economics' Autumn 2018 forecast and consensus calculated by GLA Economics

[1] The forecast is based on an in-house model built by GLA Economics. For more detail, see: Douglass, G & van Lohuizen, A (2016). 'The historic performance of the GLA's medium-term economic forecast model', GLA Economics Current Issues Note 49, November 2016.

[2] Unless stated otherwise any reference to jobs in the main text refers to workforce jobs.

[3] 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 2017 figures for London GVA are estimates.

[4] The methodology used to estimate London's GVA is outlined in Keijonen, M & van Lohuizen, A (2016). 'Modelling real quarterly GVA data for London', GLA Economics Current Issues Note 50, December 2016.

[5] RPI = Retail Price Index. Although not part of the GLA Economics forecast for London. Instead the consensus forecasts provided by HM Treasury are reported here. See: HM Treasury (2018). 'Forecasts for the UK economy: a comparison of independent forecasts', November 2018.

[6] CPI = Consumer Price Index. Although not part of the GLA Economics forecast for London. Instead the consensus forecasts provided by HM Treasury are reported here. See: HM Treasury (2018). 'Forecasts for the UK economy: a comparison of independent forecasts', November 2018. Also, since December 2003, the Bank of England's symmetrical inflation target has been annual CPI inflation at 2 per cent.

Around four months are left until the end of the Article 50 procedure for the UK to leave the European Union (EU) with a transition period expected to last from 29 March 2019 to 31 December 2020. The four London's Economic Outlook's (LEO)[7, 8, 9,10] since the June 2016 referendum result have examined London's position given this vote in detail. Although progress has been made in the talks with a draft withdrawal agreement agreed between the UK and EU, there remains considerable uncertainty about the outcome of the Brexit process as this agreement has yet to be ratified by Parliament and also the accompanying political declaration only sets out at the high-level the terms of the UK's future relationship with the EU. Box 3.1 in Chapter 3 of this forecast summarises what has occurred in the Brexit process since the publication of the Spring 2018 LEO.

Beyond the large depreciation of sterling seen in the aftermath of the vote and the uncertainty caused about future relationships during the negotiation process the economic shock of the decision has been a bit more delayed than some expected in the run up to the referendum. Overall, economic indicators remain mixed especially compared to where they stood at the beginning of 2016. Although these indicators generally show an ongoing expansion of London's economy, they indicate slower growth than that seen in the middle years of the decade. This moderation in growth is also seen at the UK level. For example, the Bank of England's agents[11] found in the third quarter of 2018 that "growth in business services activity eased somewhat, and contacts indicated that there was tighter cost control on discretionary spending due to heightened uncertainty ahead of Brexit". They added that "investment intentions for the next 12 months softened slightly, depressed by economic and political uncertainty. Concern focused on the possibility of increased trade frictions with the EU after withdrawal, which some firms cited as a reason to put investment on hold or divert it to other countries or subsidiaries". At the same time they also noted that "annual consumer spending growth rose slightly, supported by the warmer weather, which boosted demand for seasonal food and outdoor leisure goods and activities." Overall, they commented that the underlying picture remained one of modest growth, with weak real income growth holding back demand for new cars, white goods and homewares, while housing market activity was also weak.

In terms of credit conditions, the Bank noted that "demand for secured lending for house purchase was unchanged in Q3, and was expected to remain unchanged again in Q4. However, demand for secured lending for remortgaging increased significantly in Q3, and demand was expected to increase significantly again in Q4". They added that, "overall demand for unsecured lending increased significantly in Q3; this was solely driven by a significant increase in demand for credit card lending. However, lenders expected a slight decrease in the demand for both credit card and other unsecured lending in Q4". Although, they further observed that "lenders reported a fall in demand for corporate lending from small businesses in Q3, but expected demand to remain unchanged in Q4. For medium PNFCs, demand for lending was reported to have increased slightly but was expected to remain unchanged in the next quarter. Demand for

7 GLA Economics (2016). 'London's Economic Outlook: Autumn 2016 The GLA's medium-term planning projections', November 2016.
8 GLA Economics (2017). 'London's Economic Outlook: Spring 2017 The GLA's medium-term planning projections', June 2017.
9 GLA Economics (2017). 'London's Economic Outlook: Autumn 2017 The GLA's medium-term planning projections', November 2017.
10 GLA Economics (2018). 'London's Economic Outlook: Spring 2018 The GLA's medium-term planning projections', May 2018.
11 Bank of England (2018). 'Agents' summary of business conditions, and results from the Decision Maker Panel 2018 Q3', 13 September 2018.

corporate lending from large PNFCs was reported to have decreased in Q3 and was expected to decrease further in 2018 Q4"[12].

Consumer confidence in London has alternated between being positive and negative on a month-on-month basis in recent months, having being generally positive over the end of 2016 and all of 2017. Overall it remains slightly above its long-run average and continues to be above the UK average, which has been negative for most of the post-referendum period[13]. Companies in London also continue to grow as measured by the business activity measure of the Purchasing Managers' Index, having bounced back from their post-referendum fall, but this growth remains at a more subdued level compared to that seen in the first half of the decade[14].

Data from the Office for National Statistics (ONS) show that the UK economy continues to grow and at a slightly better than expected pace in the second half of 2018 so far, with output increasing by 0.6% in Q3 2018 compared to the previous quarter. This was a bit faster than the 0.4% quarterly growth rate seen in Q2 2018. On a year-on-year basis output growth in Q3 2018 was sluggish at 1.5%, although this was an improvement on the 1.2% growth seen in Q2 2018[15].

Meanwhile, inflation – having risen due in part to the large depreciation of sterling after the referendum – continues to stand above the Bank of England's inflation target, although it has fallen back from its recent highs. Consumer Prices Index (CPI) inflation stood at 2.4% in October 2018, unchanged compared with September 2018[16]. Thus, although inflation has dropped back from the highs seen in 2017 and the beginning of 2018 the Bank of England still needs to juggle policy between economic growth and inflation. In response to this, the Bank raised rates to 0.75% in August 2018 (the second rise in a year), with further rises still being factored in by most commentators. That said, even if the expectations of further tightening occur, monetary policy is likely to remain extremely accommodating for some time to come. The Bank has thus observed in their November 2018 Inflation Report that the best collective judgment of the members of the Monetary Policy Committee (MPC) was that "were the economy to continue to develop broadly in line with the November Inflation Report projections, an ongoing tightening of monetary policy over the forecast period would be appropriate to return inflation sustainably to the 2% target at a conventional horizon"[17]. The MPC however further noted that "any future increases in Bank Rate are likely to be at a gradual pace and to a limited extent"[18].

The growth in jobs in London has continued and at a faster rate than that seen in the UK as a whole. Thus, the number of jobs in London increased to 5.919 million in Q2 2018, an increase by 88,000 jobs (1.5%) from a year earlier[19] and a new record-high for this series which began in 1996. The employment rate in London stood at 75.2% in the three months to September 2018, a near record high. However, although real weekly earnings in Great Britain have risen slightly in 2018 they remain below their March 2008 peak[20]. With inflation remaining above target but

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[12] Bank of England (2018). 'Credit Conditions Survey', 2018 Q3, 11 October 2018.
[13] Hope, M. & Orellana, E. (2018). 'London's Economy Today', Issue 194, 25 October 2018.
[14] Ibid.
[15] ONS (2018). 'GDP first quarterly estimate, UK: July to September 2018', 9 November 2018.
[16] ONS (2018). 'Consumer price inflation, UK: October 2018', 14 November 2018.
[17] Bank of England (2018). 'Inflation Report', November 2018.
[18] Ibid.
[19] ONS Regional labour market statistics.
[20] ONS (2018). 'UK labour market: November 2018', 13 November 2018.

with employment standing at around record levels there is speculation in both directions as to the future course of real earnings.

Risks to the economy have continued their slow upward trajectory seen throughout 2018, but the main risk remains associated with the ongoing Brexit process, which appears to continue to dampen economic sentiment. As observed in all published LEOs since the Brexit vote, the longer-term impact of the vote remains hard to model precisely although the consensus from scenario analyses is that they will be negative and increasingly so the 'harder' Brexit scenarios get. The exact long-term growth prospects will ultimately be highly dependent on what post-Brexit economic relationships and policies are followed.

The other major risk is the continuing trade tensions between the US and other countries particularly China. More generally the increased protectionist sentiment in the US and to an extent in other countries is by itself a risk to global growth.

Other risks to the economy also persist. Thus, although there is continuing evidence of a slight recent improvement[21], UK productivity growth remains slow and if this recent trend continued in the long-term, as some forecasters think may be the case, it will act as a dampener on GDP growth.

As has been highlighted for a round a decade now, structural problems remain in the Eurozone and could reappear to cause further problems for its members. With the main risk at the moment in the Zone coming from the conflict between the EU and Italy over the budget plans of the Italian government, which are in breach of the Fiscal Compact rules. If this escalates into a new European debt crisis this would be a cause for concern due to the impact it could have on the UK and London's trade and hence growth. Still, despite these risks, the Eurozone is expected to grow in the near term with its prospects remaining relatively upbeat compared to the situation seen in the first half of the decade

Beyond the risk of a trade war global growth has remained relatively robust, although concerns for it, partially triggered by these trade tensions have risen. Another concern for the global economy, as highlighted in previous LEO's, is the high debt levels seen in China which may affect the economic stability of that country in the longer run and therefore have potential knock-on impacts on the global economy. The disruptive effects on the world economy of an intensification of the current regional conflicts also cannot be discounted.

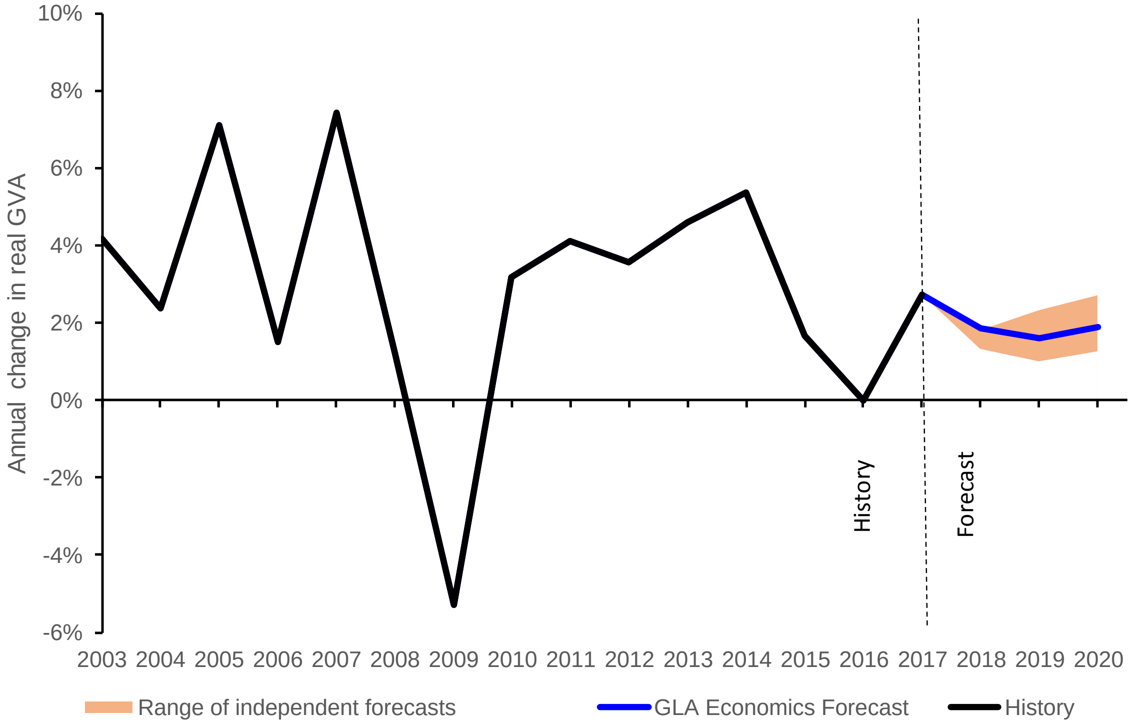
The normalisation of monetary policy in the United States continues and this has the potential for some negative knock-on effects. This could be especially destabilising if differing stages in various countries monetary policy cycles interact to exacerbate the effect. The normalisation is also impacting on the prices of other financial assets as shown by the recent instability in global stock markets. Still, although the tightening in US monetary policy continues, it is likely to take some time yet to return fully to a more historically normal monetary policy regime.

In conclusion, the economic environment continues to be more uncertain than usual at both the UK and London levels. However, despite this the outlook for the London economy remains one of expected growth for the coming few years. Although inflation remains above the Bank's target rate, it is moderate but may stay above target due to the ongoing feed through of the inflationary impact of the depreciation of sterling which started in 2016. Given this higher inflation, it is possible that growth in real income will be a bit subdued in the coming years. In

[21] ONS (2018). '[Labour productivity, UK: April to June 2018](#)', October 2018.

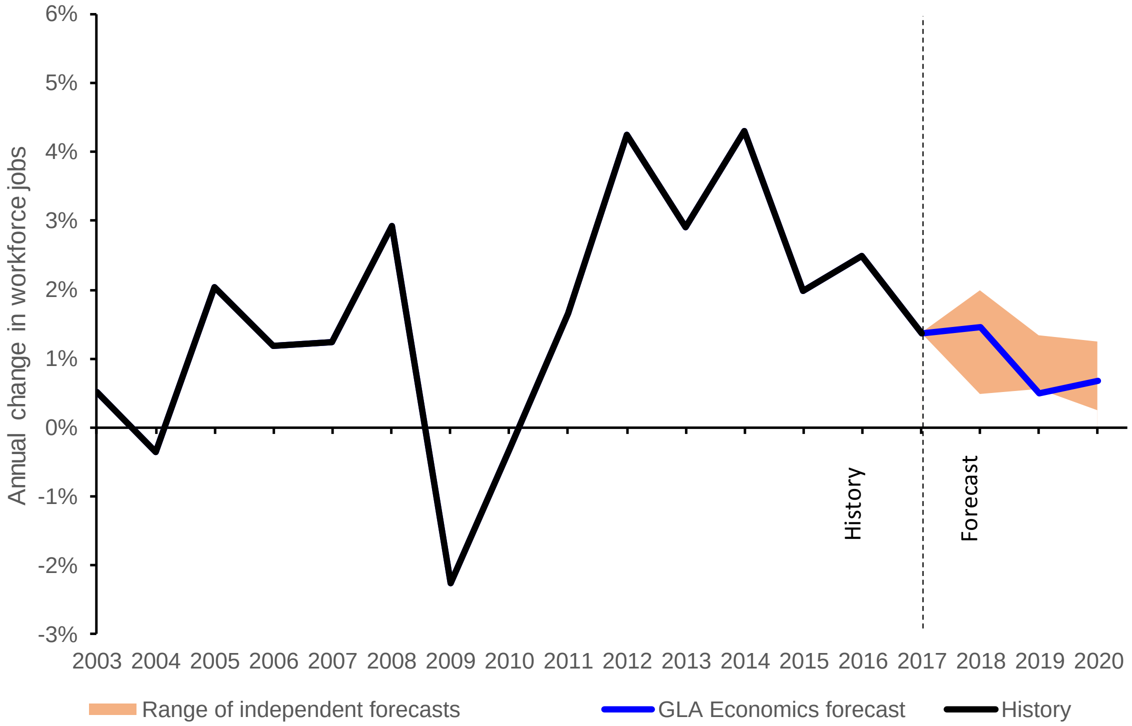
turn, this is likely to put some restraint on household spending, which had been a large driver of economic growth in the first half of the decade. Still, despite the likelihood of further tightening in the coming years, UK monetary policy is most likely to stay at what are historically very accommodating levels for a time to come, with this providing support to the national and London economies. Most business surveys continue to show growth and sterling remains low, although London consumers' confidence about the short-term future economic outlook has fluctuated markedly since the 2016 referendum. Fiscal policy is also moving in a more expansionary direction with the Government announcing the end of austerity. Of the sectors of the UK economy, Business services and finance continues to grow (albeit at a more subdued rate) and given its size in London its continued growth should provide some foundation to London's economic growth. Balancing all these factors acting on London's economy it is likely that both output (Figure 1.1) and employment (Figure 1.2) should see continued growth in the next few years, albeit at a more subdued rate than seen earlier this decade.

Figure 1.1: Trend and forecast output growth



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

Figure 1.2: Trend and forecast employment growth



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

2. Introduction

The autumn 2018 edition of London's Economic Outlook (LEO) is GLA Economics' 33rd London forecast. The forecasts are issued roughly every six months to assist those preparing planning projections for London in the medium-term. The report contains the following:

- An overview of the recent economic conditions in London, the UK and the world economies and includes analysis of important events, trends and risks to short and medium-term growth (Chapter 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 (Chapter 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 (Chapter 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[22]. 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)[23]
- 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 reported in this paper show the lowest and highest estimates respectively from the external organisations for each year. Therefore, the reported forecasts can come from different forecasters and means that they 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.

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

3. Economic background: London's economy continues to grow amidst heightened uncertainty at the UK level

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

3.1 The London economy

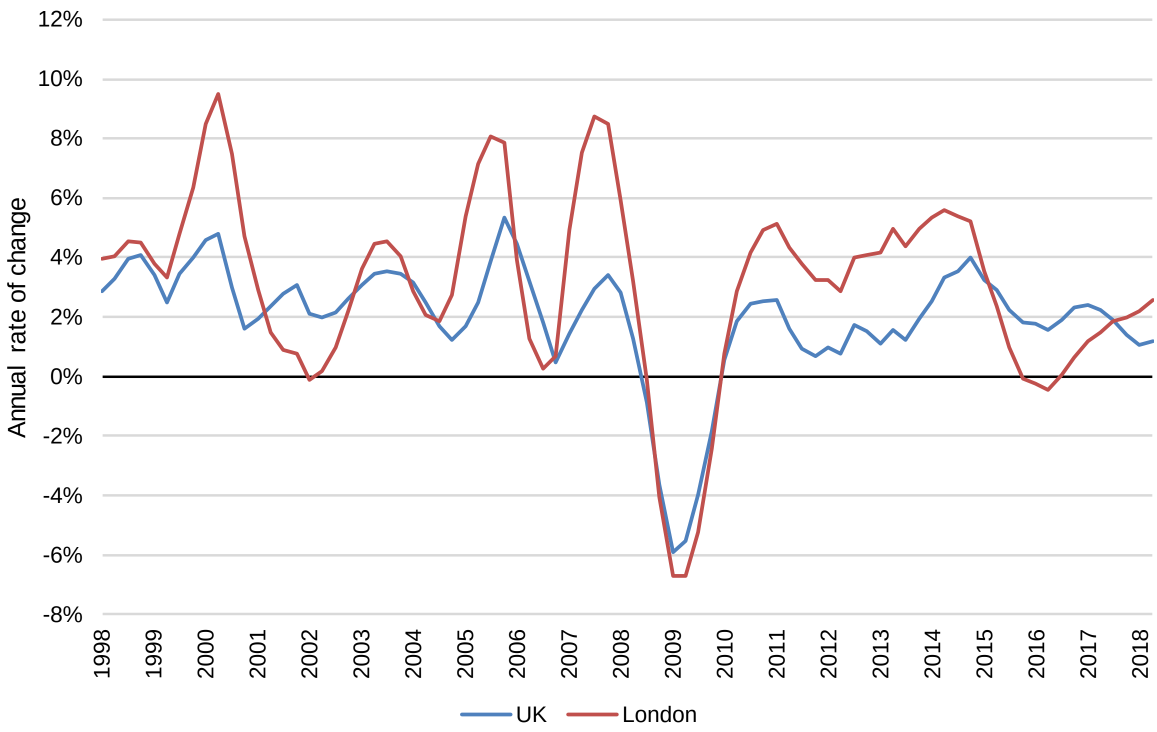
London's economy – as measured by gross value added (GVA) – grew at a moderate pace of 2.2% on average between Q2 2017 and Q2 2018. This continues a period of relatively subdued growth whereby the capital's economy showed growth of just 1.6% on average in 2017, no growth on average in 2016 and a modest 1.7% expansion on average in 2015. These are a lot weaker than the rates of growth seen between 2010 and 2014, when the average rate of expansion was 4.2%.

On a more positive note, the annual rate of GVA growth on a quarterly basis in London has continued to steadily improve in recent quarters. For example, the annual rate of growth improved since Q2 2016, rising from -0.4% then to stand 2 years later at 2.6% in Q2 2018.

The UK has also seen generally slowing rates of real GVA growth in recent years. The UK grew 2.0% on average in 2017 - largely unchanged from 1.9% in 2016, but down from 2.5% in 2015 and 3.4% in 2014. In contrast to London the annual rate of GVA growth on a quarterly basis has also been slowing in recent months. From a peak of 4.0% back in Q4 2014 the annual growth rate decreased to 1.2% in Q2 2018 although this is marginally up on the 1.1% growth seen in Q1 2018.

Comparing London and the UK more closely, the capital has generally had a slower rate of annual GVA growth than the rest of the country over the past three years. However, looking over a longer period as shown in Figure 3.1, growth in London has generally exceeded the rest of the UK. The latest data point too – Q2 2018 – shows that London continued the trend seen since Q4 2017 and grew at a faster rate than the UK (2.6% versus 1.2%).

Figure 3.1: Annual rate of GVA growth for London and the UK, constant prices
Last data point is Q2 2018

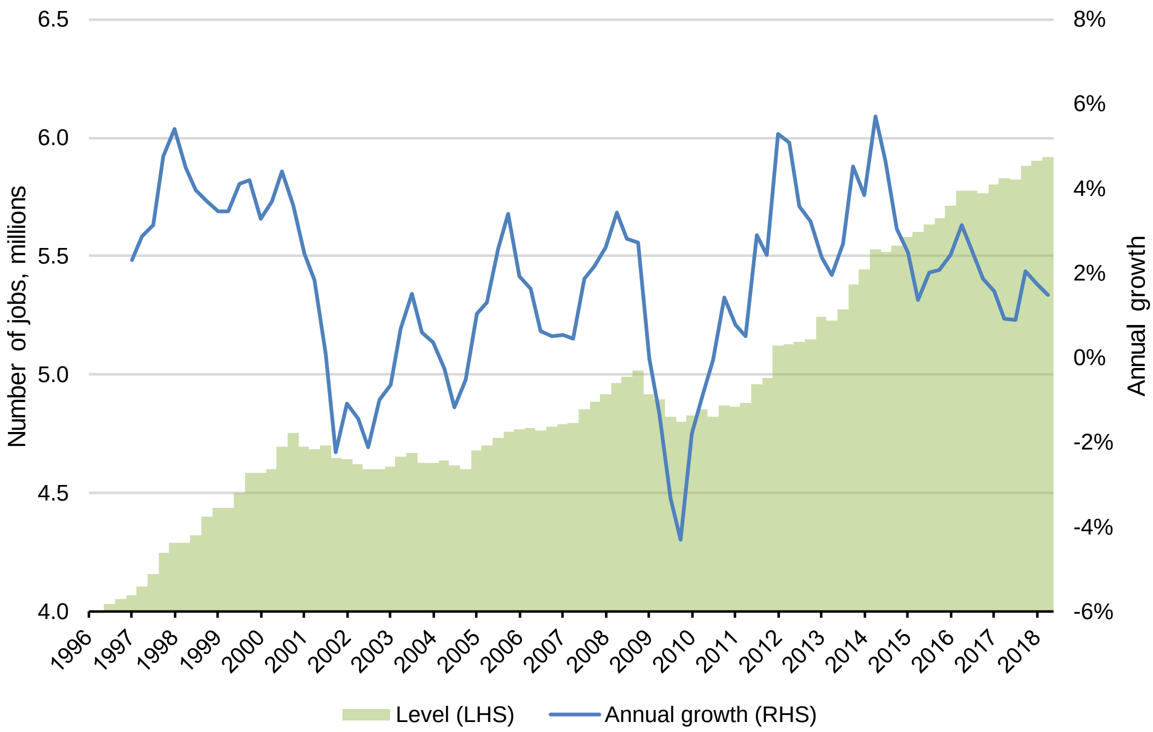


Source: ONS Regional GVA, GLA Economics

Looking at the labour market, London's employment rate has been at one of the highest levels (and the unemployment rate has been at one of the lowest levels) since data collection began in 1992. The employment rate shows the percentage of residents aged 16-64 who are in work and stood at 75.2% in the three months to September 2018, up 0.6 percentage points from the three months to June 2018. The unemployment rate shows the proportion of the 16 and over resident population who are unemployed but are wanting to work and stood at 4.7% in the three months to September, down 0.2 percentage points from the three months to June. For comparison the UK's employment rate stood at 75.5% in the three months to September and the unemployment rate was 4.1%.

The strong performance of London's labour market is also reflected in the number of jobs. The number of jobs in London (regardless of whether they are taken by London residents or not) grew 1.5% year-on-year in Q2 2018, the equivalent of 88,000 jobs, to reach 5.919 million (Figure 3.2). Moreover, the year-on-year rate of job creation in London was faster than the UK average for Q2 2018 (0.4%).

Figure 3.2: Number of workforce jobs in London
Last data point is Q2 2018

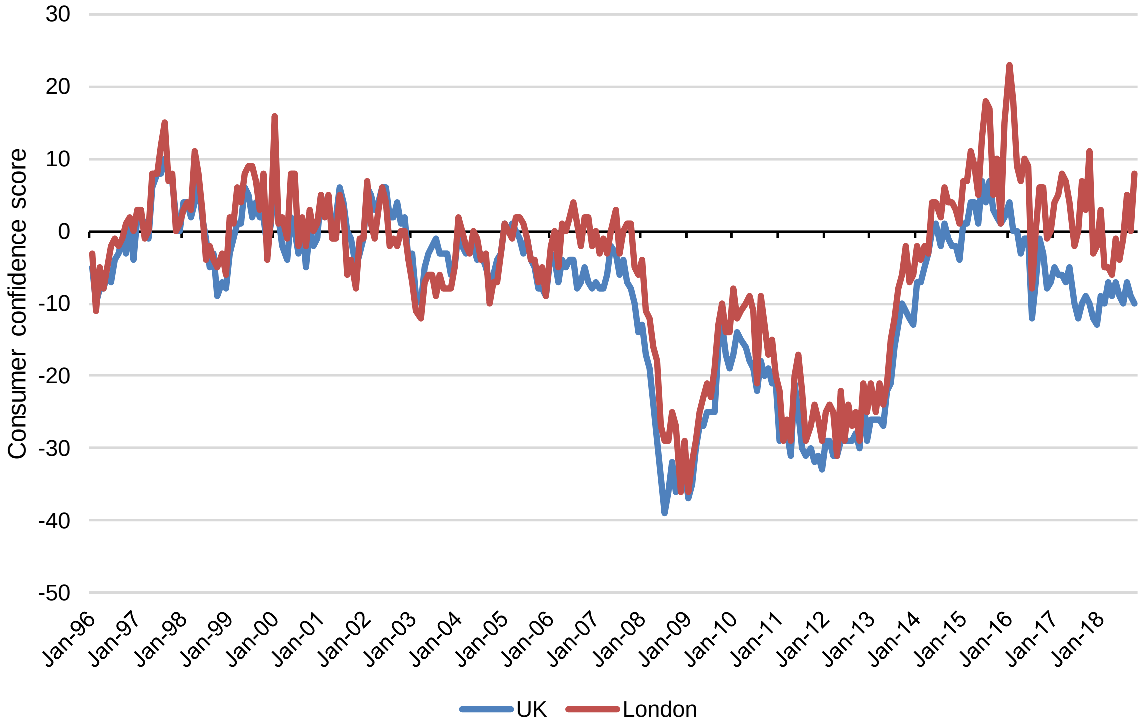


Source: ONS Workforce Jobs

An opportunity for London's economy considering the strong labour market is the potential for higher consumer spending and business investment (among others). At a basic level, firms creating new jobs can be a sign of businesses growing and creating more output. Similarly, if more people are in work and earning income, there can be an increase in household spending which can further support economic growth. Moreover, this potential increase in consumer spending is further supported by a slight rise in average weekly earnings at the Great Britain level, although these still remain below their pre-financial crisis highs.

Linked to this is consumer confidence. Data from GfK-NOP suggest that London consumers were positive towards the next 12 months in terms of their household finances, the general economy and the purchasing climate (Figure 3.3). The consumer confidence data for London has recently turned positive (standing at +8 in October) after being negative for much of 2018. Consumer confidence in London is also significantly higher than the negative number (-10) for the UK as a whole.

Figure 3.3: Consumer confidence
Last data points are October 2018

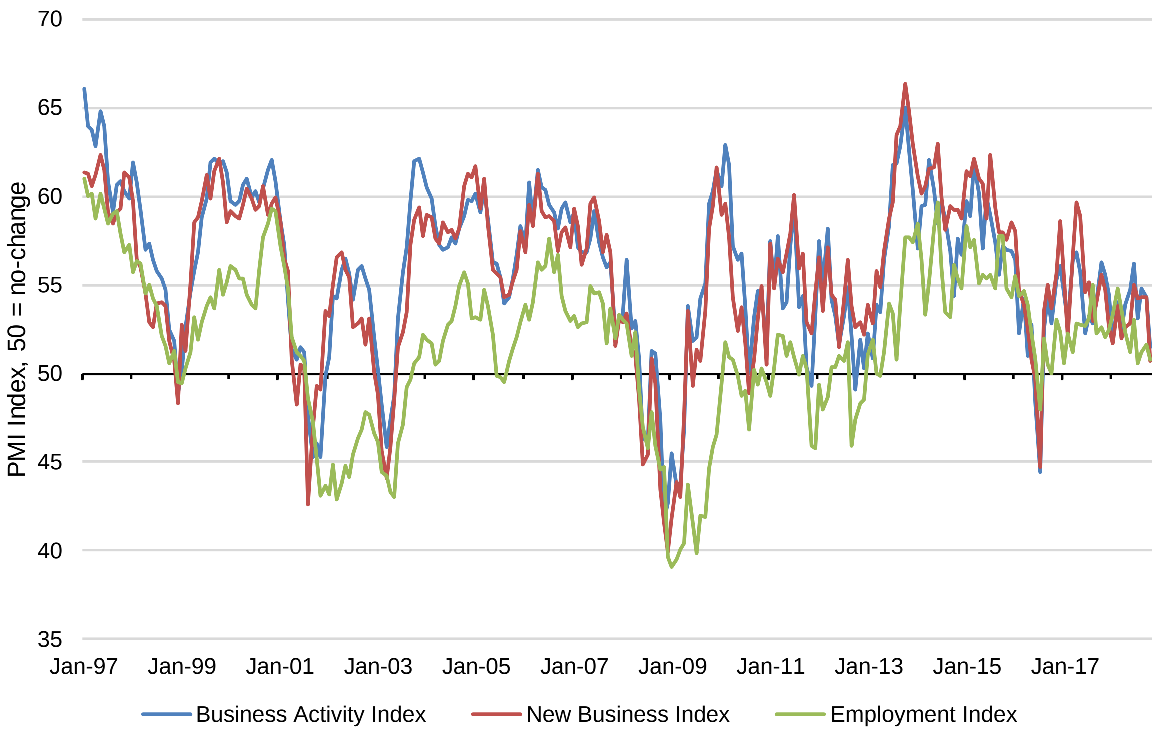


Source: GfK-NOP

Moving to businesses, the Purchasing Managers' Index (PMI) survey can show the state of overall business conditions in London[24]. It does so by asking private sector firms about the month-on-month trends in a variety of business indicators like new work and employment. The most recent PMI data generally point to a weakening of business conditions in London, with firms reporting lower rates of increase in the levels of activity, new business and employment (Figure 3.4). Overall, given that the Business Activity Index tracks London GVA growth rather well (Figure 3.5), this could be an indication of slower economic growth in the coming months. Continuing but slower growth is supported by London private sector firms remaining optimistic towards business conditions over the next year. However, at 61.5 in October, down from a recent peak of 69.8 in January, the level of positive sentiment was below the average of 68.8 since data collection began in 2012.

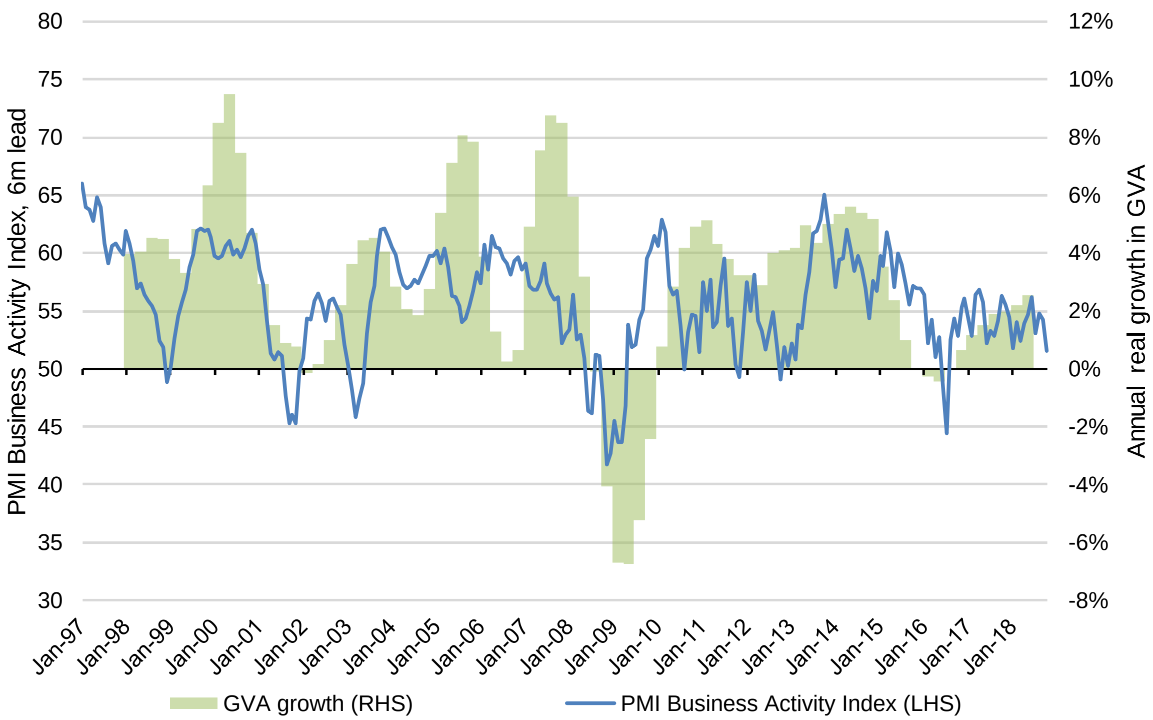
[24] PMI index readings are based around the 50 no-change mark. Readings above 50 suggest an overall increase in that variable, while readings below suggest an overall decline. Readings exactly at 50 suggest no-change in that variable compared with a month earlier. Moreover, the further the index reading is away from the 50 no-change mark, the faster the rate of growth or decline.

Figure 3.4: London PMI Business Activity, New Business and Employment Indices
Last data point for PMI is October 2018



Source: IHS Markit

Figure 3.5: London PMI Business Activity Index and GVA growth
Last data point for PMI is October 2018 and Q2 2018 for GVA

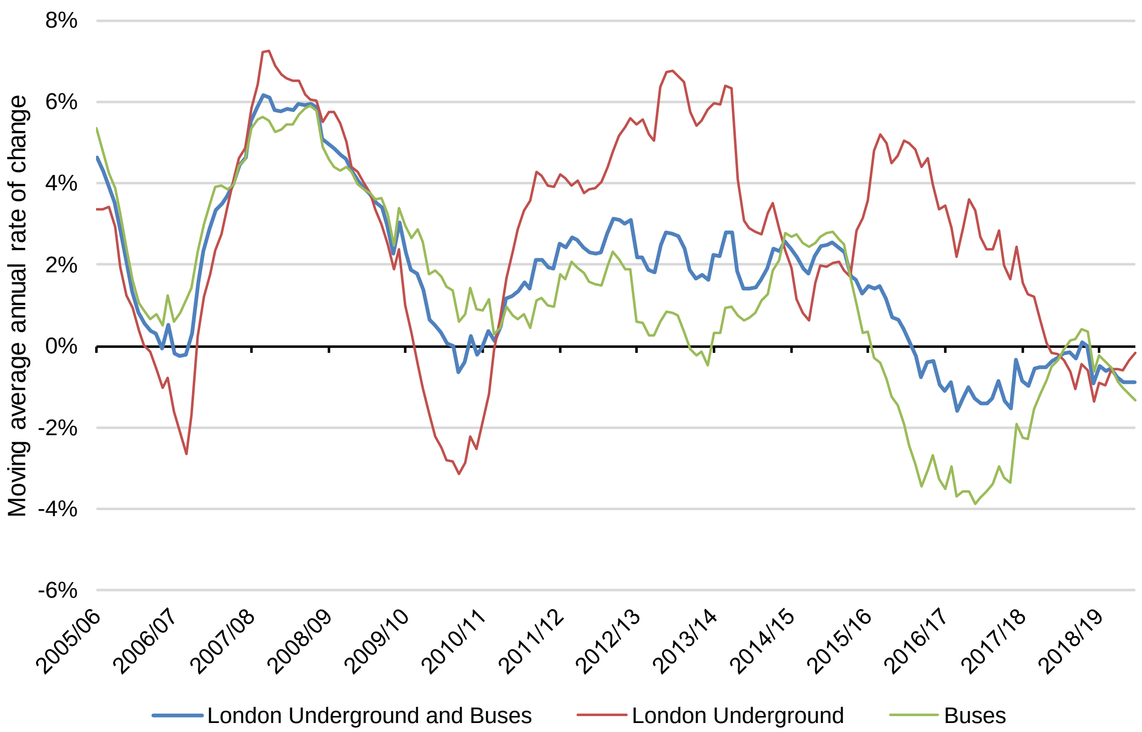


Source: IHS Markit, GLA Economics

Despite most business surveys pointing to positive current business conditions forward looking expectations for the London economy in other surveys remain negative. Thus, the London Chambers of Commerce and Industry (LCCI) Capital 500 Quarterly Economic Survey found in Q3 2018 that the net balance of this survey remained negative as it has been since Q2 2017[25].

Public transport use is also another indicator that can shed light on the current state of the London economy. For example, more people travelling in London could reflect more jobs i.e. they are commuting to work. Alternatively, it could reflect increased leisure activities like shopping, which could indicate an increase in household spending. Having noted this, the moving average of the annual rate of change in total passenger journeys in London has been declining in recent periods after being generally stagnant in the first few months of 2018 (Figure 3.6). In more detail, by mode of transport, the moving average of the annual rate of change in Tube passenger journeys has been negative since mid-2017 (this was the first time it has been negative in almost eight years), while the corresponding measure for bus use has again turned negative.

Figure 3.6: Public transport use in London
Last data point is the 28-day period ending 13 October 2018



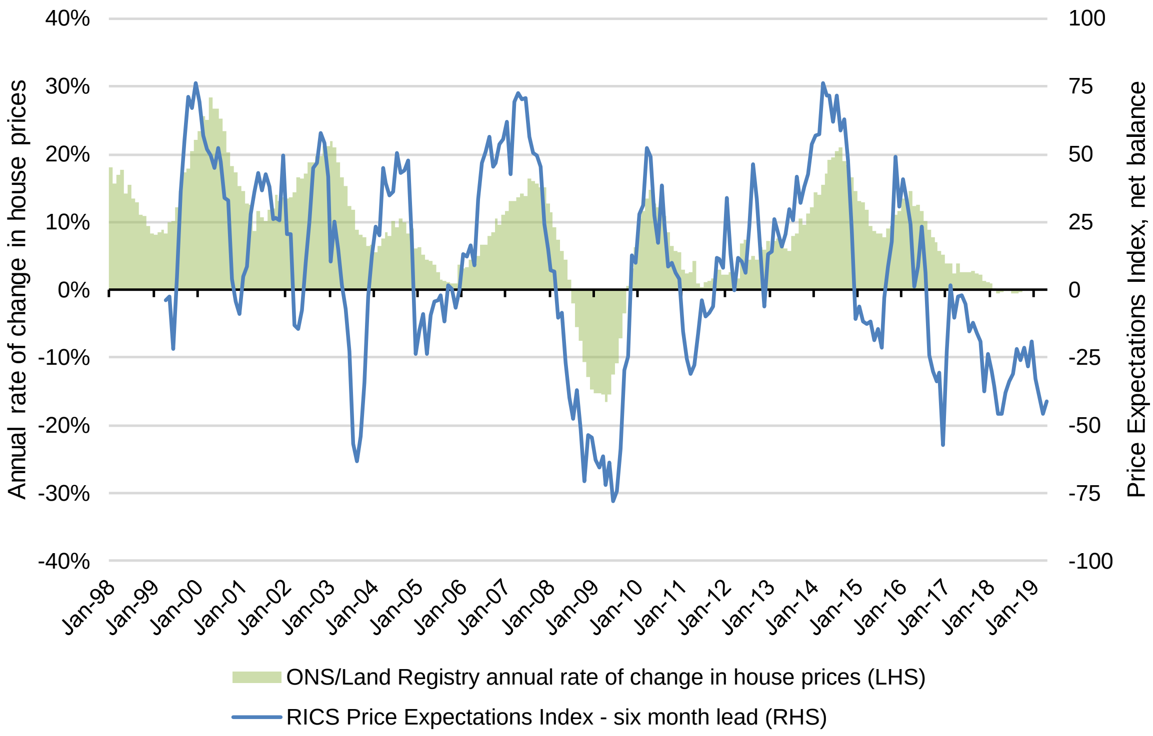
Source: Transport for London

Finally, most of the evidence on the London's housing market points to a continued moderation in prices in 2018. The average house price in London was £477,700 in September, according to data from the ONS and Land Registry. However, this has fallen 0.3% from a year earlier. This follows on from the price declines for every month since March 2018 which are the first annual declines since September 2009. This is in line with what survey data has been signalling for some months now. For instance, property surveyors responding to the Royal Institute of

[25] London Chamber of Commerce and Industry (2018), 'Capital 500: London Quarterly Economic Survey – Q3 2018'. October 2018.

Chartered Surveyors (RICS) Housing Market Survey in September have been reporting, on balance, a reduction in London's house prices for well over two years. Moreover, the net balance was also negative for the Price Expectations Index suggesting that there could be further price reductions in the coming months (Figure 3.7).

Figure 3.7: House price inflation in London and the RICS Future Expectations Index
Last data points are September 2018 for house prices and October 2018 for RICS Housing Market Survey



Source: ONS/Land Registry House Price Index, RICS

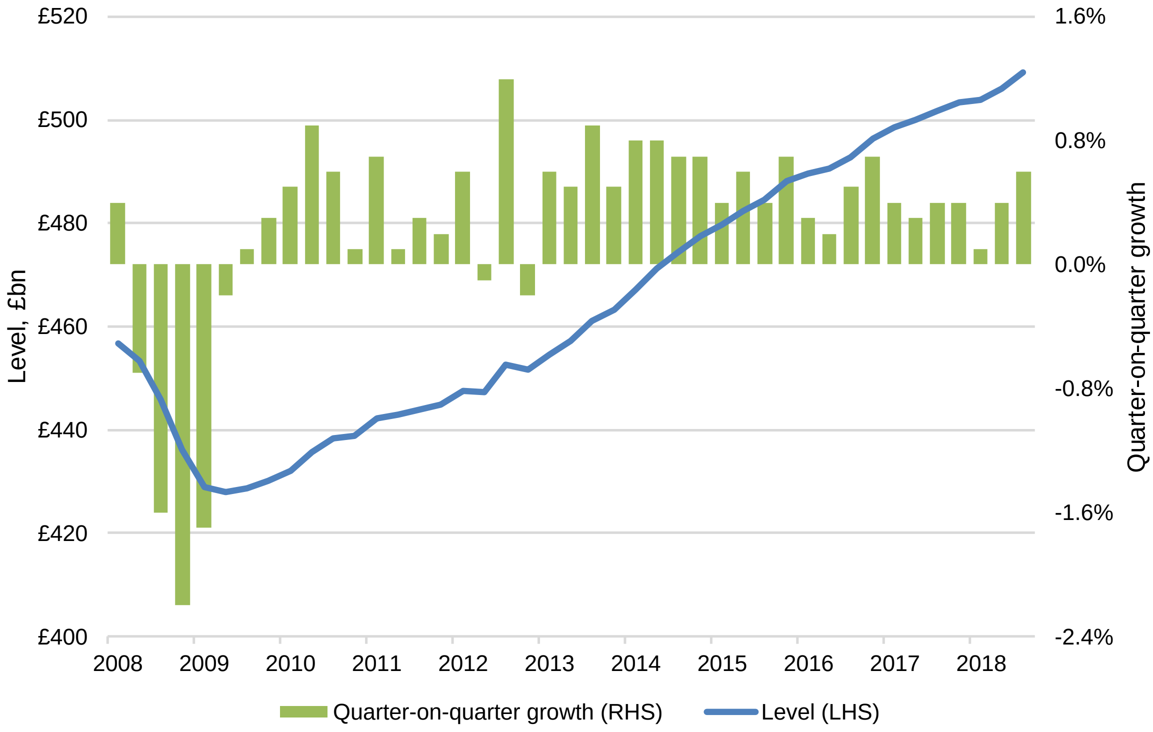
Overall, the indicators discussed above suggest that London's economy is performing reasonable well given the very uncertain economic environment in the second half of 2018 and is likely to continue to grow, though probably at a relatively subdued pace. While GVA growth in London has started to pick up, it remains slower than most of the rates reported following the financial crisis. Similarly, the strong performance of the labour market is not necessarily being translated into strong real earnings growth, although consumer confidence has recently improved. Also, firms are continuing to report higher levels of activity and new business, although their views towards the coming year are mixed.

3.2 The UK economy

The main measure of economic growth for the UK is Gross Domestic Product (GDP). On this basis, the UK economy grew 0.6% in Q3 2018 according to the first estimate from the ONS. While the estimates of GDP are potentially subject to revisions at a later stage, this was the fastest rate of quarterly growth since Q4 2016. On the other hand, the Q3 growth rate was not much faster than the average growth rate seen since Q1 2013 (0.5%). Commentating on the GDP numbers the ONS noted that "the economy saw a strong summer, although longer-term economic growth remained subdued. There are some signs of weakness in September with slowing retail sales and a fall-back in domestic car purchases. However, car manufacture for export grew across the quarter, boosting factory output. Meanwhile, imports of cars dropped substantially helping to improve Britain's trade balance"[26]. Real GDP now stands at 10.9% above its pre-financial crisis height of Q1 2008.

Looking at year-on-year changes in GDP also gives a mixed picture of the economy's performance. The UK economy grew at an annual rate of 1.5% in Q3 2018 which was below the post 2012 average of 2.0%. Although this is still the highest rate since Q3 2017.

Figure 3.8: UK GDP in real terms
Last data point is Q3 2018 (First estimate)



Source: ONS (2018). 'GDP first quarterly estimate, UK: July to September 2018', 9 November 2018.

Looking slightly further back most sectors of the UK economy grew over the year to Q2 2018 although at varying rates of speed. Construction output grew slowly at an annual rate of 0.4%, although this was an improvement on the 0.3% annual fall seen in Q1 2018. In contrast, output of the Business services and finance sector (1.6%) and Manufacturing (1.4%) sectors increased (Table 3.1). However, growth in most sectors of the economy was more subdued in Q2 2018 than seen in most recent quarters.

[26] ONS (2018). 'GDP monthly estimate, UK: September 2018', 9 November 2018.

Table 3.1: Percentage annual change in real GVA by broad industry group for the UK

Broad industry group	2016		2017				2018	
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Agriculture, forestry, and fishing	-6.4	-4.3	1.4	3.0	4.1	3.2	-0.1	-0.6
Mining & quarrying; oil & gas extraction	3.2	-2.7	2.5	2.0	-2.7	0.8	0.0	-1.1
Manufacturing	0.4	1.8	2.7	1.7	3.1	3.1	2.3	1.4
Electricity gas, steam and air	0.0	5.0	-1.3	-4.8	1.3	-1.8	3.5	-0.7
Water supply, sewage	5.1	5.4	6.3	2.4	1.7	1.8	-2.2	-0.4
Construction	4.7	6.1	9.3	7.7	7.2	4.8	-0.3	0.4
Distribution hotels and catering	3.6	4.4	2.9	2.7	2.2	0.5	1.1	2.4
Transport, storage and communication	4.0	5.2	5.2	6.2	3.9	3.3	3.0	3.3
Business services and finance	2.1	1.9	2.3	2.2	2.0	2.0	1.7	1.6
Government and other services	-0.4	-0.5	0.1	0.7	0.7	0.2	0.1	0.2

Source: ONS (2018). 'UK Economic Accounts', 28 September 2018.

The GDP data can also be split into different types of final expenditure. That is, the expenditure on goods and services which are not used in the production process (i.e. as intermediate consumption). This includes final expenditure by households, general government and the non-profit institutions serving households, as well as expenditure used in gross capital formation (e.g. business investment)[27]. The latest data also refers to Q2 2018 and is shown in Table 3.2.

Table 3.2: Annual rates of real growth in domestic final expenditure for the UK

Final expenditure group	2016		2017				2018	
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Households	3.2	3.1	2.7	2.1	1.3	1.6	1.5	1.6
Non-profit institutions serving households	1.2	1.5	0.6	-0.6	-1.2	-1.8	-1.9	-2.2
General government	0.2	0.4	-0.5	0.0	-0.2	0.1	0.7	0.0
Gross fixed capital formation	4.9	2.5	3.4	3.7	2.4	3.7	1.7	-0.6

Source: ONS (2018). 'UK Economic Accounts', 28 September 2018.

Household expenditure is important to the UK economy, with it contributing around two-thirds to UK GDP in 2017. However, the latest estimates showed that consumer spending grew slowly at 1.6% year-on-year in real terms in Q2 2018. The other notable trend is for gross capital formation. This declined at an annual rate of 0.6% in real terms during Q2 2018, having grown at a relatively strong pace in 2017.

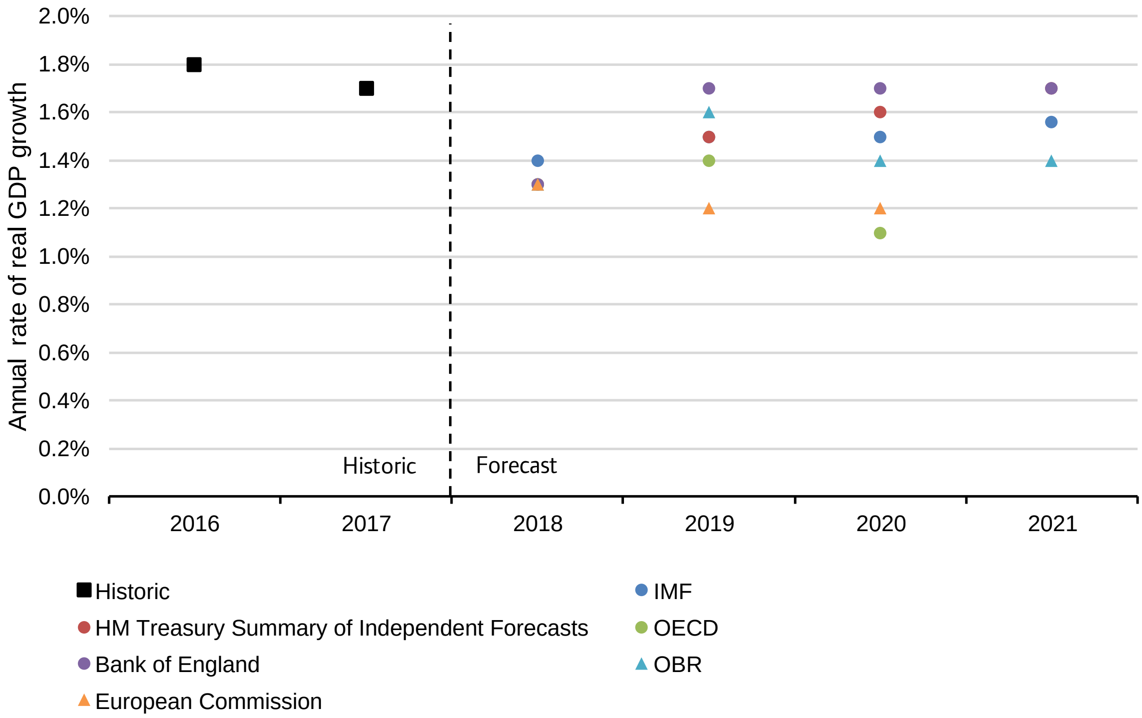
Forecasts of the UK economy

Forecasts suggest that the UK economy will continue growing over the next couple of years, though different organisations take a different view on the expected growth trajectory. Most of these differences can be linked to different interpretations of the impacts of Brexit, inflation, productivity and global factors like the disruption caused by trade disputes. For example, some of the impact of Brexit is dependent on the negotiations between the UK and the EU as well as whether the UK can secure trade deals with other countries and/or roll over existing EU trade deals. An update on the progress of Brexit so far is presented in Box 3.1, while the other risks to the forecasts are discussed in greater detail in Section 3.4.

[27] It also includes net trade in goods and services.

Acknowledging the above, Figure 3.9 shows the range of forecasts for real UK GDP growth. This includes the International Monetary Fund's (IMF) forecast who in the October edition of the World Economic Outlook expects GDP growth of 1.4% in 2018 (down 0.2 percentage points from April 2018), followed by 1.5% in 2019 (unchanged from the April forecast)[28]. It also includes the HM Treasury's summary consensus forecast for the UK economy based on research from a variety of organisations. From this, the latest average forecast is for growth of 1.3% in 2018 and 1.5% in 2019[29], so a bit weaker than in 2017. Meanwhile, the Office for Budget Responsibility (OBR) lowed their forecast of UK GDP growth for 2018 from 1.5% to 1.3%, though they then expect the rate of expansion to pick up to 1.6% in 2019 before moderating to 1.4% in 2020 and 2021.

Figure 3.9: Forecasts of real UK GDP growth



Source: ONS (2018), 'GDP first quarterly estimate, UK: July to September 2018', November 2018; IMF (2018), 'World economic outlook' October 2018 HM Treasury (2018). 'Forecasts for the UK economy: a comparison of independent forecasts', November 2018; OECD (2018), 'Economic outlook', November 2018; Bank of England (2018), 'Inflation report', November 2018; OBR (2018), 'Economic and fiscal outlook', October 2018; and European Commission (2018), 'Autumn 2018 Economic Forecast: sustained but less dynamic growth amid high uncertainty', November 2018.

The OBR and HM Treasury also publishes forecasts for other variables like the labour market and public-sector net borrowing (PSNB). These are shown in Table 3.3.

[28] IMF (2018). 'World Economic Outlook', October 2018.
[29] HM Treasury (2018). 'Forecasts for the UK economy: a comparison of independent forecasts', November 2018.

Table 3.3: Selected OBR and HM Treasury consensus forecasts for the UK economy

	HM Treasury's Average of Independent Forecasters (May 2018)		Office for Budget Responsibility (October 2018)	
	2018	2019	2018	2019
Annual real GDP growth rate	1.3%	1.5%	1.3%	1.6%
LFS unemployment rate	4.0%	4.1%	4.0%	3.7%
Current account	-£70.2bn	-£68.5bn	-£73.5bn	-£82.5bn
Public sector net borrowing (financial year)	£30.3bn	£32.4bn	£25.5bn	£31.8bn

Sources: HM Treasury (2018). 'Forecasts for the UK economy: a comparison of independent forecasts', November 2018; and OBR (2018). 'Economic and fiscal outlook', October 2018.

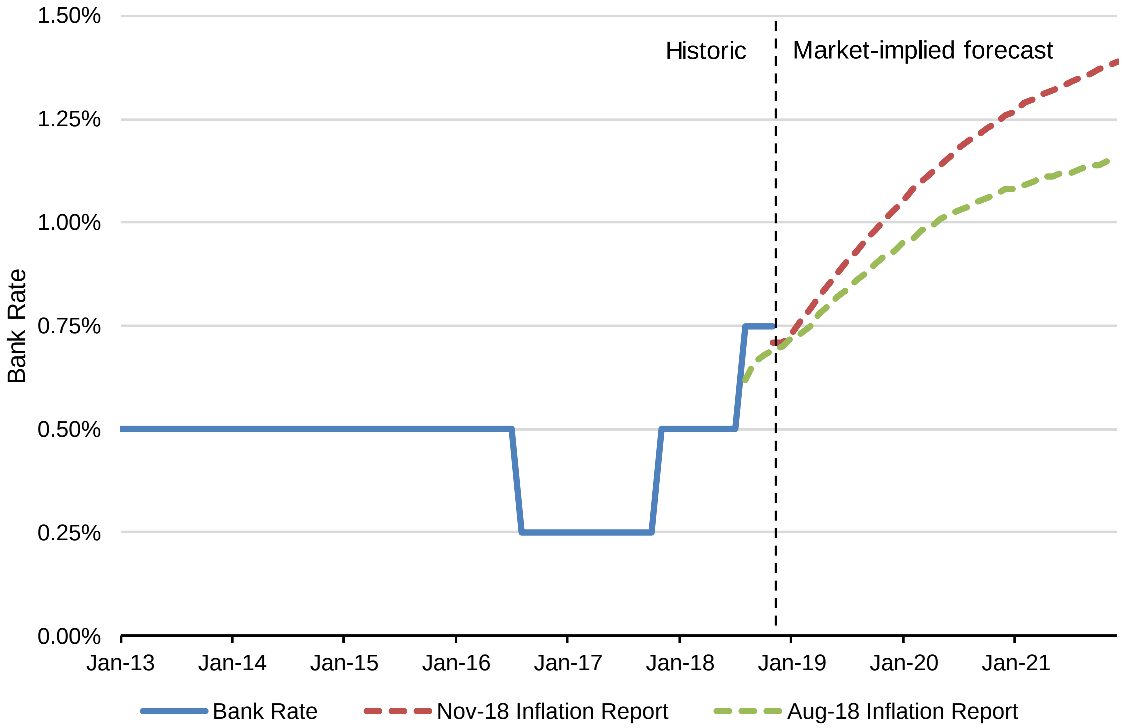
Other UK economic indicators

Beyond GDP, another important economic indicator is inflation as measured by the Consumer Price Index (CPI). Inflation has been above the Bank of England's central symmetrical target of 2% since February 2017 in part due to the large depreciation of sterling following the EU referendum making the price of imported goods and services more expensive. The Bank of England (among others) expected the rise in inflation to be short-lived as the sterling-related price increases worked its way through the economy. This seems to have generally been the case – inflation peaked at 3.1% in November 2017 but has since fallen back slightly with the latest estimate for October at 2.4%, although this remains above the Bank's 2% target and was unchanged on the September rate.

In part given this the Bank raised interest rates in August 2018 by 0.25 percentage points to 0.75% this was the second rise in interest rates in a year following the 0.25 percentage point increase in November 2017. However, there continues to be speculation on further interest rate rises although these in part are dependent on the outcome of Brexit. Still, the Bank in its latest Inflation Report, reiterated that "were the economy to continue to develop broadly in line with the November Inflation Report projections, an ongoing tightening of monetary policy over the forecast period would be appropriate to return inflation sustainably to the 2% target at a conventional horizon"[30]. However, it further noted that "any future increases in [interest rates] are likely to be at a gradual pace and to a limited extent". Consequently, some commentators and the markets are currently expecting further interest rate rises in the coming years (Figure 3.10).

[30] Bank of England (2018). 'Inflation Report', November 2018.

Figure 3.10: Market-implied interest rate path for the UK



Source: Bank of England (2018). 'Inflation Report', November 2018.

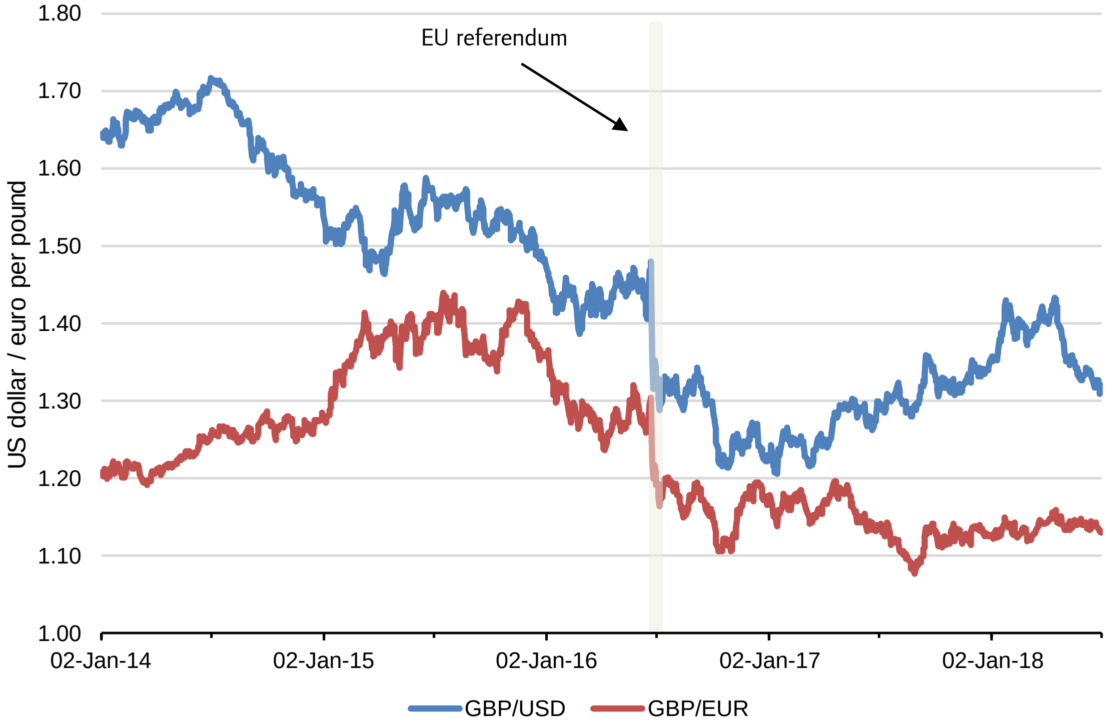
Higher interest rates can have several influences on the economy[31]. All other things held constant, they can bolster sterling as returns (interest) on sterling would be relatively higher than other countries leading to an increase in demand for sterling-based assets by foreigners. They can also reduce consumer demand as higher interest on savings raises the 'opportunity cost' of spending. Likewise, it can reduce the appetite to invest and borrow as the cost in terms of debt interest would be higher. It can thus slow the rate of inflation and negatively affect the rate of economic growth in the short-run through the combined effect of weaker demand for goods and services. However, the magnitude of these effects will be dependent on several factors – i.e. the speed and scale of the interest rate increases, the time it takes for interest rates to work through the transmission mechanism, and the current state of the wider economy – and therefore provides some further uncertainty to economic forecasts. It should also be noted that interest rates in the UK remain at historically very low levels and any rises in rates are expected to be slow and limited, indicating that the dampening effect of interest rates on the UK in the near term is likely to be limited.

It has already been noted that the value of sterling fell following the result of the EU referendum in June 2016 and this is shown in Figure 3.11. Sterling has been relatively steady against the Euro over the past year until recently when it has experienced a slight recent downward trend. At the same time, sterling appreciated against the US dollar in the early months of the year, largely because of the progress made with the Brexit negotiations. Since then however sterling has declined somewhat as progress has lagged and concerns rose around whether the finalised withdrawal deal will be passed by Parliament (Box 3.1). Although depreciation of sterling since the EU referendum has led to higher import prices and has been a factor behind the relatively higher rates of inflation seen since 2017, it could also boost exports

[31] For more information, see Bank of England (1999). 'The transmission mechanism of monetary policy', Bank of England Quarterly Bulletin, May 1999.

by making UK goods and services cheaper. In the longer term, it could also encourage some substitution of imported goods and services to domestically produced alternatives and make the UK a more attractive place to invest and visit.

Figure 3.11: Sterling to US dollar and euro exchange rates
Last data point is 21 November 2018



Source: Bank of England

Overall, the first estimate of UK GDP growth in Q3 2018 was one of the strongest rates seen since the EU referendum. However, trends for the Services sector – which represents a large part of the economy – also show a general weakness in recent quarters. And despite respectable GDP growth in Q3 2018 the first half of the year showed relatively weak growth. This was expected by economic forecasts that are largely pointing to slower growth in 2018 and 2019 compared with 2017. Meanwhile, despite inflation continuing to ease reducing the pressure on the Bank of England to raise interest rates, future interest rate hikes are expected, and this could dampen growth prospects. That said, the value of sterling has yet to recover from the fall following the EU referendum which may act as a slight boost to growth.

Box 3.1: Brexit

This box provides an update on the process to establish a new policy framework after Brexit, and its economic impact so far. This follows the updates included in the four previous editions of LEO and so covers the period since May 2018. It also updates the review of forecasts conducted in the Autumn 2016 LEO[32].

1 New policy framework after Brexit

a) Political discussions in the UK, and with the European Union

The UK Government and the European Commission have published[33] on 14 November 2018 a draft Withdrawal Agreement for the UK to leave the European Union on 29 March 2019. This covers citizens' rights of Britons residing in the EU and vice versa, a financial settlement and arrangements for the border between Northern Ireland and the Republic of Ireland. If there is not to be a disorderly exit from the EU in March an agreement needs to be ratified by the UK Parliament. If ratified, there will be further negotiations between the UK Government and the European Commission on the future relationship between the two parties, including trading relationships although a political declaration setting out a proposed framework for the future relationship has also been published[34]. Agreement on these follow-up talks has to be reached by the end of 2020 if they are to be successful unless the transition period of the UK withdrawal from the EU is extended. Otherwise the UK will trade with the EU on the basis of World Trade Organisation rules, which would reduce trading opportunities with the EU as there would be higher tariff and non-tariff barriers.

b) Development of a UK migration policy for workers

As well as trade policy, migration policy will be different once the UK leaves the European Union, subject to the caveat that migration rules for EU nationals still fall within the scope of forthcoming negotiations with the EU on the future relationship. The likely structure of the new migration regime has, though, become clearer. The Migration Advisory Committee (MAC) produced its final report on EEA migration in the UK in September[35]. The conclusions and recommendations from this were that:

- "EEA migration has had impacts, [and] many of them seem to be small in magnitude when set against other changes. The fall in the value of the Pound after the referendum to leave the EU probably raised prices by 1.7 per cent – this is almost certainly a larger impact than the effect on wages and employment opportunities of residents from all the EEA migration since 2004, although over a different time period".
- "EEA migrants pay more in taxes than they receive in benefits. The positive net contribution to the public finances is larger for EU13+ migrants than for new member states migrants". The MAC did not report on the impact of immigration on economic output, but the corollary is that migration boosts output.
- "The evidence … points in the direction of high-skilled migrants having a clear benefit to existing residents while the same is not true for lower-skilled migrants. As a result, a policy on work migration that provided greater access for higher-skilled

[32] See: GLA Economics (2016). 'London's Economic Outlook: Autumn 2016', November 2016.
[33] European Commission (2018). 'Draft Agreement on the withdrawal of the United Kingdom of Great Britain and Northern Ireland from the European Union and the European Atomic Energy Community, as agreed at negotiators' level on 14 November 2018', November 2018.
[34] HM Government (2018). 'Political Declaration setting out the framework for the future relationship between the European Union and the United Kingdom'. November 2018.
[35] See: MAC (2018). 'Migration Advisory Committee (MAC) report: EEA migration', September 2018.

> migration while restricting access for lower-skilled workers to enter the UK would be consistent with the available evidence".

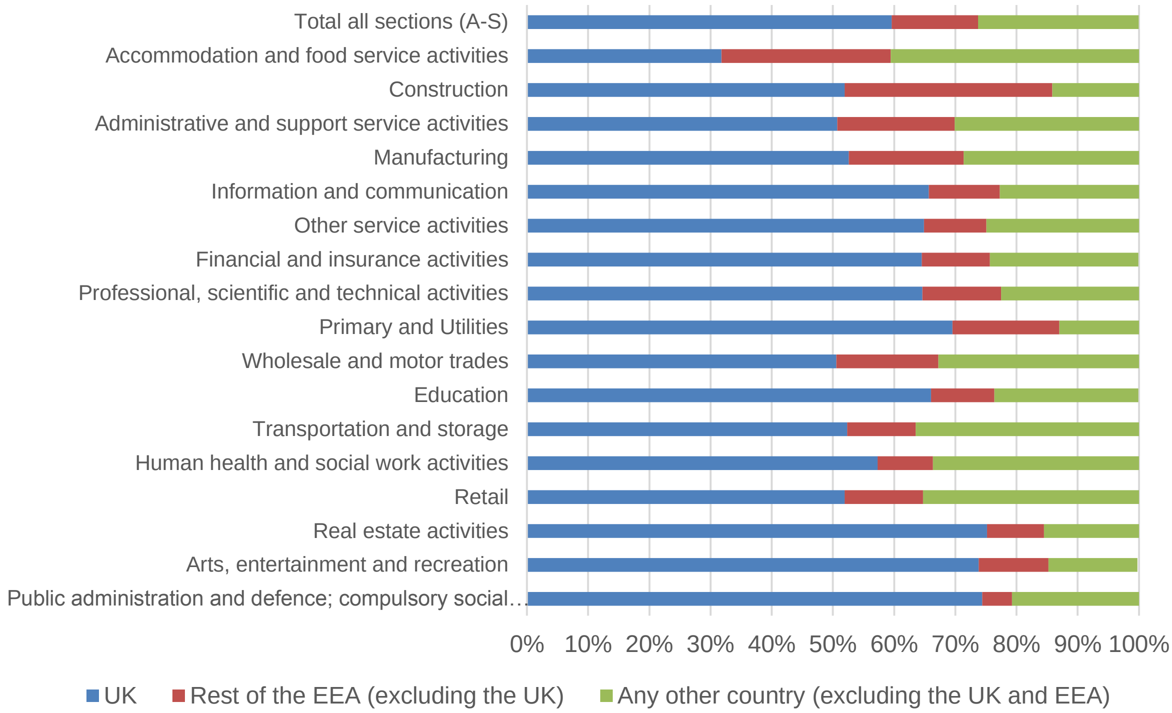
The MAC also proposed "changes to the Tier 2 visa system – removing the cap [on numbers], widening the range of jobs permitted, and reducing bureaucracy … For non-EEA workers, [the] Tier 2 proposals would make it easier to hire migrants into high and medium-skilled jobs but make no change for lower-skilled". There would be one system for EEA and non-EEA workers, and limited provision, if any, for work visas or permits for lower-skilled workers.

Following publication of the report the Cabinet met to agree the overarching principles of a new immigration system. The UK Government is expected to provide a response in a White Paper later this year[36].

These proposals are likely to have a significant impact on London as EU workers are particularly important to the capital's economy, making up 14% of the workforce (752,000 jobs) in 2017[37]; for some industries, such as Accommodation and food services, and Construction, the figure is much higher (Figure 3.12). The equivalent figure for the UK is just 7.5%. Research by GLA Economics shows that these workers tend to be younger, and more highly skilled, than average. However, net EU migration continues to fall amid the ongoing Brexit uncertainty. ONS data shows that over in the year to March 2018, the number of EU citizens coming to the UK (226,000) decreased by 19,000 year-on-year, while the number leaving the UK (138,000) increased by 17,000 year-on-year, and is the second highest recorded level (after the year to December 2017) since the series began in 2008[38]. The net in-migration of 87,000 is the lowest since the year to December 2012, and somewhat below the highest level of net in-migration of 189,000 in the year to June 2016, just before the EU referendum.

[36] See: CBI responds to government commissioned immigration report - CBI
[37] ONS (2018). 'Jobs in London, the City of London, and the Regions, by country of birth (UK, EEA and rest of world), broken down in various ways, 2004 to 2017', November 2018.
[38] ONS (2018). 'Migration Statistics Quarterly Report - Office for National Statistics', August 2018.

Figure 3.12: Percentage of jobs by industry and country/area of birth, London, 2017



Source: ONS Annual Population Survey

2 Economic impact of Brexit

This section considers our understanding of the likely economic impact of Brexit by reviewing and interpreting estimates of impacts of various scenarios, and by tracking the evolution of forecasts for the UK and London.

a) Modelling the impact of Brexit scenarios

In advance of the EU referendum, many forecasters attempted to quantify the potential short-term impact of a vote to leave the EU for the UK economy. A summary of these forecasts was provided in the Autumn 2016 LEO[39], however with Brexit looming it would be opportune to re-examine these forecasts and forecasts produced since. The consensus of opinion of the pre-referendum forecasts was that the impacts would be negative.

The OECD's assessment of the near-term effects was that "UK GDP growth would be reduced by 0.5 percentage points in both 2017 and 2018. The onset of the trade shock in 2019 adds to these costs considerably, with GDP growth reduced by 1.5 percentage points that year"[40].

Analysis from NIESR undertaken on 12 May 2016, expected that "in the short-run…it would lower GDP by around 1 per cent in 2017, compared to a world in which the UK voted to remain". At that time, NIESR stated that "our central forecast results do not imply that the economy will go into recession as a consequence of a vote to leave, but the likelihood of such an event increases". At that time it was expected that GDP would be 2.3 per cent lower in 2018 compared to a baseline where the UK voted to remain in the EU[41].

In contrast, the HM Treasury analysis published in the lead-in to the referendum had starker conclusions of the potential short-term impact of a vote to leave the EU on output, the labour market and sterling. Two scenarios were created to model the potential negative impacts resulting from the vote, a "shock" and a "severe shock" scenario. Under the shock scenario, "a vote to leave would result in a recession, a spike in inflation and a rise in unemployment", with the headline findings being that GDP would be 3.6 per cent lower after 2 years compared to a vote to remain, sterling would be around 12 per cent lower, and unemployment would increase by around 500,000[42].

More recently, in October 2018 the OBR published a discussion paper on Brexit and the OBR's forecasts[43], and reviewed GDP growth trends since the EU referendum result. They noted that:

> "Following the June 2016 referendum result, we made some broad-brush adjustments to our forecasts in our November 2016 EFO [Economic and Fiscal Outlook] to reflect the fact that it was now Government policy to leave the EU: notably that trade intensity, net inward migration, business investment and productivity growth would be weaker than would otherwise have been the case. We also took on board the significant fall in the exchange rate that accompanied the referendum and its outcome. In terms of near-term impact, we reduced our forecast for real GDP growth between the second quarters of 2016 and 2018 from 4.4 to 3.0 per cent; the ONS currently estimates that growth over this period was 3.2 per cent. Studies based on synthetic 'doppelgangers' for the UK economy suggest that output in mid-2018 is around 2 to 2½ per cent lower than it would have been in the absence of the referendum".

Events have largely been in line with most predictions. There was a sharp fall in the exchange rate following the decision to leave the EU and a notable drop in output, if perhaps more gradually than some forecasters expected. What did not happen was the predicted rise in unemployment.

In terms of estimates of the longer-term impacts on output of Brexit the Spring 2018 LEO[44] reviewed more recent modelling of long-term regional impacts of Brexit scenarios by Cambridge Econometrics[45] and the UK Government[46]. Both pieces of work concluded that Brexit would have a detrimental impact on the UK economy and for London over the longer term, but that the London economy would be more resilient in terms of GVA although the impact on employment could be more severe.

Other recent research has concluded that Brexit would have an adverse impact on the UK economy over the longer term:

- Analysis by the IMF[47] published in August 2018 concludes that the EU output would be 0.5% to 1.5% lower depending on whether the outcome of Brexit negotiations was a FTA or a hard Brexit, while UK output would be 2.5% to 4% lower.

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39 See: GLA Economics (2016). 'London's Economic Outlook: Autumn 2016', November 2016.
40 OECD (2016). 'The Economic Consequences of Brexit: A Taxing Decision', April 2016. OECD Economic Policy Paper No. 16.
41 NIESR (2016). 'The Long and Short of it: What price UK Exit from the EU?', May 2016.
42 HM Treasury (2016). 'HM Treasury analysis: the immediate economic impact of leaving the EU', May 2016.
43 See: Brexit analysis - Office for Budget Responsibility
44 See: GLA Economics (2016). 'London's Economic Outlook: Autumn 2016', November 2016.
45 Cambridge Econometrics (2018). 'Preparing for Brexit', January 2018. Greater London Authority.
46 UK Parliament (2018). 'Government Brexit analysis material published', March 2018.
47 See: The Long-Term Impact of Brexit on the European Union | IMF Blog

- Analysis by NIESR[48] published in May 2018 shows that, "by 2030 a hard Brexit would reduce cumulative GDP growth by 18 percentage points compared to a situation where the UK continued its EU membership. The economic damage in our FTA [Free Trade Agreement] and soft Brexit scenarios is less severe than in our hard Brexit scenario, although it will still cost the UK economy roughly 12.5 percentage points and 10 percentage points of cumulative GDP growth by 2030, respectively". This report found stronger negative effects than other studies in part because it expects, and models, negative UK-specific effects on productivity caused by Brexit.

While following the publication of the withdrawal agreement at the end of November a number of pieces of analysis where published looking at the impact of various forms of Brexit on the UK economy against a baseline of remaining in the EU. Thus:

- The UK Government[49] published estimates of a wide variety of Brexit scenarios although not of the proposed deal. However the scenario closest to the proposed deal would leave UK GDP 3.9% lower in 15 years than the baseline of staying in the EU. The Government also estimated that a no deal scenario would see UK GDP 9.3% lower in 15 years than the baseline of staying in the EU.
- Research from NIESR[50] found that the proposals would leave UK GDP 3.9% lower than staying in the EU. With an 'orderly no deal' leaving GDP 5.5% lower than the baseline.
- Researchers[51] from King's College London, the Centre for Economic Performance and the Institute for Fiscal Studies found that by 2030 UK GDP per capita would be between 1.9% and 5.5% lower than a baseline of staying in the EU. No deal was forecast to leave GDP per capita 3.5% to 8.7% lower than the baseline.

b) A review of forecasts for the UK economy

Although Brexit has yet to occur a number of forecasters have downgraded their forecasts for the short-run with immediate effect. This section reviews vintages of GDP forecasts for the UK economy both before and after the EU referendum to examine these downgrades, and the duration of these effects. While the next section does the same for forecasts for London.

A comparison of vintages of various official forecasts confirms that there is a shared sense of a downward transition in the UK GDP growth rate in contrast to concerns amongst some forecasters at the time of the vote of a significant downward shock (Table 3.4).

Prior to the EU referendum forecasters were predicting growth of between 2% and 2.3% a year. This is below historical trends prior to the 2008 recession and reflects the subsequent slowdown in productivity growth.

After the EU referendum in the Autumn of 2016 there had been a downgrading of forecasts for the period to 2018, and some improvement thereafter.

By Autumn 2017 the OBR stated that they had "lowered our real GDP forecast in every year. We now expect growth to average 1.4 per cent a year over the next five years, slowing a little

[48] See: Erken, H. et al. (2018). 'Measuring the permanent costs of Brexit', May 2018. National Institute Economic Review Issue 244.
[49] HM Government (2018). 'EU Exit: Long-term economic analysis'. November 2018.
[50] Hantzsche, A., Kara, A. & Young G. (2018). 'The Economic effects of the Government's proposed Brexit Deal'. NIESR, November 2018.
[51] UK in a changing Europe (2018). 'The economic consequences of the Brexit deal'. November 2018.

over the next two (as public spending cuts and Brexit-related uncertainty weigh on the economy) and picking up modestly thereafter as productivity growth quickens. The main reason for lowering out GDP forecast since March is a significant downward revision to potential productivity growth, reflecting a reassessment of the post-crisis weakness and the hypotheses to explain it"[52]. The OBR forecasts for 2018 and 2019 are 0.8 percentage points lower in Autumn 2017 than they were in Autumn 2016. IMF and Bank of England forecasts were largely unchanged. Outturn GDP growth rate in 2018 is likely to be in line with forecasts at 1.3-1.4%.

By Autumn 2018 the OBR had marginally increased its GDP forecast, "reflecting a downward revision to our estimate of the sustainable rate of unemployment and an upward revision to potential labour market participation, reflecting new data on participation by age"[53]. Bank of England forecasts for 2019 and 2020 remained unchanged at 1.7%. The IMF, in contrast, had reduced slightly its forecasts for 2019 and 2020 to 1.5% from 1.6%, and 1.7% respectively. It commented that, "the balance of risks to the short-term global growth forecast has now shifted to the downside … The proliferation of trade actions and threats, and the ongoing renegotiations of major free trade agreements, such as NAFTA and the economic arrangements between the United Kingdom and the rest of the European Union, have created pervasive uncertainty about future trade costs"[54].

[52] See: OBR (2017). 'Economic and fiscal outlook', November 2017.
[53] See: OBR (2018). 'Economic and fiscal outlook', October 2018.
[54] See: IMF (2018). 'World Economic Outlook: Challenges to Steady Growth', October 2018.

Table 3.4: Summary of UK GDP growth rate forecasts: Pre/post EU referendum, 2016 to 2018

Pre-Referendum

Forecaster	2016	2017	2018	2019	2020	2021
IMF	1.9	2.2	2.2	2.1	2.1	2.1
OBR	2.0	2.2	2.1	2.1	2.1	--
HMT (Summary of Independent Forecasts)	1.8	2.1	--	--	--	--
BoE	2.0	2.3	2.3	--	--	--

Post-Referendum (Autumn 2016)

Forecaster	2016	2017	2018	2019	2020	2021
IMF	1.8	1.1	1.7	1.8	1.9	1.9
OBR	2.1	1.4	1.7	2.1	2.1	--
HMT (Summary of Independent Forecasts)	2.0	1.1	--	--	--	--
BoE	2.2	1.4	1.5	1.6	--	--

Post-Referendum (Autumn 2017)

Forecaster	2016	2017	2018	2019	2020	2021
IMF	1.8	1.7	1.5	1.6	1.7	1.7
OBR	1.8	1.5	1.4	1.3	1.3	1.5
HMT (Summary of Independent Forecasts)	--	1.6	1.4	--	--	--
BoE	--	1.6	1.6	1.7	1.7	--

Post-Referendum (Autumn 2018)

Forecaster	2016	2017	2018	2019	2020	2021
IMF	1.8	1.7	1.4	1.5	1.5	1.6
OBR	--	1.7	1.3	1.6	1.4	1.4
HMT (Summary of Independent Forecasts)	--	--	1.3	1.5	--	--
BoE	--	--	1.3	1.7	1.7	1.7

Sources: IMF World Economic Outlook, Spring and Autumn for 2016, and Autumn edition for 2017 and 2018; OBR Economic and Fiscal Outlook, Spring and Autumn for 2016, and Autumn edition for 2017 and 2018; HMT Summary of Independent Forecasts, June and November in 2016, November in 2017, and October in 2018; BoE Inflation Report, May and November in 2016, and November in 2017 and 2018

A number of conclusions may be drawn:

- UK GDP growth rate has been lower than it was expected to be prior to the EU referendum
- The decline is not out-of-line with forecasts before the referendum, although its impact has materialised more gradually
- A low rate of growth is expected to persist over the forecast horizon, and for longer than had been originally expected by some forecasters

Finally, it is easier to identify the downside risks than upside risks to these forecasts. The OBR comments, "currently, our forecasts assume an orderly end to the negotiations between the UK and the EU and so a smooth transition from the pre- to post-Brexit worlds. This would be most likely if the UK and EU finalise the current version of the draft Withdrawal Agreement, which contains a transition period until the end of 2020. But a disorderly exit is not impossible and it could have a severe short-term impact on demand and supply in the economy and on the public finances"[55].

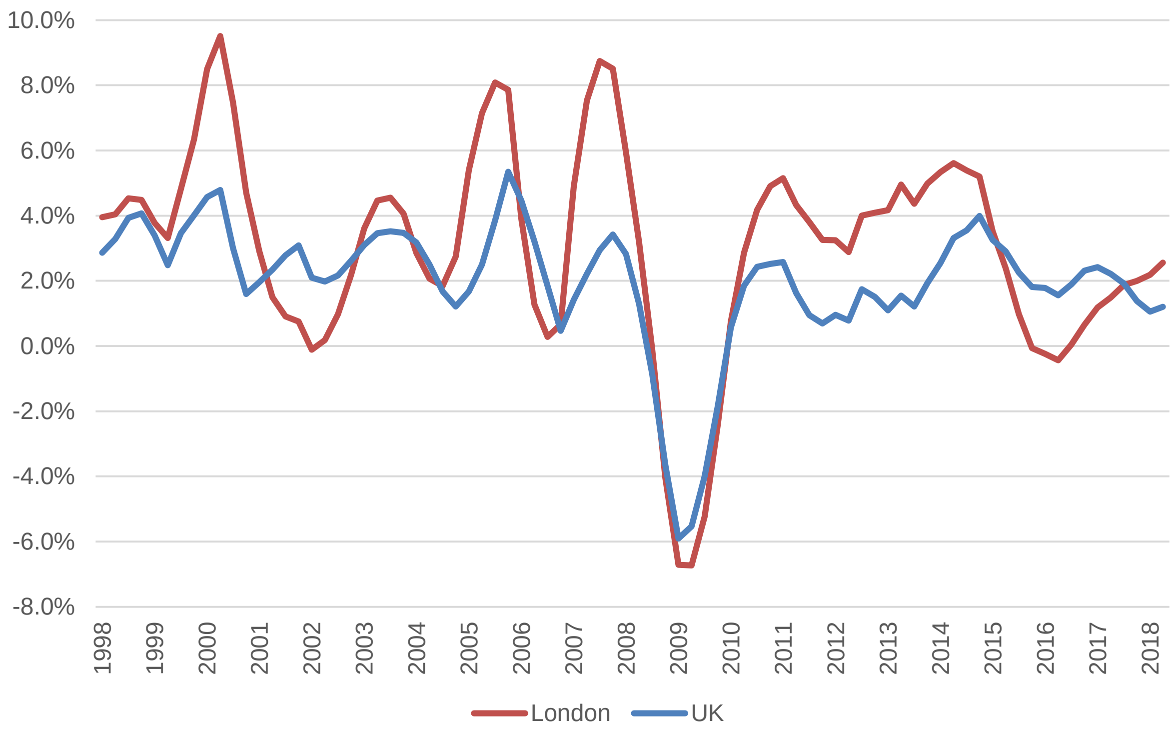
c) A review of forecasts for the London economy

Changing the focus towards London, Figure 3.13 shows that for the period 1998-2015:

- London has grown at a faster rate on average than the UK as a whole
- Year-on-year changes in GVA growth for London mirror UK trends

Growth slowed for both London and the UK in 2014, if more sharply in London where the economy contracted for a period during 2016. Subsequently, the London economy has been improving, and had an annualised growth rate of 2.6% in Q2 2018. In contrast, UK growth slowed in 2017, and has since stagnated at an annualised rate of 1.2% in Q2 2018.

Figure 3.13: Annual real terms GVA growth, London and the UK, 1998 Q1 to 2018 Q2



Source: GLA Economics and Office for National Statistics

This may be because there have been differential impacts across the UK from the effects of the EU referendum result:

[55] See: Brexit analysis - Office for Budget Responsibility

- A sharp drop in the value of sterling immediately afterwards, which improved the competitiveness of exports
    - London is relatively more export oriented with economic theory suggesting that the impact of a depreciation could be felt for a number of years after the event[56]
- Increased uncertainty around the nature of future trading relationships with the EU
    - There is evidence that this has had the effect of delaying business investment decisions. As this spending directly impacts economic growth this is likely to have had an immediate impact on output, while in the long-run if this investment is not made up after the uncertainty is removed this could also impact long-run growth as well
    - London has a lower exposure to trade with the EU (as a share of GDP) compared with other parts of the UK[57] indicating that it will be less directly harmed by disruption to trade with the block

A comparison of vintages of London economy forecasts both before and after the EU referendum is consistent with the view of the impact analyses for Brexit that growth in the London economy will be slower as a consequence of Brexit, but that it will be higher than for the UK as a whole in the next couple of years (Table 3.5).

Table 3.5: Summary of London economy forecasts: Pre/post referendum, 2016 to 2018

Spring 2016

Forecaster	2016	2017	2018
Consensus (LEO 28)	2.6	2.6	2.6
GLA Economics (LEO 28)	2.9	3.4	3.3

Autumn 2016

Forecaster	2016	2017	2018
Consensus (LEO 29)	2.8	2.0	2.3
GLA Economics (LEO 29)	2.4	1.4	1.9

Autumn 2017

Forecaster	2017	2018	2019
Consensus (LEO 31)	2.1	1.8	2.6
GLA Economics (LEO 31)	1.5	1.4	1.5

Autumn 2018

Forecaster	2018	2019	2020
Consensus (LEO 33)	1.6	1.8	2.0
GLA Economics (LEO 33)	1.9	1.6	1.9

Source: London's Economic Outlook, various editions

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[56] For a brief introduction to this theory see the "J-curve" effect.
[57] See: Chen, W. et al. (2017) 'The continental divide? Economic exposure to Brexit in regions and countries on both sides of The Channel' December 2017. Papers in Regional Science - Wiley Online Library.

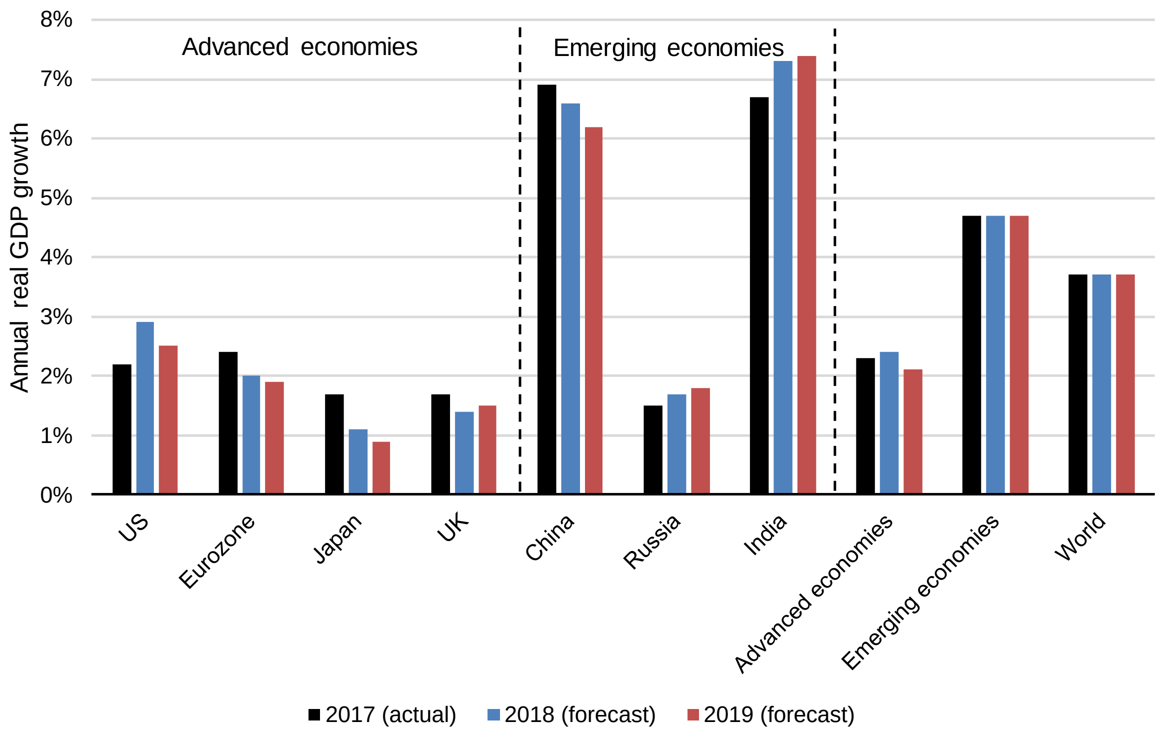
In summary:

- London's economy is performing better than the UK economy
- There is expected to be an ongoing detrimental impact on growth in London following Brexit as with the UK
- London is expected to be more resilient than the UK, and perform better.

3.3 The world economy

The global economy was estimated to have grown 3.7% in 2017 by the IMF which was "well above its level during 2012–16" [58]. In the latest IMF World Economic Outlook (WEO), the world economy is expected to grow at the same rate of 3.7% in both 2018 and 2019, although this has been revised down by 0.2 percentage points since the WEO Update of July 2018. The IMF noted that "the steady expansion under way since mid-2016 continues, with global growth for 2018–19 projected to remain at its 2017 level". However, they also warned that this is not assured with "risks to global growth skew[ing] to the downside in a context of elevated policy uncertainty". They warn that "while financial market conditions remain accommodative in advanced economies, they could tighten rapidly if, for example, trade tensions and policy uncertainty were to intensify. Monetary policy is another potential trigger". In its latest Global Financial Stability Report[59] the IMF also notes that "an intensification of concerns about emerging markets, a broader rise in trade tensions, the realization of political and policy uncertainty, or a faster-than-expected tightening in monetary normalization could all lead to a sharp tightening in financial conditions". Figure 3.14 shows the IMF economic forecasts for selected countries.

Figure 3.14: IMF forecasts of annual rate of real GDP growth for selected countries



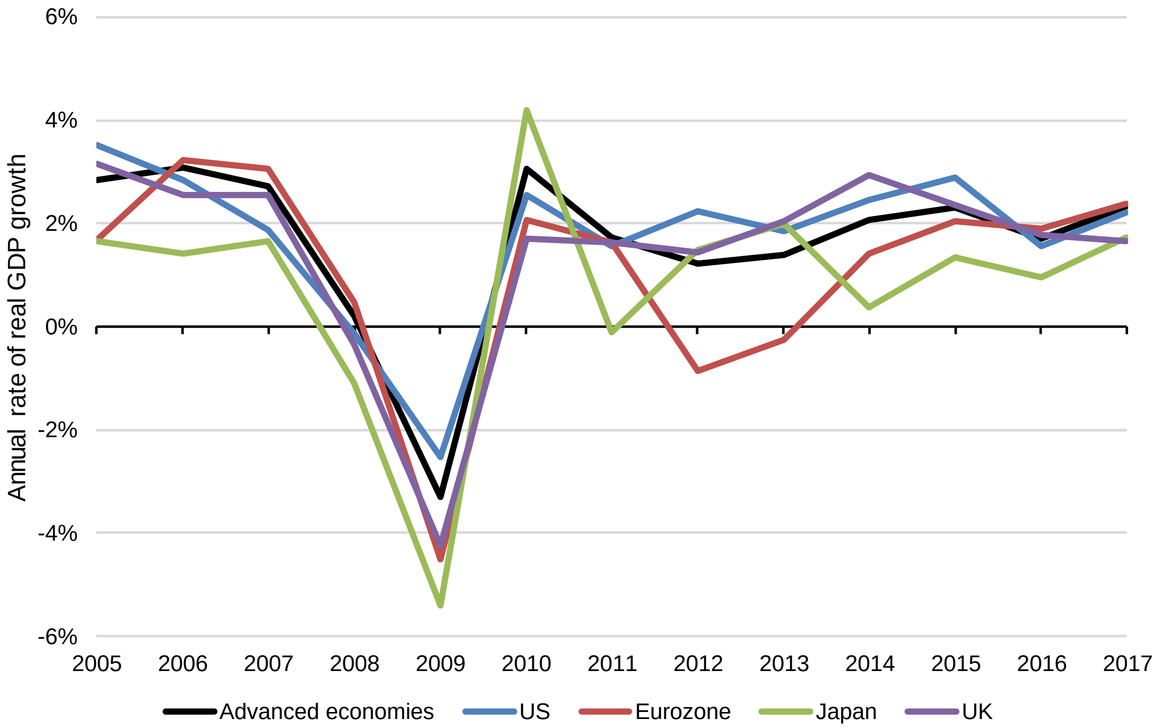
Source: IMF (2018). 'World Economic Outlook', October 2018.

[58] IMF (2018). 'World Economic Outlook', October 2018.
[59] IMF (2018). 'Global Financial Stability Report', October 2018.

Advanced economies

The advanced economies collectively grew 2.3% on an annual basis in 2017, one of the strongest rates of growth since the financial crisis. The IMF expects the recovery to pick up in 2018 with growth hitting 2.4% (unchanged on the July 2018 forecast), although growth is then expected to slow to 2.1% in 2019 (down 0.1 percentage points on their July forecast). This reflects stronger economic prospects in some advanced economies for this year but some mounting economic risks for next year.

Figure 3.15: Annual rate of real GDP growth for selected advanced economies



Source: IMF (2018). '[World Economic Outlook](#)', October 2018.

Looking at the advanced economies in greater detail, the **US** economy grew by 3.5% year on year in Q3 2018. This follows a year on year expansion of 4.2% in Q2 2018. These where the fastest quarterly growth rates since the end of 2014[60]. Looking forward the IMF expects the US to grow 2.9% in 2018 overall and 2.5% in 2019. Compared with the IMF's July 2018 forecasts, these latest IMF forecasts are unrevised for 2018 but revised down marginally (by 0.1 percentage points) for 2019. Looking at the US economy in detail the IMF forecasts growth this year to be "supported by the procyclical fiscal stimulus after eight consecutive years of expansion and still-loose financial conditions (despite expected monetary tightening)". Growth is then expected to soften in 2019 - in part due to the recently introduced trade measures - "and to drop to 1.8 percent in 2020 as the fiscal stimulus begins to unwind. Strong domestic demand is projected to push the economy above full employment and increase imports and the current account deficit"[61]. There also remains the downside risk of higher interest rates which could negatively affect consumer spending and business investment. The Federal Reserve has continued to raise interest rates in 2018 and has raised them twice since the previous LEO so that, at a range of 2-2.25%, it currently stands at its highest level since April 2008.

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[60] BEA (2018). 'Gross Domestic Product, 3rd quarter 2018 (advance estimate)', 26 October 2018.
[61] IMF (2018). 'World Economic Outlook', October 2018.

Meanwhile, the **Eurozone's** economy continues to grow. In Q3 2018, GDP in the Zone increased 0.2% on a quarter-by-quarter basis. This was down from 0.4% in Q2 2018 and compared to a year earlier the Zone's GDP was 1.7% higher the slowest rate of annual growth since Q4 2014. Still, the IMF forecasts the Eurozone to grow by 2.0% in 2018 before slowing to 1.9% in 2019. The IMF notes that "healthy consumer spending and job creation amid supportive monetary policy are expected to continue to provide strong aggregate demand, though at a moderating pace"[62]. While looking at individual countries they note that "in France, growth is expected to moderate to 1.6 percent in 2018 and 2019, 0.5 (0.4) percentage point weaker than in the April 2018 [forecast] for 2018 (2019), reflecting softer external demand as well as lower outturns and high-frequency indicators in 2018. In Germany, growth was revised down to 1.9 percent in 2018 and 2019 (by 0.6 percentage point and 0.1 percentage point, respectively) because of a slowdown in exports and industrial production. Italy's growth forecast is also lower than in the April 2018 [forecast], estimated at 1.2 percent for 2018 and 1 percent in 2019, because of the underlying deterioration in external and domestic demand and uncertainty about the new government's policy agenda. In Spain, growth is expected to be 2.7 percent in 2018 and 2.2 percent in 2019, which is a 0.1 percentage point decline relative to the April forecast for 2018, and no change for 2019.".

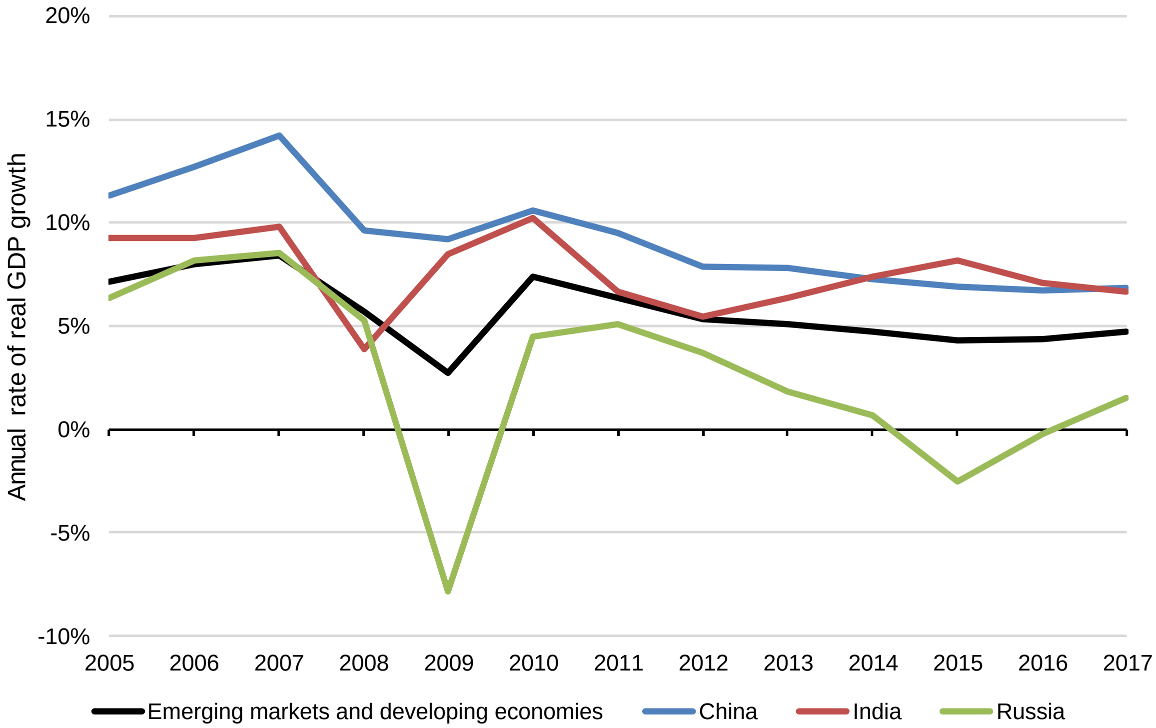
In **Japan**, the economy contracted in the third quarter of 2018 although this has been partially attributed to the impact of natural disasters. The latest estimate showed that GDP fell by an annualised 1.2% in Q3 2018. Looking forward, the IMF notes that "Japan's growth is projected to moderate to 1.1 percent in 2018 (from a strong, above‑trend outturn of 1.7 percent in 2017), before softening to 0.9 percent in 2019. The downward revision of 0.1 percentage point for 2018 relative to the April 2018 [forecast] is largely due to the contraction observed in the first quarter of 2018, and given the uptick in growth and domestic demand in the second quarter of 2018, this is likely to represent a temporary dip rather than the beginning of a turn in the cycle. Japan's medium-term prospects are impeded by unfavorable demographics and a trend decline in the labor force"[63].

Emerging market economies

Growth in the emerging market economies is expected to remain steady over the coming few years. The IMF expects growth to be 4.7% in both in 2018 and 2019, "and to rise modestly over the medium term"[64].

[62] Ibid.
[63] Ibid.
[64] Ibid.

Figure 3.16: Annual rate of real GDP growth for selected emerging market economies



Source: IMF (2018). '[World Economic Outlook](#)', October 2018.

Of the major emerging markets, **China's** economy grew by 6.5% year-on-year in Q3 2018, this was its slowest quarterly growth rate for almost a decade, although in line with the Government's full-year growth target of 6.5%. The outlook for China however remains uncertain due to the ongoing trade dispute with the US. The IMF expects growth "to moderate from 6.9 percent in 2017 to 6.6 percent in 2018 and 6.2 percent in 2019, reflecting slowing external demand growth and necessary financial regulatory tightening. The 0.2 percentage point downgrade to the 2019 growth forecast is attributable to the negative effect of recent tariff actions, assumed to be partially offset by policy stimulus. Over the medium term, growth is expected to gradually slow to 5.6 percent as the economy continues to make the transition to a more sustainable growth path with continued financial de-risking and environmental controls"[65]. This is in line with the forecasts by the Asian Development Bank (ADB) that expects growth of 6.6% in 2018 and 6.3% in 2019[66]. The ADB attributed the slowdown in 2019 to "slower demand growth and the implementation of US tariffs and PRC countermeasures".

Meanwhile, **India's** economy grew by 8.2% year-on-year in the three months to June 2018, up from 7.7% in the three months to March 2018. Over the course of the year as a whole the IMF expects India's annual rate of economic growth "to increase to 7.3 percent in 2018 and 7.4 percent in 2019 (slightly lower than in the April 2018 World Economic Outlook for 2019, given the recent increase in oil prices and the tightening of global financial conditions), up from 6.7 percent in 2017. This acceleration reflects a rebound from transitory shocks (the currency exchange initiative and implementation of the national Goods and Services Tax), with strengthening investment and robust private consumption. India's medium-term growth prospects remain strong at 7¾ percent, benefiting from ongoing structural reform"[67]. Likewise,

[65] Ibid.
[66] Asian Development Bank (2018). 'Asian Development Outlook 2018: Update', September 2018.
[67] IMF (2018). 'World Economic Outlook', October 2018.

the ADB expects faster growth too – 7.3% in 2018 and 7.6% in 2019. With them noting that "robust domestic demand and growing exports, particularly manufactures, counteract import growth driven in large part by rising oil prices. The changing external environment poses some challenges ahead for India. Depreciation of the rupee, volatile external financial markets, and risks of inflation will require vigilance from monetary authorities, but tighter fiscal policy will help to quell inflationary pressures"[68].

In **Russia**, the economy grew by 1.3% year-on-year in Q3 2018 compared to 1.9% in Q2 2018. The IMF expects this growth period to continue with forecasts of 1.7% growth in 2018 and 1.8% in 2019 though "medium-term growth is expected to remain muted at about 1.2 percent, absent structural reforms."[69].

3.4 Risks to the economy

As has been the case since the June 2016 referendum the main risk to London's economic outlook remains the UK's decision to leave the EU. Additionally, there are risks surrounding interest rates in the UK, the strength of the global economic recovery and global trade flows. These are looked at in greater detail below.

Although a Brexit withdrawal agreement together with a declaration on a high-level framework on the future relationship has been negotiated between the UK and EU this has yet to be approved by Parliament. Thus a large amount of uncertainty to the economic outlook remains especially as further negotiations and agreement will occur during the transition period. This uncertainty in of itself has the potential to negatively affect the UK's and London's economic growth due to its impact on business and consumer confidence. While in the longer term even if the Government's Brexit deal is approved by Parliament most economists expect that this will have a dampening effect on long-term growth compared to a baseline of EU membership.

Another risk to the economic outlook is UK interest rates. The rate of inflation in the UK has been above the Bank of England's inflation target for over a year and a half. A normal monetary policy response would be to raise interest rates as that raises the opportunity cost of spending or borrowing and ultimately eases the demand-side pressure on prices. And indeed, the Bank has so far raised rates twice in a year. This and the Bank's ambition to 'normalise' interest rates away from the current ultra-low level, has led to expectations of higher interest rates in the short and medium-term. Therefore, the risk to the economic outlook relates to the pace of interest rate increases. On the downside, if interest rates rise too quickly, the impact on demand could dampen the rate of economic growth. However, on the upside, if interest rates rise gradually and therefore remain at historically low levels for some time, the relatively low borrowing costs can encourage investment and consumption which could support the economy.

Linked to this, the relatively high rate of inflation could affect the cost of living. Earnings have until recently not kept pace with inflation. Although real earnings have begun to rise again if this went into reverse this could have knock-on effects on consumer spending for instance. However, the rate of inflation is relatively moderate – standing at 2.4% in October – meaning the pressure on real earnings growth could lessen.

There is also a risk around fiscal policy in the UK. Although in the 2018 Budget the UK Government announced the end of austerity the fiscal situation in the UK remains quite tight

[68] Asian Development Bank (2018). 'Asian Development Outlook 2018: Update', September 2018.
[69] IMF (2018). 'World Economic Outlook', October 2018.

which could have a negative effect on the outlook. Despite the loosening of austerity, based on the latest economic and fiscal forecasts produced by the OBR[70] the Government is still projected to meet its three fiscal targets. However this is in part due to an improvement in tax revenue forecasts, which raises the risk that these forecasts may in future be reversed. While looking at the Government's broader objective of balancing the budget by the middle of the next decade the OBR notes that this "looks challenging". If UK public finances did deteriorate this runs the risk that the UK's debt rating could be downgraded further by international ratings agencies, which could lead to higher borrowing costs and have a knock-on effect on public spending and, consequently, economic growth.

In addition to these UK-level risks, another risk relates to the strength of global economic growth. As noted in section 3.3, the rate of global growth had picked up in 2017 and the IMF is expecting this decent growth to continue in the short and medium-run. This can potentially support economic growth in the UK and London through higher demand for exports and improving market sentiment. However, the IMF noted that the risks to growth are on the downside. This could lead to the global economy expanding at a disappointing rate, which in turn could adversely affect the UK economy.

Also, as has been highlighted for a round a decade now, structural problems continue to affect the Eurozone and could reappear to cause further problems for its members. The main risk in the Eurozone at the moment is represented by the conflict between the EU and Italy over the budget plans of the Italian government, which are in breach of the Fiscal Compact rules. Should this escalate into a new European debt crisis it would be a cause for concern due to the impact it could have on the UK and London's trade and hence growth. Still, despite these risks, the Eurozone is expected to grow in the near term with its prospects remaining relatively upbeat compared to the situation seen in the first half of the decade

Financial vulnerabilities appearing in some economies such as China also remains a concern. While the direct impact of a Chinese financial crisis on London may be limited, London's role in the global financial system means that the capital's economy could still be negatively affected indirectly.

A further trade-related downside risk is the increasing inward-looking, protectionist policies coming from the US in particular. While the possibility of increased protectionist attitudes in the US in and of itself is a risk to global growth, it can also negatively affect global trade flows.

Finally, there is a risk associated with geopolitical uncertainty. Any conflicts or sanctions have the potential to dampen or reverse country or regional growth, which in turn could have wider effects depending on how globally interconnected the relevant countries or regions are.

Overall (and notwithstanding these other risk factors relating to the strength of the global economy) the risks to the economic outlook for the UK and for London are dominated by Brexit.

3.5 Conclusion

This chapter described the recent performance of the London, UK and world economies. It thus noted that the recovery in the global economy remains strong and is likely to promote growth in global trade flows. In turn this could benefit economies that are particularly outward looking,

[70] Office for Budget Responsibility (2018). 'Economic and fiscal outlook', October 2018.

like the UK's and London's economies. However, there are downward risks to the global outlook, with threats of financial vulnerabilities in some economies and increasing protectionist policies especially by the US.

Meanwhile, for the UK, economic growth in 2018 so far has been mixed which partly reflects a general slowdown in the services sector. This was to some extent expected with various economic forecasts showing slower growth for 2018 and 2019. Nonetheless, prospects of further increases in interest rates by the Bank of England remain. While this could dampen economic growth by raising the opportunity cost of spending and borrowing, the process of raising interest rates is expected to be gradual and therefore monetary policy should remain supportive to economic growth.

The picture for London is also generally positive. Indicators largely point to the London economy performing relatively well. For example, the labour market continues to perform strongly and businesses have continued to report rising activity levels. These indicators also point to further growth in the short and medium-term, though probably at a relatively subdued pace. For instance, while GVA growth in London has started to pick up, it remains slower than the average seen since the financial crisis. This outlook for London is by no means certain, however, with the main risks relating to the impact of Brexit.

4. Review of independent forecasts

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 28 November 2018 on the first three of these indicators is summarised[71], drawing on forecasts from outside (independent) organisations[72]. 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 on GVA and workforce jobs presented in the following tables and charts is GLA Economics modelling, which in turns relies on ONS data. The source of historic data for Household Income and Expenditure is a mixture of Experian Economics (EE) for growth rates and GLA Economics modelling using EE data for absolute levels data.

Additionally, both the consensus[73] and GLA Economics' own forecasts provide predictions of employment and output growth in six broad sectors:

- Manufacturing
- Construction
- Transportation and storage
- Distribution[74], accommodation and food service activities
- Finance and business services[75]
- Other (public & private) services[76].

It should be noted, that since our spring 2012 forecast GLA Economics has been using the new Standard Industrial Classification (SIC 2007)[77].

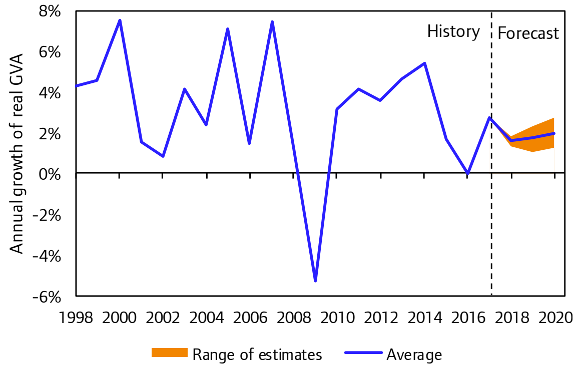
[71] The consensus forecast for GVA and employment is based on the latest available forecast from CE, CEBR, EE and OE, while the consensus forecast for household expenditure is based on the latest available forecast from CE, EE and OE only.
[72] Most forecasters do not yet provide forecasts of household income.
[73] 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.
[74] Distribution is made from the summation of Wholesale and Retail.
[75] 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.
[76] This is made from the summation of Public admin and defence, Education, Health, Arts, entertainment and recreation and Other services.
[77] For more information see Appendix A of: GLA Economics (2012). 'London's Economic Outlook: Spring 2012', June 2012.

Output

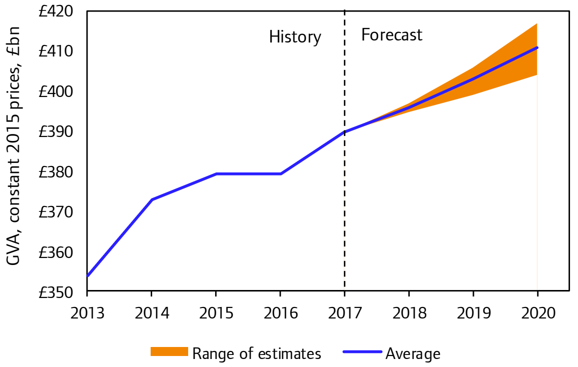
(London GVA, constant prices (base year 2015), £ billion)

The consensus (mean average view) is for real output growth to increase from 1.6% in 2018, to 1.8% in 2019, and reach 2.0% in 2020.

Annual growth



Level (constant year 2015, £ billion)



Annual growth (%)					Level (constant year 2015, £ billion)			
	2018	2019	2020			2018	2019	2020
Average	1.6	1.8	2.0		Average	395.8	402.7	410.6
Lowest	1.3	1.0	1.3		Lowest	394.8	398.8	405.9
Highest	1.8	2.3	2.7		Highest	396.6	405.9	416.9

History: Annual growth (%)

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
4.3	4.6	7.5	1.5	0.8	4.2	2.4	7.1	1.5	7.4	1.2	-5.3	3.2	4.1	3.6	4.6	5.4	1.7	0.0	2.7

History: Level (constant year 2015, £ billion)

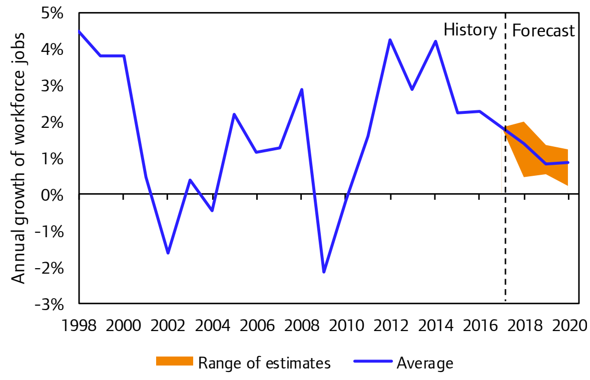
1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
212.4	221.4	231.5	248.9	252.7	254.7	265.3	271.6	291.0	295.4	317.3	321.0	304.0	313.7	326.6	338.2	353.8	372.9	379.2	379.2	389.6

Employment

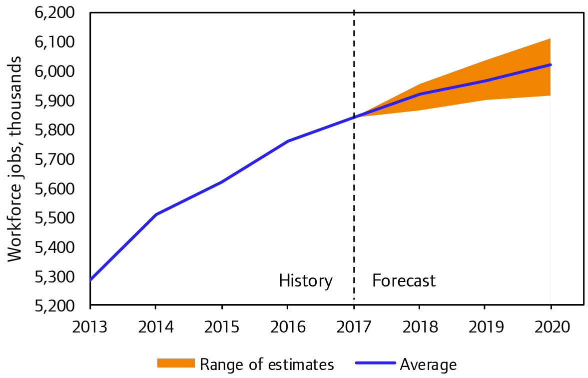
(London workforce jobs)

The consensus view is for the number of workforce jobs to grow slowly in the medium-term, from 1.4% this current year dropping to 0.8% in 2019, and then increasing slightly to 0.9% in 2020.

Annual growth



Level (millions of persons)



Annual growth (%)					Level (millions of persons)			
	2018	2019	2020			2018	2019	2020
Average	1.4	0.8	0.9		Average	5.92	5.97	6.02
Lowest	0.5	0.6	0.2		Lowest	5.86	5.89	5.91
Highest	2.0	1.3	1.2		Highest	5.95	6.03	6.11

History: Annual growth (%)

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
4.4	3.8	3.8	0.5	-1.4	0.5	-0.4	2.0	1.2	1.2	2.9	-2.3	-0.3	1.6	4.3	2.9	4.3	2.0	2.5	1.4

History: Level (millions of persons)

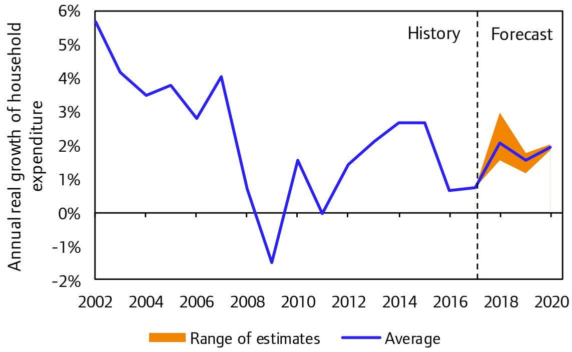
1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
4.14	4.32	4.49	4.66	4.68	4.62	4.64	4.62	4.72	4.77	4.83	4.97	4.86	4.84	4.92	5.13	5.28	5.51	5.62	5.76	5.84

Household expenditure

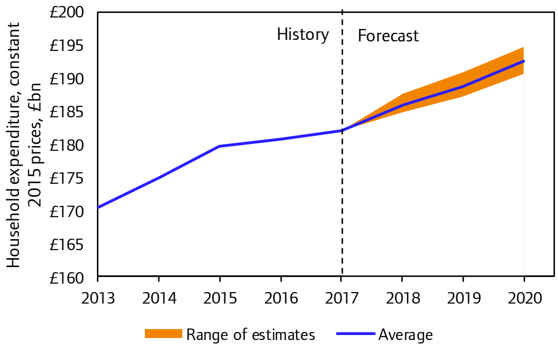
(London household spending, constant year 2015, £ billion)

The consensus view is for moderate household expenditure growth of 2.1% in 2018, 1.6% in 2019, and 2.0% in 2020.

Annual growth



Level (constant year 2015 £ billion)



Annual growth (%)					Level (constant year 2015 £ billion)			
	2018	2019	2020			2018	2019	2020
Average	2.1	1.6	2.0		Average	185.9	188.8	192.5
Lowest	1.5	1.2	1.9		Lowest	184.9	187.1	190.6
Highest	3.0	1.8	2.0		Highest	187.5	190.9	194.8

History: Annual growth (%)

2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
6.5	5.7	4.2	3.5	3.8	2.8	4.0	0.7	-1.5	1.6	0.0	1.4	2.1	2.7	2.7	0.7	0.7

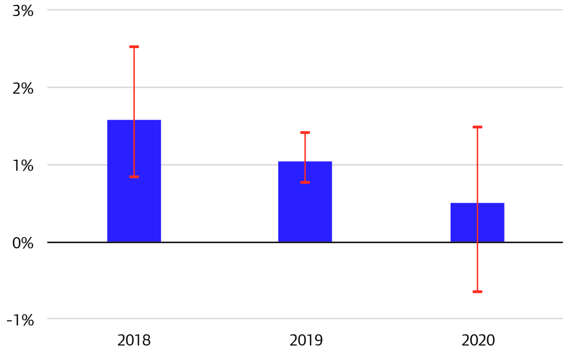
History: Level (constant year 2015, £ billion)

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
121.3	129.2	136.5	142.2	147.2	152.8	157.0	163.4	164.5	162.1	164.6	164.6	166.9	170.4	175.0	179.6	180.8	182.1

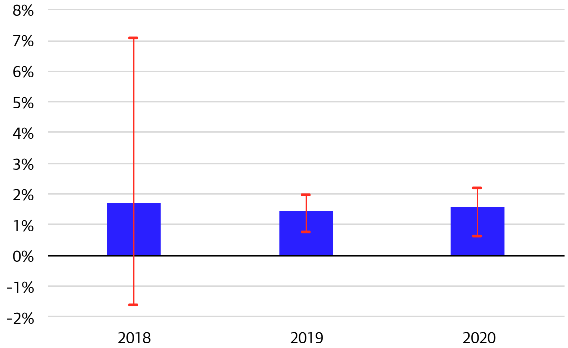
Output growth by sector (annual change)

In terms of output, the positive but modest outlook for the whole economy can be observed at the breakdown by sectors as well, with all sectors forecast to grow over the period 2018-2020.

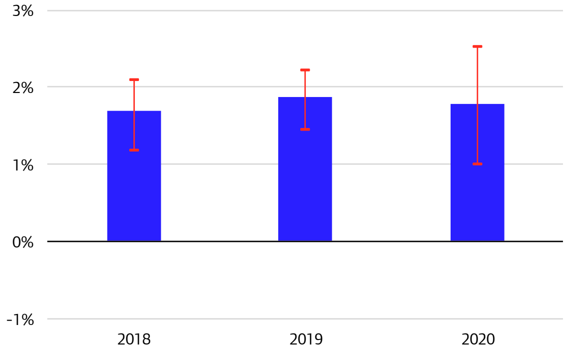
Manufacturing



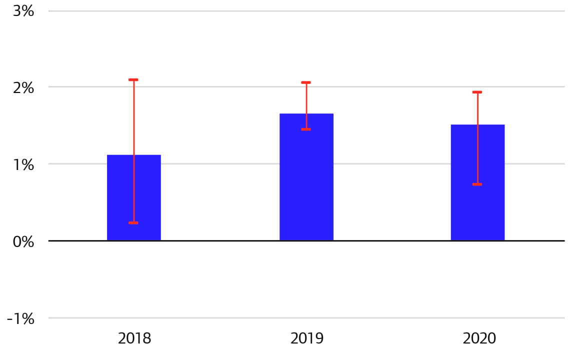
Construction



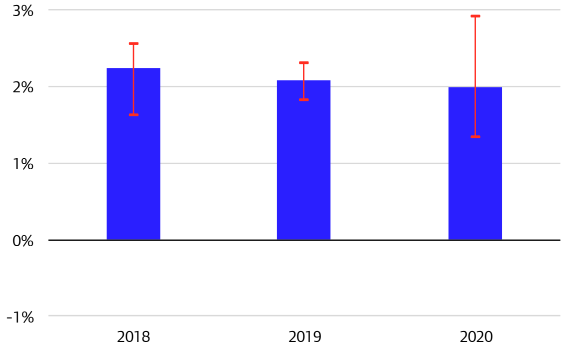
Distribution, accommodation and food service activities



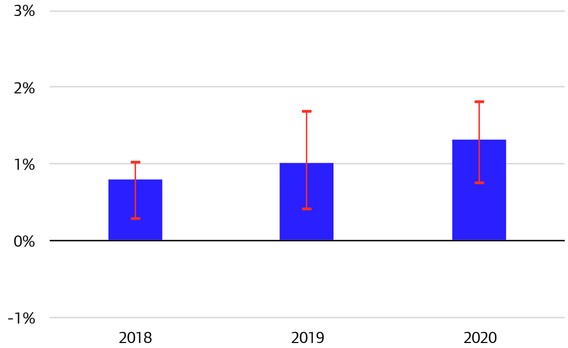
Transportation and storage



Finance and business



Other (public & private) services

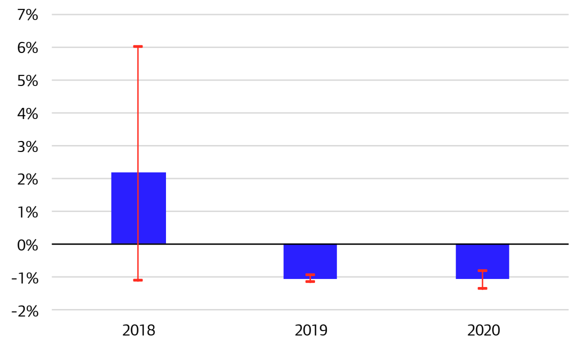


		2018	2019	2020			2018	2019	2020
Manufacturing	*Average*	1.6	1.0	0.5	**Construction**	*Average*	1.7	1.4	1.6
	Lowest	0.8	0.8	-0.7		*Lowest*	-1.6	0.8	0.6
	Highest	2.5	1.4	1.5		*Highest*	7.1	2.0	2.2
Distribution, accommodation and food service activities	*Average*	1.7	1.9	1.8	**Transportation and storage**	*Average*	1.1	1.7	1.5
	Lowest	1.2	1.5	1.0		*Lowest*	0.2	1.5	0.7
	Highest	2.1	2.2	2.5		*Highest*	2.1	2.1	1.9
Finance and business	*Average*	2.2	2.1	2.0	**Other (public & private) services**	*Average*	0.8	1.0	1.3
	Lowest	1.6	1.8	1.3		*Lowest*	0.3	0.4	0.7
	Highest	2.6	2.3	2.9		*Highest*	1.0	1.7	1.8

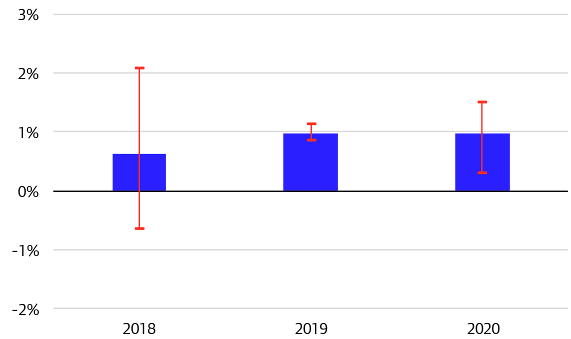
Employment growth by sector (annual change)

Most sectors are forecast to see weak to modest increases in employment over the next couple of years. The exception is Manufacturing which is predicted to see a reduction in the number of workforce jobs in 2019 and 2020, and Transport and Storage which is predicted to see a reduction of workforce jobs in the current year 2018.

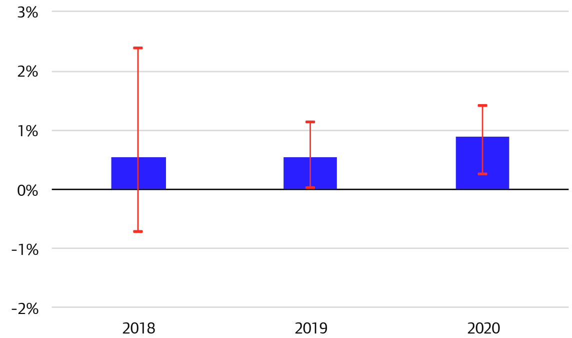
Manufacturing



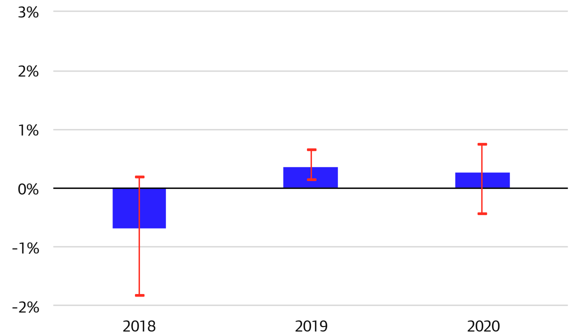
Construction



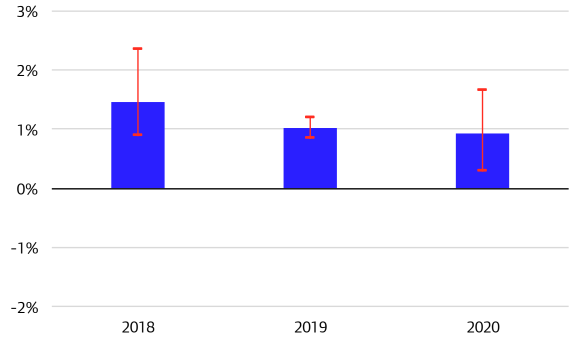
Distribution, accommodation and food service activities



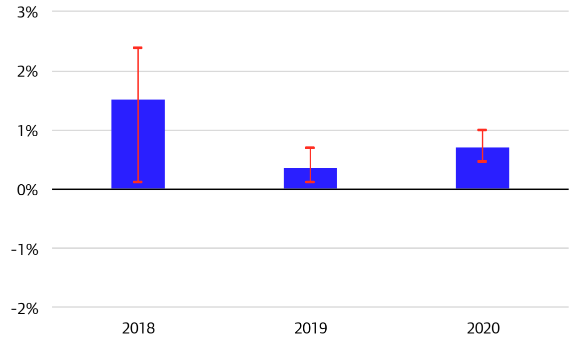
Transportation and storage



Finance and business



Other (public & private) services



		2018	2019	2020			2018	2019	2020
Manufacturing	*Average*	2.2	-1.1	-1.1	**Construction**	*Average*	0.6	1.0	1.0
	Lowest	-1.1	-1.2	-1.4		*Lowest*	-0.7	0.8	0.3
	Highest	6.0	-1.0	-0.8		*Highest*	2.1	1.1	1.5
Distribution, accommodation and food service activities	*Average*	0.5	0.5	0.9	**Transportation and storage**	*Average*	-0.7	0.4	0.3
	Lowest	-0.7	0.0	0.3		*Lowest*	-1.8	0.1	-0.4
	Highest	2.4	1.1	1.4		*Highest*	0.2	0.7	0.7
Finance and business	*Average*	1.5	1.0	0.9	**Other (public & private) services**	*Average*	1.5	0.4	0.7
	Lowest	0.9	0.8	0.3		*Lowest*	0.1	0.1	0.5
	Highest	2.3	1.2	1.6		*Highest*	2.4	0.7	1.0

5. The GLA Economics forecast

5.1 The background

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 (this forecast) provide these estimates. It is thus necessary to distinguish carefully between the GLA's long-term employment projections and this forecast. 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, whereas business planning requires estimates of actual numbers. 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 Experian Economics (EE) for the historic growth rates and GLA Economics modelling using EE data for the levels data.

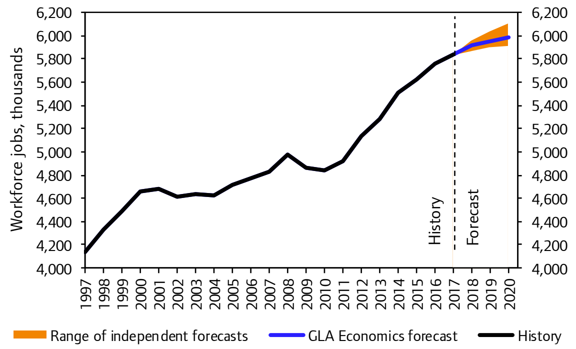
5.2 Results

With the exception of 2016 when no growth was recorded, London's economic output has been growing every year since 2010. This expansion is expected to continue over the next three years, though at a modest pace when compared with historic growth rates. Employment is also predicted to rise between 2018 and 2020 though similarly at modest to weak rates.

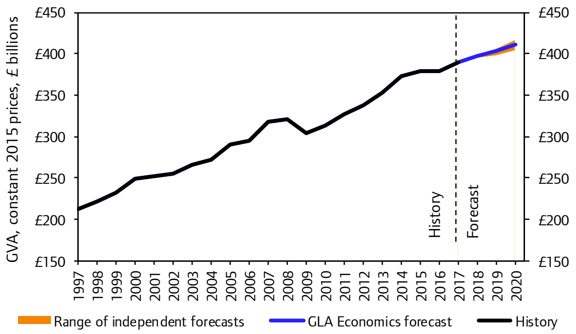
Household income and spending are also expected to grow below the historic trend.

Figure 5.1: Trend and forecast employment and output

Employment



Output



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

Table 5.1: Forecast and historical growth rates

(Annual % change)

	2012	2013	2014	2015	2016	2017	2018	2019	2020
GVA	3.6	4.6	5.4	1.7	0.0	2.7	1.9	1.6	1.9
Workforce jobs	4.3	2.9	4.3	2.0	2.5	1.4	1.5	0.5	0.7
Household spending	1.4	2.1	2.7	2.7	0.7	0.7	1.4	0.8	1.6
Household income	3.6	3.6	2.6	6.2	0.5	0.2	1.9	0.9	1.5

Table 5.2: Forecast and historical levels

(constant year 2015, £ billion except jobs)

	2012	2013	2014	2015	2016	2017	2018	2019	2020
GVA	338.2	353.8	372.9	379.2	379.2	389.6	396.9	403.3	410.9
Workforce jobs (millions)	5.13	5.28	5.51	5.62	5.76	5.84	5.92	5.95	5.99
Household spending	166.9	170.4	175.0	179.6	180.8	182.1	184.7	186.3	189.4
Household income	204.4	211.7	217.3	230.7	231.9	232.4	236.8	238.9	242.5

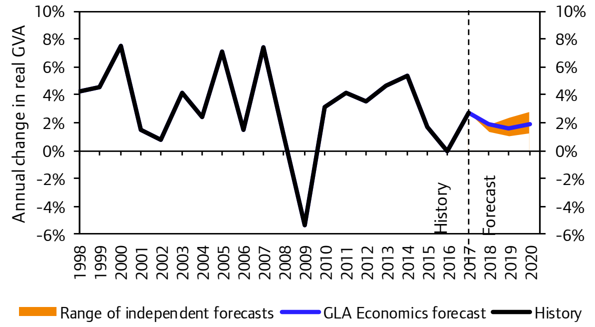
Output

(London GVA, constant year 2015, £ billion)

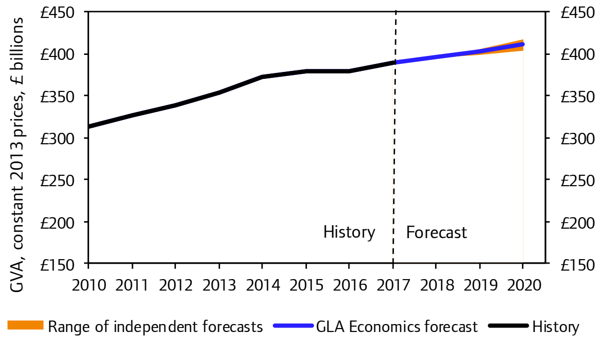
London's real GVA is forecast to grow between 2018 and 2020 at 1.9%, 1.6%, and 1.9%, respectively.

The GLA Economics' forecast is higher for the year 2018 but lower for the years 2019 and 2020 than the consensus average forecasts.

Annual growth (%)



Level (constant year 2015, £ billion)



Growth (annual %)					Level (constant year 2015, £ billion)				
	2017	2018	2019	2020		2017	2018	2019	2020
GLA	2.7	1.9	1.6	1.9	GLA	389.6	396.9	403.3	410.9
Consensus		1.6	1.8	2.0	Consensus		395.8	402.7	410.6

History: Annual growth (%)

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
4.3	4.6	7.5	1.5	0.8	4.2	2.4	7.1	1.5	7.4	1.2	-5.3	3.2	4.1	3.6	4.6	5.4	1.7	0.0	2.7

History: Level (constant year 2015, £ billion)

1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	**2017**
212.4	221.4	231.5	248.9	252.7	254.7	265.3	271.6	291.0	295.4	317.3	321.0	304.0	313.7	326.6	338.2	353.8	372.9	379.2	379.2	389.6

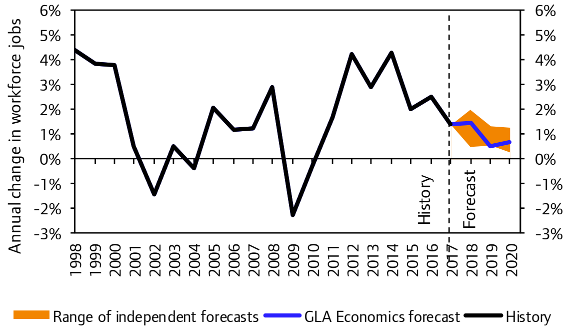
Employment

(London workforce jobs)

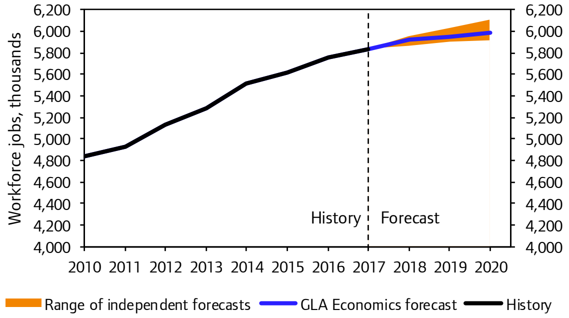
London's employment is forecast to rise over the forecast period although modestly between 2019 and 2020. The rates of growth are predicted at 1.5% in 2018, 0.5% in 2019, and 0.7% in 2020.

GLA Economics' forecasts for employment growth in London are marginally higher than the consensus average forecasts for 2018 but lower for 2019 and 2020.

Annual growth (%)



Level (millions of workforce jobs)



Growth (annual %)						Level (millions of workforce jobs)				
	2017	2018	2019	2020			2017	2018	2019	2020
GLA	1.4	1.5	0.5	0.7		GLA	5.84	5.92	5.95	5.99
Consensus		1.4	0.8	0.9		Consensus		5.92	5.97	6.02

History: Annual growth (%)

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
4.4	3.8	3.8	0.5	-1.4	0.5	-0.4	2.0	1.2	1.2	2.9	-2.3	-0.3	1.6	4.3	2.9	4.3	2.0	2.5	1.4

History: Level (millions)

1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
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	5.62	5.76	5.84

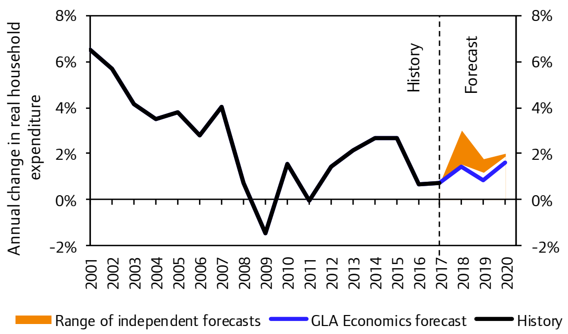
Household expenditure

(London household spending, constant year 2015, £ billion)

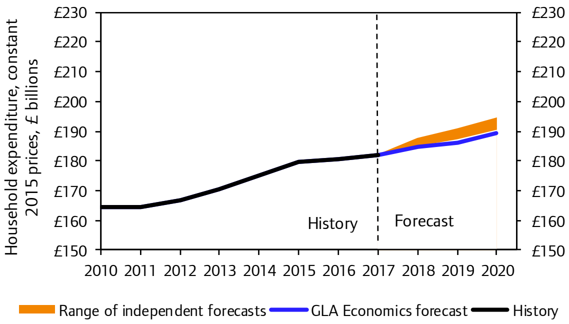
Growth in London's household spending is forecast to be below the historic rates of growth over the forecast period, 1.4% in 2018, 0.8% in 2019, and 1.6% in 2020.

GLA Economics' household spending growth forecast is lower than the consensus average for all years between 2018 and 2020.

Annual growth (%)



Level (constant year 2015, £ billion)



Growth (annual %)						Level (constant year 2015, £ billion)				
	2017	2018	2019	2020			2017	2018	2019	2020
GLA	0.7	1.4	0.8	1.6		GLA	182.1	184.7	186.3	189.4
Consensus		2.1	1.6	2.0		Consensus		185.9	188.8	192.5

History: Annual growth (%)

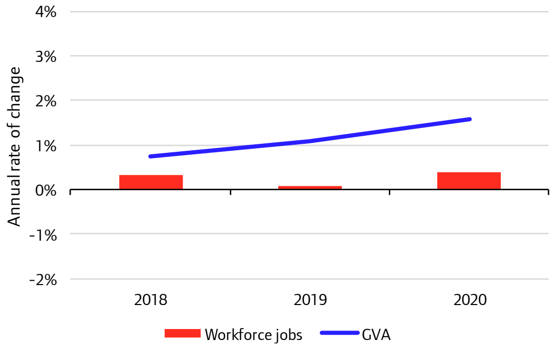
2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
6.5	5.7	4.2	3.5	3.8	2.8	4.0	0.7	-1.5	1.6	0.0	1.4	2.1	2.7	2.7	0.7	0.7

History: Level (constant year 2015, £ billion)

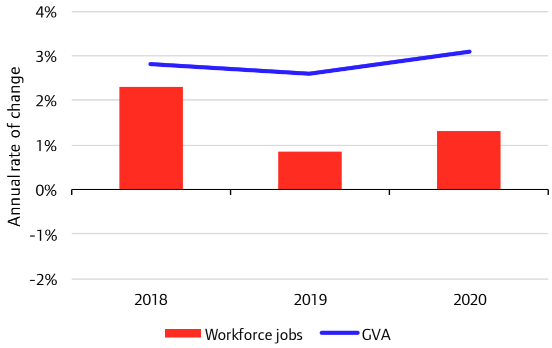
2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
121.3	129.2	136.5	142.2	147.2	152.8	157.0	163.4	164.5	162.1	164.6	164.6	166.9	170.4	175.0	179.6	180.8	182.1

Output and employment growth by sector (% annual changes)

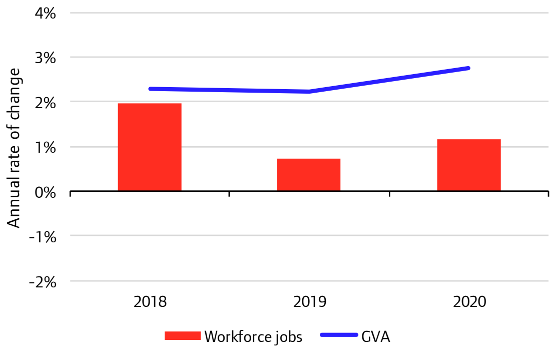
Financial services



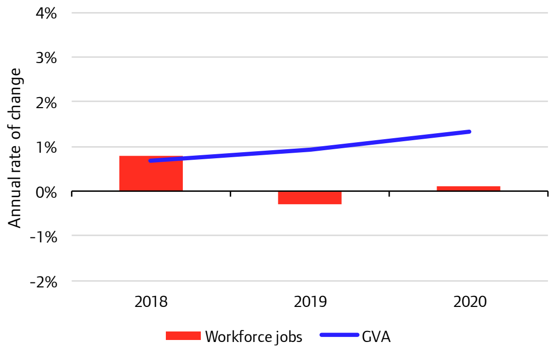
Business services



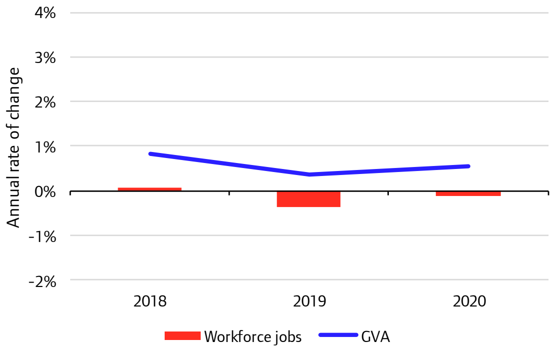
Finance and business (combined)



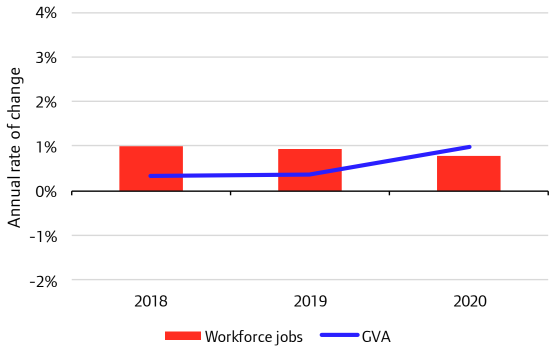
Distribution, accommodation and food service activities



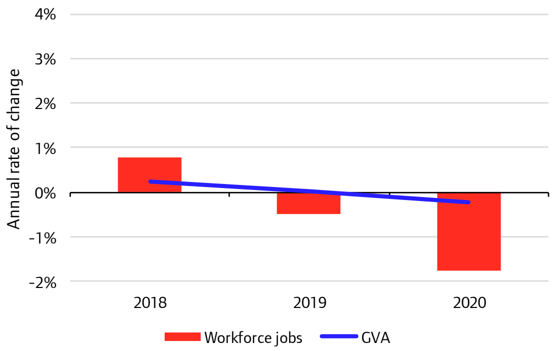
Transportation and storage



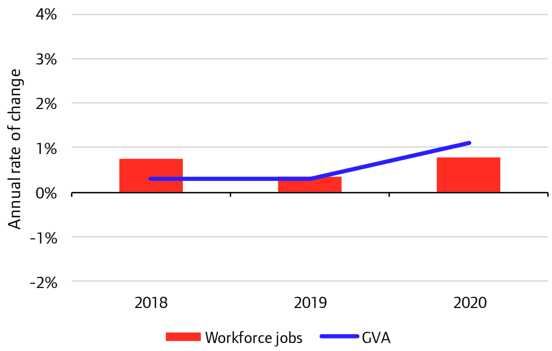
Other (public & private) services



Manufacturing



Construction



Output and employment growth by sector (% annual change)

	2018	2019	2020
Financial services			
Output	0.7	1.1	1.6
Employment	0.3	0.1	0.4
Business services			
Output	2.8	2.6	3.1
Employment	2.3	0.9	1.3
Financial and business services combined			
Output	2.3	2.2	2.7
Employment	2.0	0.7	1.2
Distribution, accommodation and food service activities			
Output	0.7	0.9	1.3
Employment	0.8	-0.3	0.1
Transportation and storage			
Output	0.8	0.4	0.5
Employment	0.1	-0.4	-0.1
Other (public & private) services			
Output	0.3	0.4	1.0
Employment	1.0	0.9	0.8
Manufacturing			
Output	0.2	0.0	-0.2
Employment	0.8	-0.5	-1.7
Construction			
Output	0.3	0.3	1.1
Employment	0.8	0.3	0.8
(Memo: non-manufacturing)			
Output	1.9	1.6	1.9
Employment	1.5	0.5	0.7

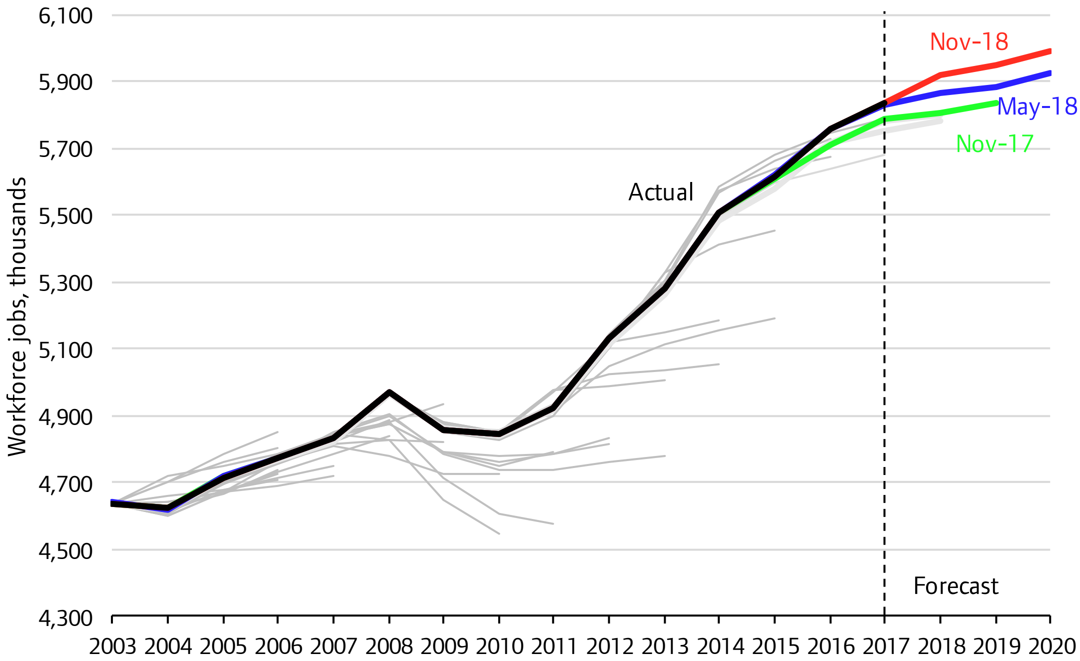
5.3 Comparison with previous forecasts

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 comparisons in Figures 5.2 and 5.3.

For the whole forecast period (2018-2020), the most recent GLA Economics forecast for the level of London's workforce jobs is higher than the May 2018 forecast. While, the forecast growth rate of employment is higher than the previous forecast for this year and next but the same for 2020.

Figure 5.2: Employment – latest forecast compared with previous forecasts

(millions of workforce jobs)



Note: the grey lines show levels of employment given historic GLA Economic forecasts of employment growth rates. The last three GLA Economics forecasts are also shown (and labelled) in colour. Source: Various London's Economic Outlooks

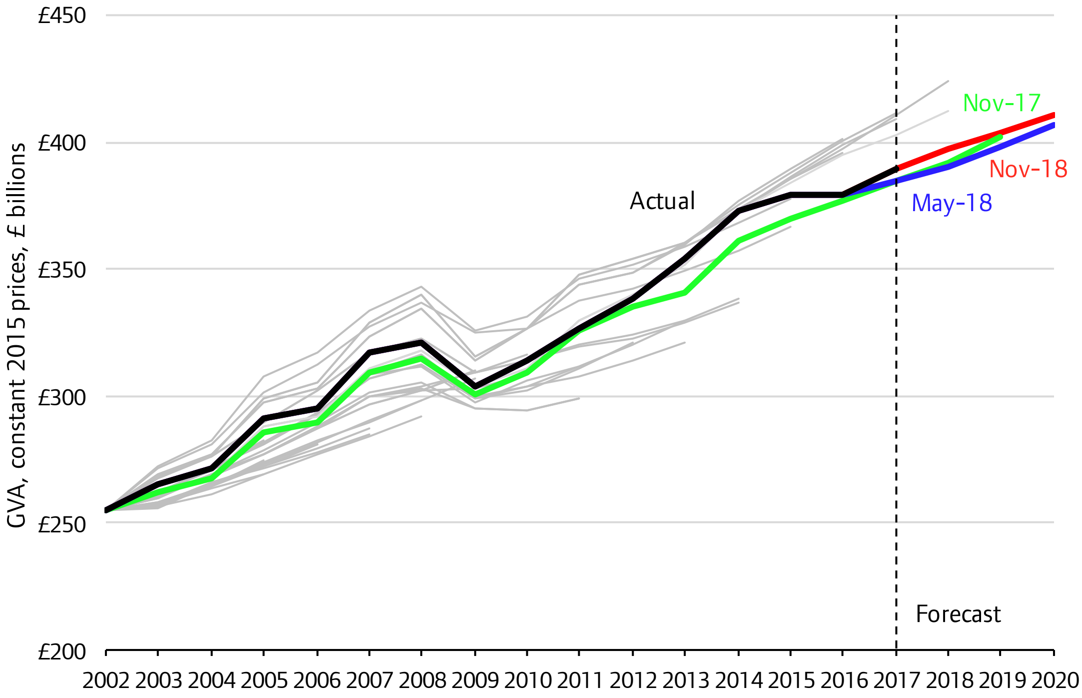
Table 5.3: Comparisons with previous published forecasts
(London workforce jobs, % annual growth)

Forecast	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Nov 2018	**-0.4%**	**2.0%**	**1.2%**	**1.2%**	**2.9%**	**-2.3%**	**-0.3%**	**1.6%**	**4.3%**	**2.9%**	**4.3%**	**2.0%**	**2.5%**	**1.4%**	**1.5%**	**0.5%**	**0.7%**
May 2018															0.6%	0.3%	0.7%
Nov 2017														1.4%	0.3%	0.5%	
Jun 2017														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%					
Jul 2013										0.6%	0.7%	0.7%					
Nov 2012									1.0%	0.2%	0.4%						
Jun 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%								
Jun 2010							-0.8%	0.8%	1.1%								
Oct 2009						-3.4%	-2.3%	-0.6%									
Apr 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%											
Apr 2007				1.2%	1.4%	1.5%											
Oct 2006			1.3%	1.1%	1.1%												
Apr 2006			0.8%	0.8%	1.1%												
Oct 2005		0.6%	0.4%	0.8%													
Apr 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	0.1%	0.6%															
Jul 2003	-0.4%	0.9%															
Jan 2003	1.4%	1.8%															

Source: Various London's Economic Outlooks

The most recent forecast for London's GVA level is slightly higher than the May 2018 forecast for all three years. However, in terms of growth rates the latest forecast only has a higher forecast than the previous estimate for the year 2018.

Figure 5.3: Output – latest forecast compared with previous forecasts
(constant year 2015, £ billion)



Note: the grey lines show levels of GVA given historic GLA Economic forecasts of GVA growth rates. The last three GLA Economics forecasts are also shown (and labelled) in colour. Source: Various London's Economic Outlooks

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

Forecast	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Nov 2018	**2.4%**	**7.1%**	**1.5%**	**7.4%**	**1.2%**	**-5.3%**	**3.2%**	**4.1%**	**3.6%**	**4.6%**	**5.4%**	**1.7%**	**0.0%**	**2.7%**	**1.9%**	**1.6%**	**1.9%**
May 2018															1.6%	1.9%	2.2%
Nov 2017														2.1%	1.8%	2.6%	
Jun 2017														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%					
Jul 2013										1.9%	2.4%	2.5%					
Nov 2012									0.9%	1.8%	2.4%						
Jun 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%								
Jun 2010							1.0%	2.8%	3.3%								
Oct 2009						-3.5%	-0.2%	1.5%									
Apr 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%											
Apr 2007				2.6%	2.8%	3.0%											
Oct 2006			3.1%	3.0%	3.0%												
Apr 2006			2.7%	2.6%	2.8%												
Oct 2005		2.0%	2.3%	2.6%													
Apr 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	1.9%	3.0%															
Jul 2003	2.6%	4.1%															
Jan 2003	4.1%	4.0%															

Source: Various London's Economic Outlooks

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 2016 from the ONS[78]. So far only experimental official estimates of real regional GVA[79] are available because of the difficulties in producing authoritative regional price deflators, although the ONS has produced experimental regional price indexes for the years 2010-2017[80]. 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 official 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.

[78] ONS Regional GVA (income approach)
[79] ONS Regional GVA (production approach)
[80] ONS (2017). 'Feasibility study into producing CPIH consistent inflation rates for UK regions', November 2017.

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
m	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

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