GLA ECONOMICS

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

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Contents

1. Executive summary

GLA Economics' 32nd London forecast[1] suggests that:

- London's Gross Value Added (GVA) growth rate is forecast to be 1.6 per cent in 2018. The growth rate is expected to rise slightly to 1.9 per cent in 2019, before reaching 2.2 per cent in 2020.

- London is forecast to see increases in the number of workforce jobs 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 forecasts and provides an average of independent forecasts.

Table 1.1: Summary of forecasts

Annual growth rates (per cent)	2017[2]	2018	2019	2020
London GVA[3] (constant prices)	1.4	1.6	1.9	2.2
Consensus (average of independent forecasts)		1.8	1.9	2.0
London civilian workforce jobs	1.3	0.6	0.3	0.7
Consensus (average of independent forecasts)		0.8	0.9	1.0
London household spending (constant prices)	1.5	1.3	1.3	1.2
Consensus (average of independent forecasts)		1.6	1.7	2.1
London household income (constant prices)	0.5	1.6	1.4	1.5
Memo: Projected UK RPI[4] (Inflation rate)	3.6	3.4	3.0	3.0
Projected UK CPI[5] (Inflation rate)	2.7	2.5	2.1	2.0

Sources: GLA Economics' Spring 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] Historic data for London GVA and workforce jobs is based on GLA Economics 'now-casting' estimates, while household spending and household income is based on Experian Economics data. It should be noted that the 2016 figures for London GVA and civilian workforce jobs are estimates.
[3] The methodology used to estimate London's GVA is outlined in Keijonen, M & van Lohuizen, A (2016). 'Modelling real quarterly GVA data for London', GLA Economics Current Issues Note 50, December 2016.
[4] 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', May 2018.
[5] 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', May 2018. Also, since December 2003, the Bank of England's symmetrical inflation target has been annual CPI inflation at 2 per cent.

There is now less than a year before 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 three subsequent London's Economic Outlook's (LEO)[6, 7, 8] since the June 2016 referendum result have examined London's position given this vote in detail. However, at the time of writing, although progress has been made in the talks, uncertainty about the UK's future relationship with the EU remains. Box 3.1 in Chapter 3 of this forecast summarises what has occurred in the Brexit process since the publication of the Autumn 2017 LEO.

Still, the UK currently remains part of the EU and beyond the large depreciation of sterling seen in the aftermath of the vote, the economic shock of the decision has been more muted than some expected in the run up to the referendum. However, several economic indicators remain weaker than they were at the beginning of 2016. While most of these indicators show an ongoing expansion of London's economy, they also indicate slower growth than that seen in the early years of the decade. This moderation in growth is also seen at the UK level. For example, the Bank of England's agents found in the first quarter of 2018 that "growth in retail sales values had slowed, reflecting weaker spending on white goods and homewares. This was potentially associated with subdued housing market activity, consumers bringing forward spending to the Black Friday sales in November, and the continued squeeze on household incomes"[9]. While in their latest update on business conditions they noted, "business services growth remained moderate. There was a slight pickup in insolvency and restructuring work, robust growth in asset management and firm demand for IT services. However, discretionary spending by corporates, e.g. on events and hospitality, remained weak"[10]. And "investment intentions remained modest, reflecting continued uncertainty around Brexit"[11].

In terms of credit conditions, the Bank noted that "demand for secured lending for house purchase was reported to have decreased significantly in Q1, driven by a fall in demand for both prime and buy-to-let lending, but lenders expected a marked pick-up in demand in Q2. Lenders reported that household demand for secured lending for re-mortgaging also decreased significantly in Q1, but expected demand to pick-up again markedly in Q2". Adding that, "overall demand for unsecured lending was reported to have decreased in Q1. Within this, there was a significant decrease in demand for credit card lending but an increase in demand for other unsecured lending. Lenders expected this to reverse in the next quarter, anticipating an increase in credit card lending alongside a decrease in other unsecured lending". However, they further observed that "lenders reported no change in demand for corporate lending from businesses of all sizes. Lenders expected an increase in demand from medium-sized business[es] alongside a slight increase in demand from large businesses in Q2, while demand from small businesses was expected to remain unchanged"[12]. In London, having been positive for most of the post referendum period, consumer confidence has recently turned negative on a month-on-month basis. It is, however, in line with its long-run average and also above the UK average which, has

6 GLA Economics (2016). 'London's Economic Outlook: Autumn 2016 The GLA's medium-term planning projections', November 2016.
7 GLA Economics (2017). 'London's Economic Outlook: Spring 2017 The GLA's medium-term planning projections', June 2017.
8 GLA Economics (2017). 'London's Economic Outlook: Autumn 2017 The GLA's medium-term planning projections', November 2017.
9 Bank of England (2018). 'Agents' summary of business conditions, and results from the Decision Maker Panel 2018 Q1', 28 March 2018.
10 Bank of England (2018). 'Agents' summary of business conditions: May 2018 Update', 17 May 2018.
11 Ibid.
12 Bank of England (2018). 'Credit Conditions Survey', Q1 2018, 12 April 2018.

been negative for most of the post referendum period[13]. Companies in London also show growth in business activity as measured by the Purchasing Managers' Index, having bounced back from their post-referendum fall, but this growth remains at a more subdued level[14].

Statistics from the Office for National Statistics (ONS) show that the UK economy continues to grow but at a subdued pace at the beginning of the year, with output increasing by 0.1% in Q1 2018 compared to the previous quarter. This was significantly lower than the 0.4% quarterly growth rate seen in Q4 2017. Output in Q1 2018 was 1.2% higher than a year earlier with UK GDP recording the lowest year-on-year growth seen since 2012[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 central symmetrical inflation target although it has fallen back from its recent highs. Consumer Prices Index (CPI) inflation stood at 2.4% in April 2018, down from 2.5% seen in March 2018[16]. Although inflation has receded a touch from the highs seen in previous months the Bank of England still needs to juggle policy between economic growth and inflation. Thus, although the Bank has not raised rates since November 2017, further rises are still being factored in by most commentators. That said, even if the expectations of further monetary policy tightening occur, it is likely to remain extremely accommodating for some time to come. The Bank has thus observed in their May 2018 Inflation Report that the best collective judgment of the members of the Monetary Policy Committee (MPC) was "that, were the economy to develop broadly in line with the May Inflation Report projections, an ongoing tightening of monetary policy over the forecast period would be appropriate to return inflation sustainably to its target at a conventional horizon. As previously, however, that judgement relies on the economic data evolving broadly in line with the Committee's projections"[17]. The MPC however further noted that "all members agree that any future increases in Bank Rate are likely to be at a gradual pace and to a limited extent"[18].

The growth in workforce jobs in London has continued and at a faster rate than that seen in the UK as well. Thus, in London, the number of jobs increased to 5.863 million in Q4 2017, a 98,000 (1.7%) increase 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 March 2018, a record high. However, real wages in the UK, have only recently begun to rise again and at a very marginal rate[20]. With inflation remaining above target but with employment standing at record levels there is speculation in both directions as to the future course of real earnings.

Risks to the economy have maybe risen a touch since November 2017, but the main risk remains associated with the ongoing uncertainty around the impact of Brexit. Other risks remain relatively subdued although the prospect of interruptions to global trade due to a trade war has risen compared to the position seen at the end of 2017. And related to this the increased protectionist sentiment in the US in and of itself is a risk to global growth. Still, as noted, the economic drag from the referendum outcome and Brexit process has so far been generally more modest compared to that anticipated by many prior to the vote. However, the ongoing uncertainty about long-term future trading arrangements for the UK appears – according to

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[13] Orellana, E. & Wingham, M. (2018). 'London's Economy Today', Issue 188, 26 April 2018.
[14] Ibid.
[15] ONS (2018). 'Second estimate of GDP: January to March 2018', 25 May 2018.
[16] ONS (2018). 'Consumer price inflation, UK: April 2018', 23 May 2018.
[17] Bank of England (2018). 'Inflation Report', May 2018.
[18] Ibid.
[19] ONS Regional labour market statistics.
[20] ONS (2018). 'Analysis of real earnings and contributions to nominal earnings growth, Great Britain: April 2018', 17 April 2018.

some business surveys – to have dampened business sentiment. Finally, as observed in all published LEOs since the Brexit vote, it should be noted that the longer-term impact of the vote remains hard to model with competing claims made by a variety of commentators. In fact, the exact long-term growth prospects will likely be highly dependent on what post Brexit economic relationships and policies are followed.

Other risks to the economy persist. Thus, although there has been some evidence of a recent improvement[21], the slow growth in recent years of UK productivity if it generally continued in the long-term, as some forecasters think may be the case, will act as a dampener on GDP growth. The size of UK consumer credit growth and the ability of lenders to absorb any losses associated with it in an economic shock have also been expressed[22].

As has been highlighted over many years now, structural problems remain in the Eurozone and could reappear to cause further problems for its members. All these are concerns due to the impact they could have on the UK and London's trade and therefore growth. Still, despite these risks, the prospects for the Eurozone in the near term remain 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, however the high debt levels seen in China continue to be a concern for the economic stability of that country in the longer run and therefore in terms of potential knock-on impacts on the global economy. And the disruptive effects on the world economy of an intensification of the current regional conflicts cannot be discounted.

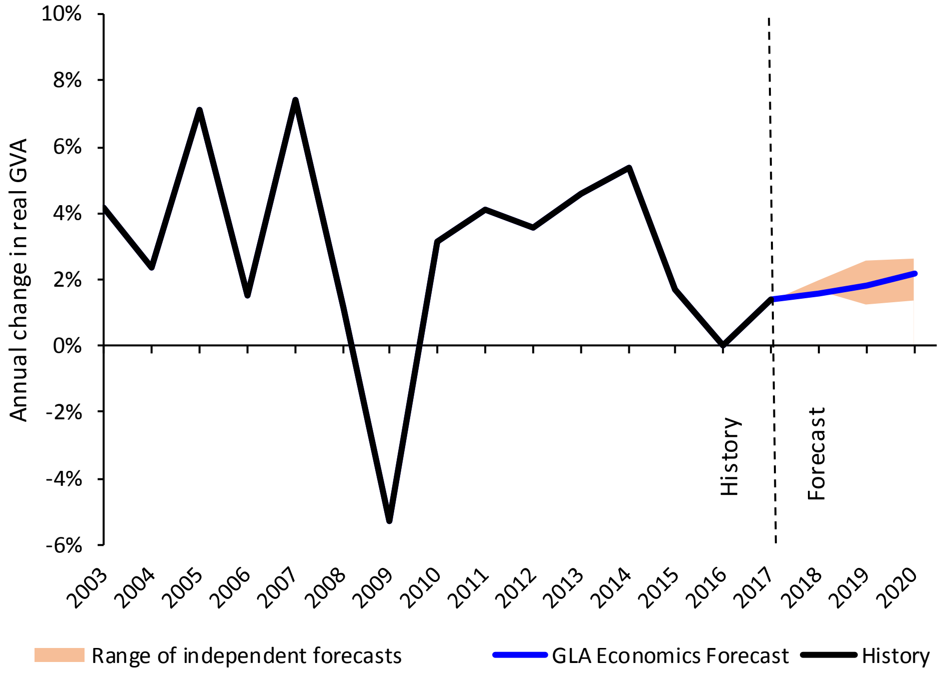
Monetary policy continues to return to more historically normal levels in the United States with this having the potential for some negative knock on effects. This could be especially destabilising if differing stages in various countries monetary policy cycle interact to exacerbate the effect. However, although the tightening in US monetary policy continues, it may take some time yet to return fully to a more historically normal monetary policy regime.

To summarise, the economic environment continues to be relatively uncertain at the UK and London levels, but despite this the outlook for the London economy remains one of expected growth for the coming few years. While above the Bank's target rate, inflation is moderate but could stay above target due to the ongoing feed through of the inflationary impact of the recent depreciation of sterling. Given somewhat high inflation, it is possible that growth in real income will be a touch subdued in the coming few years and this puts some restraint on household spending which had been a significant driver of economic growth until recently. Still, despite speculation of further tightening in the coming years, UK monetary policy is likely to stay at what are historically very accommodating levels for a time to come, 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 weakened recently. Fiscal policy also appears to be moving in a touch more expansionary direction. Of the sectors of the UK economy, Business services and finance continue to grow (albeit at a slightly subdued rate) and given its size in London should continue to provide some foundation to London's economic growth. Overall, balancing all these factors acting on London's economy, it is likely that both output (see Figure 1.1) and employment (see

[21] ONS (2018). '[Labour productivity, UK: October to December 2017](#)'. April 2018.
[22] Bank of England (2017). '[Financial Stability Report](#)', November 2017.

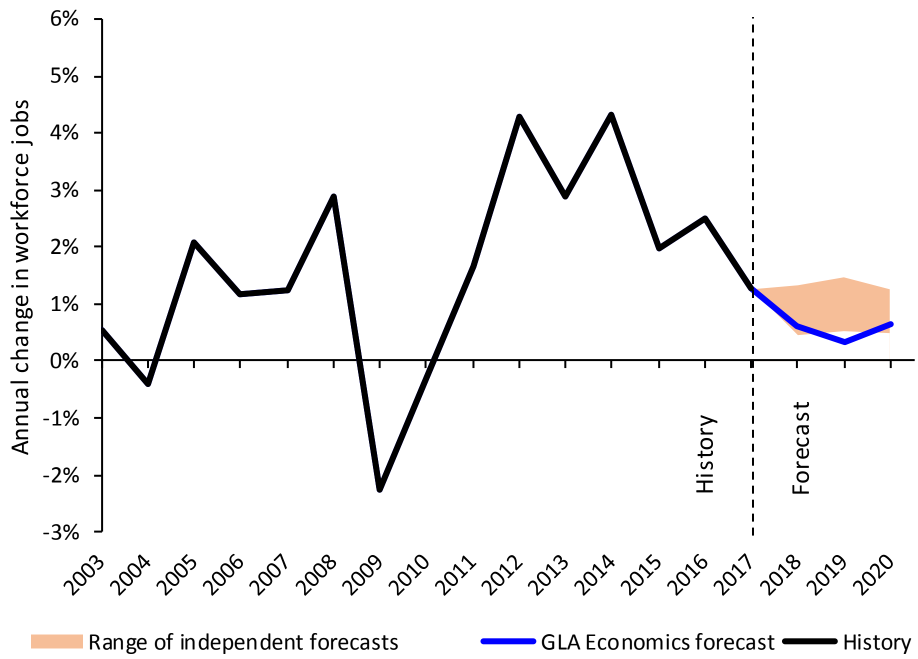
Figure 1.2) should see continued growth in the next few years but at a rate that is more subdued than seen earlier this decade.

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 spring 2018 edition of London's Economic Outlook (LEO) is GLA Economics' 32nd 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[23]. 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)[24]
- 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.

[23] 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.
[24] CEBR does not provide a forecast for household expenditure in London.

3. Economic background: Positive momentum in London's economy amidst mixed signs for the UK

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

3.1 The London economy

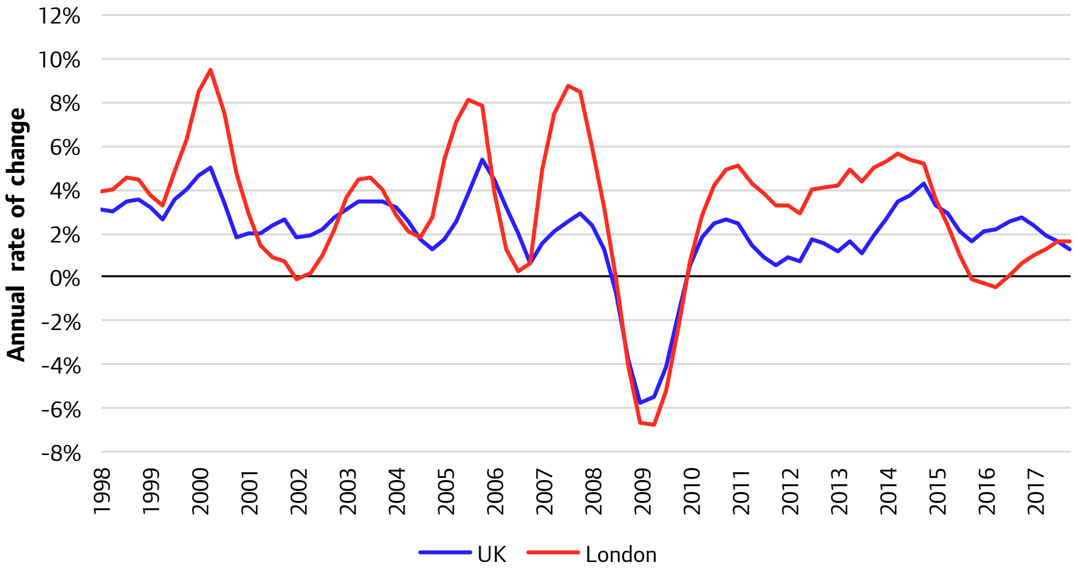
London's economy – as measured by gross value added (GVA) – grew at a modest pace of 1.4% on average in 2017. This continues a period of relatively subdued growth whereby the capital's economy showed no growth on average in 2016 and a modest 1.7% expansion on average in 2015. These are a lot weaker than 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 been steadily improving in recent periods. For example, the annual rate of growth improved for the third quarter in a row, rising from 0% in Q3 2016 to stand at 1.6% in Q4 2017 five quarters later.

The UK has also seen slower rates of real GVA growth in recent years. The UK grew 1.8% on average in 2017 which was down from 2.4% in 2016, 2.5% in 2015 and 3.5% in 2014. And in contrast to London, on a quarterly basis, the annual rate of GVA growth has been slowing from a peak of 2.7% in Q4 2016 to stand at 1.3% in Q4 2017.

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 – Q4 2017 – shows that London again grew at a faster rate than the UK (1.6% versus 1.3%), but it is too early to say whether this is the start of a new trend.

Figure 3.1: Annual rate of GVA growth for London and the UK, constant prices
Last data point is Q4 2017

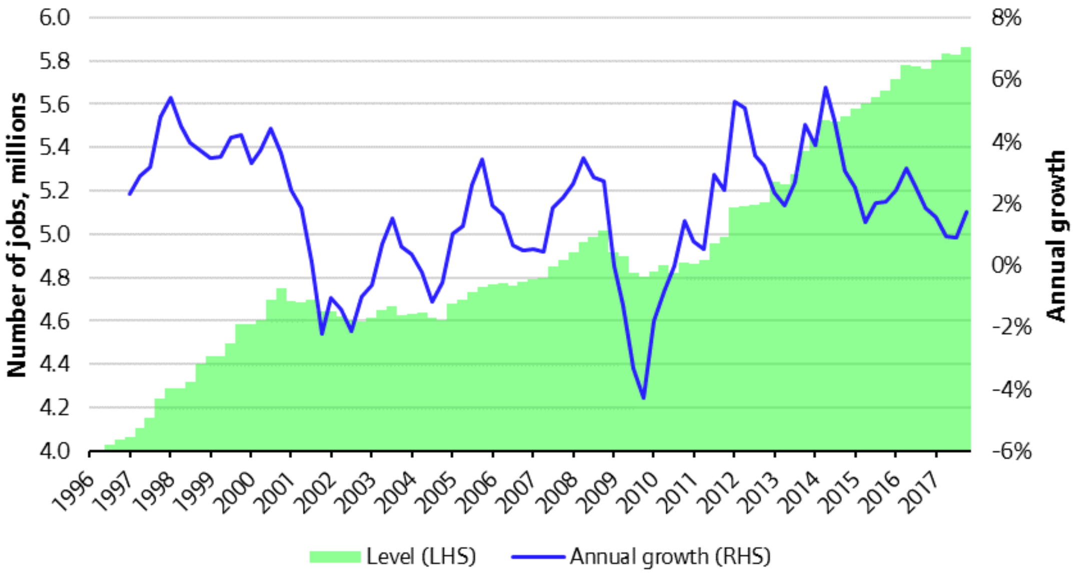


Source: ONS Regional GVA, GLA Economics

Looking at the labour market, London's employment rate has been at the highest and the unemployment rate has been at 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 March 2018, up 0.7 percentage points from the three months to December 2017. Meanwhile, the unemployment rate shows the proportion of the 16 and over resident population who are unemployed but are wanting to work and stood at 4.9% in the three months to March, down 0.1 percentage points from the three months to December. There were no statistical differences between London and the UK, though the UK's employment rate (75.6%) was also at the highest level since records began in 1971 and the unemployment rate (4.2%) was the joint lowest since 1975.

The strong performance of London's labour market is also reflected in the number of workforce jobs. The number of jobs in London (regardless of whether they are taken by London residents or not) grew 1.7% year-on-year in Q4 2017, the equivalent of 98,000 jobs, to reach 5.863 million (Figure 3.2). Moreover, the annual rate of job creation in London was faster than in Q3 2017 (0.9%) and also faster than the UK average for Q4 2017 (1.2%).

Figure 3.2: Number of workforce jobs in London
Last data point is Q4 2017

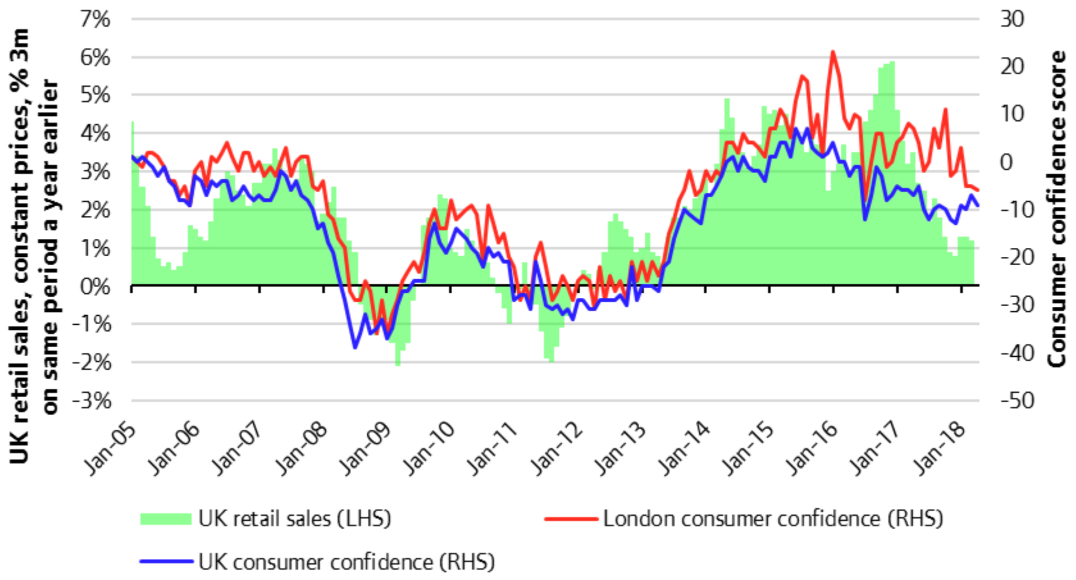


Source: ONS Workforce Jobs

A prospect 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 rise in average earnings; after accounting for inflation, average regular real pay across the UK rose year-on-year for the first time in a year in February, though only marginally (0.2%), with this slight increase continuing into March.

Linked to this is consumer confidence. However, data from GfK-NOP suggested that London consumers were slightly pessimistic towards the next 12 months in terms of their household finances, the general economy and the purchasing climate. That is not to say that consumer spending will necessarily fall as the latest reading of -6 in April is broadly in line with the average since 1996 of -5 which is largely consistent with retail sales growth (for example) as shown in Figure 3.3. Still, the consumer confidence data points to a degree of caution on the economic conditions in London.

Figure 3.3: Consumer confidence and retail sales
Last data points are April 2018

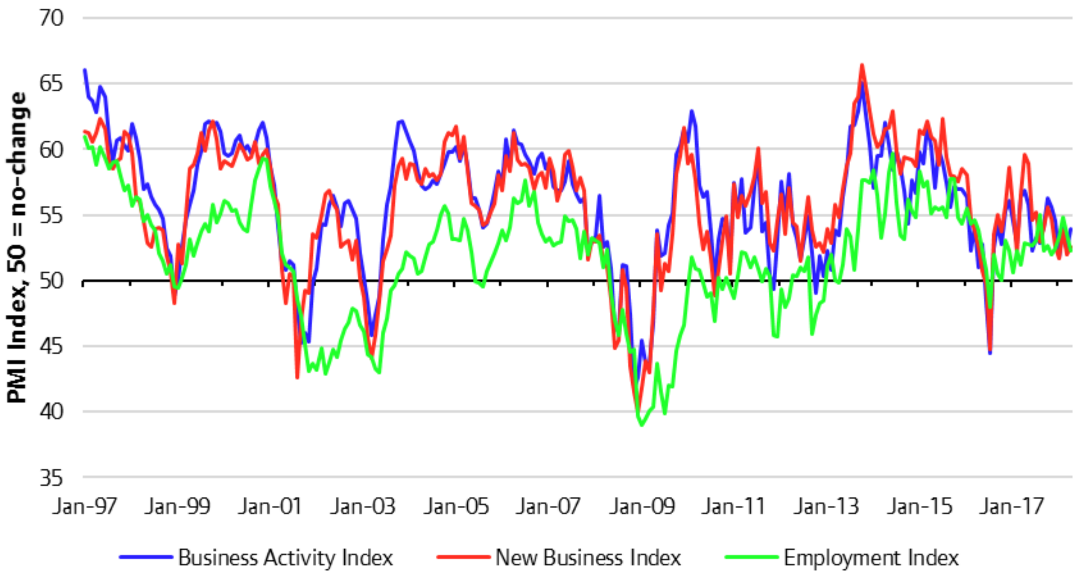


Source: GfK-NOP, ONS Retail Sales

Moving to businesses, the Purchasing Managers' Index (PMI) survey can show the state of overall business conditions in London[25]. 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 improving business conditions in London, with firms reporting higher 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 further economic growth in the coming months. This is further supported by London private sector firms being optimistic towards business conditions over the next year. However, at 67.8 in April, down from a recent peak of 69.8 in January, the level of positive sentiment was below the average of 69.2 since data collection began in 2012.

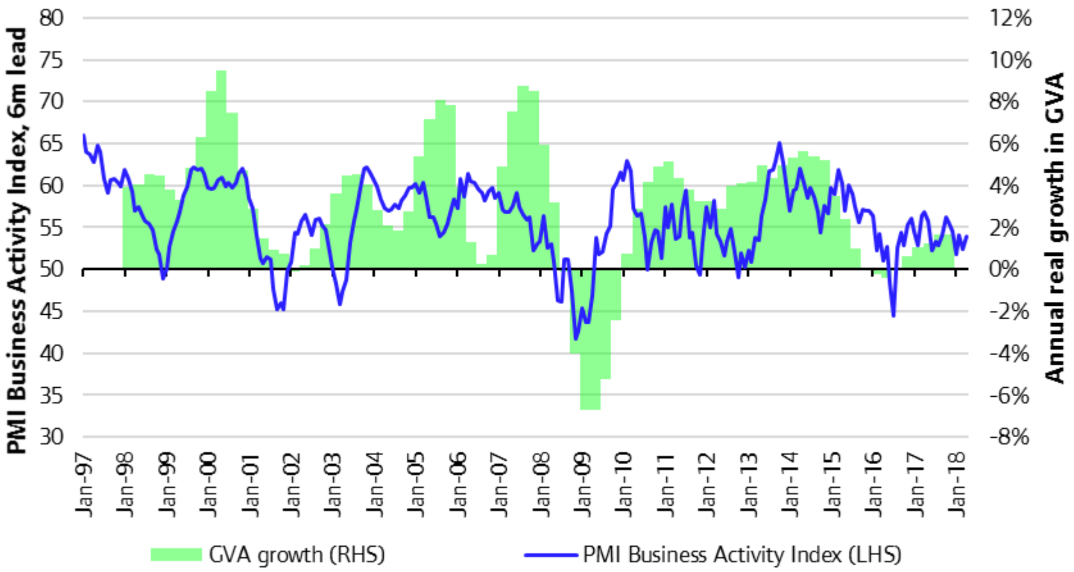
[25] PMI index readings are based around the 50 no-change mark. Readings above 50 suggest an overall increase in that variable, while readings below suggest an overall decline. Readings exactly at 50 suggest no-change in that variable compared with a month earlier. Moreover, the further the index reading 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 April 2018



Source: IHS Markit

Figure 3.5: London PMI Business Activity Index and GVA growth
Last data point for PMI is April 2018 and Q4 2017 for GVA

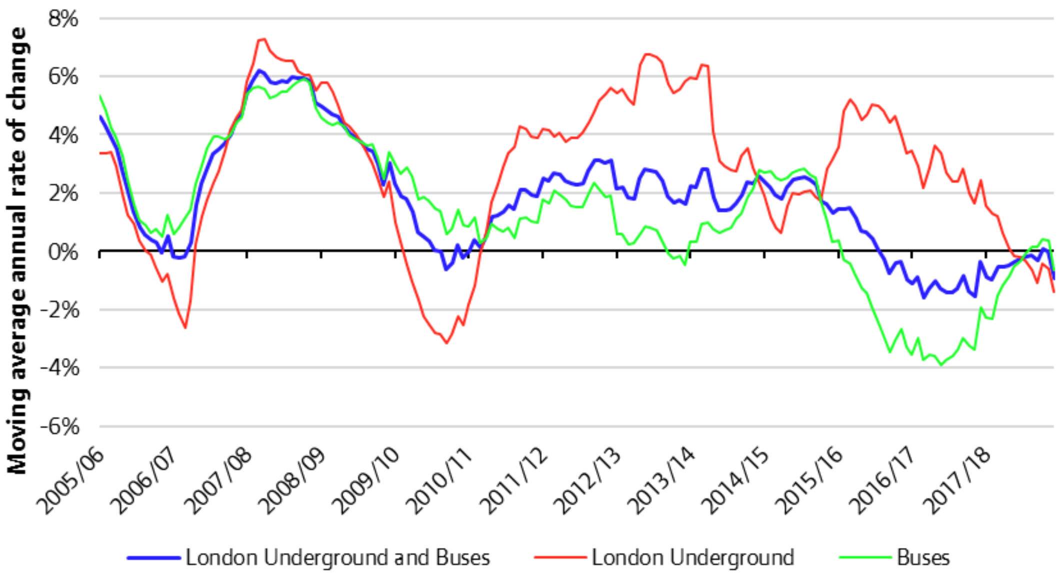


Source: IHS Markit, ONS Regional GVA, GLA Economics

Other business surveys also point to improving business conditions in London. For example, around a quarter of the respondents to the Chamber of Business and Industry (CBI) London Business Survey are feeling more optimistic about future economic prospects in April than six months earlier. Similarly, expectations for the London economy rose to its highest level in a year in Q1 2018 according to the London Chambers of Commerce and Industry (LCCI) Capital 500 Quarterly Economic Survey. However, the net balance remained negative and other business confidence indicators included in the LCCI survey reached their lowest recorded levels since Q3 2016.

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. Or it could be for leisure reasons like shopping which could indicate an increase in household spending. Having noted this, while the latest period showed a decline, the moving average annual rate of change in total passenger journeys in London has been largely stagnant in recent periods (Figure 3.6). Still, this is an improvement on the modest declines reported in previous recent periods and, consequently, points to a more positive picture for economic conditions in the capital. In more detail, by mode of transport, the moving average annual rate of change in Tube passenger journeys has been negative since mid-2017 (and for the first time in almost eight years), while growth is shown for buses.

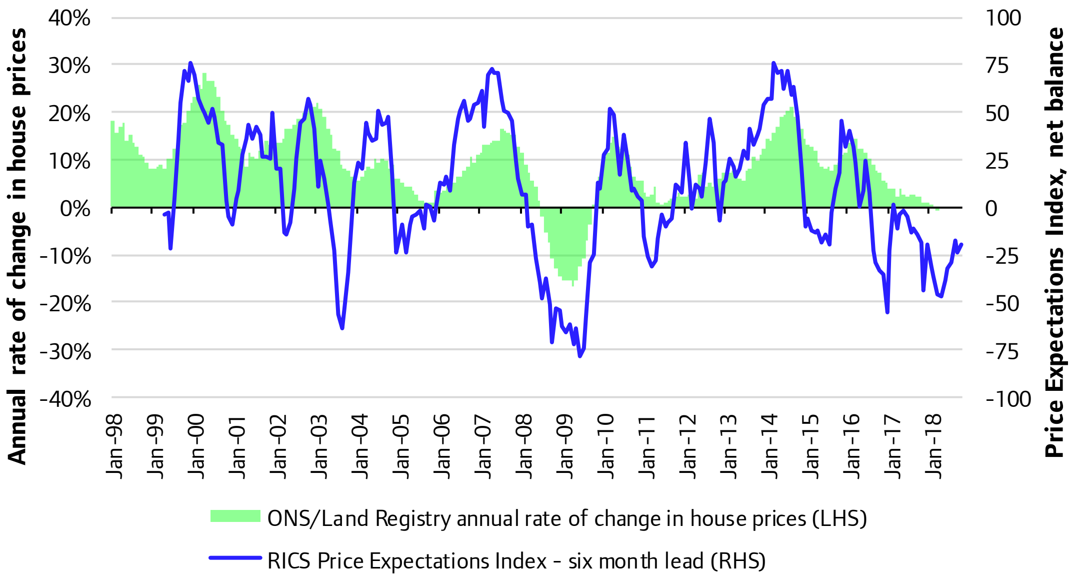
Figure 3.6: Public transport use in London
Last data point is the 28-day period ending 31 March 2018



Source: Transport for London

Finally, in London's housing market, most of the evidence points to a continued slowdown at the start of 2018. The average house price in London was £475,900 in March, according to data from the ONS and Land Registry. However, this has fallen 0.8% from a year earlier (the equivalent of nearly £4,000). This follows on from the decline in February which was the first annual decline 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 Chartered Surveyors (RICS) Housing Market Survey in April have been reporting, on balance, a reduction in London's house prices for 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 March 2018 for house prices and April 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 and is likely to continue growing, though probably at a relatively subdued pace. While GVA growth in London has started to pick up, it remains much slower than most of the rates reported following the financial crisis. Similarly, despite the strong performance of the labour market, this is not necessarily being translated into higher real earnings and consumer confidence remains slightly pessimistic. Also, firms are continuing to report higher levels of activity and new business but, while they are optimistic towards the next 12 months, the level of positive sentiment was below the long-run average.

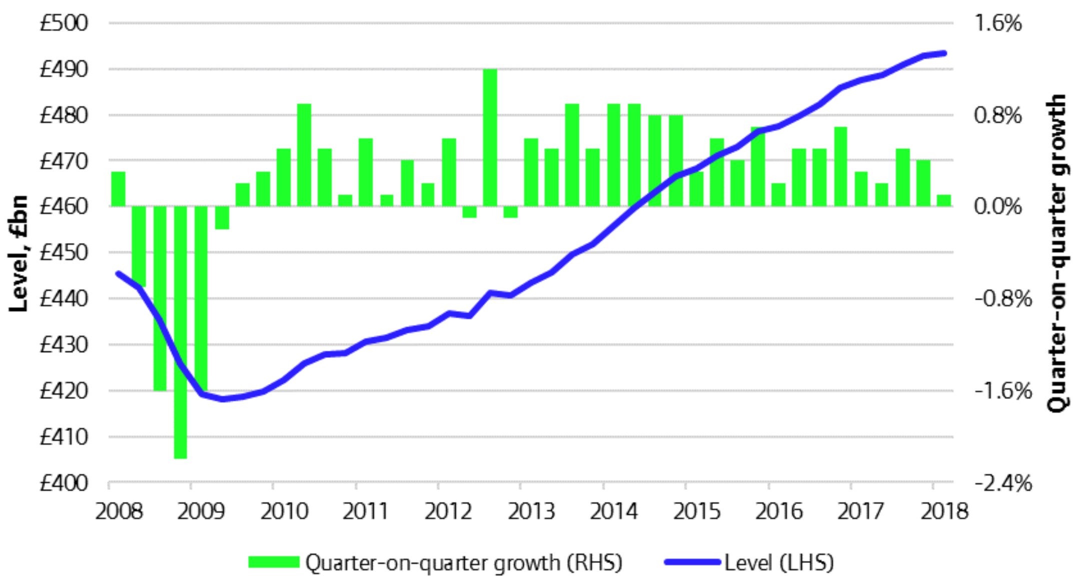
3.2 The UK economy

The main measure of economic growth for the UK is Gross Domestic Product (GDP). On this basis, the UK economy grew 0.1% in Q1 2018 according to the second estimate from the ONS. While the estimates of GDP can be later revised, this was the slowest rate of quarterly growth since the economy contracted slightly in Q4 2012. The ONS did note that wintery weather at the beginning of 2018 did influence construction and retail sales, but these impacts were only small and there was little impact observed elsewhere in the economy[26].

This picture of a slowing economy could also be seen when looking at year-on-year changes in GDP. The UK economy grew at an annual rate of 1.2% in Q1 2018 which was the weakest expansion for almost six years. Indeed, the rate of annual growth has now been slowing for four quarters in a row.

[26] ONS (2018). 'Monthly economic commentary: May 2018', 25 May 2018.

Figure 3.8: UK GDP in real terms
Last data point is Q1 2018 (second estimate)



Source: ONS (2018). '[Second estimate of GDP: January to March 2018](#)', 25 May 2018.

The slowdown was mainly a reflection of a sharp contraction of the Construction sector. Construction output fell 2.7% on a quarterly basis, its largest rate of decline since 2012. In contrast, output of the Services (0.3%) and Production (0.6%) sectors increased. Despite this, there are signs of a long-term weakness in the Services sector. On a year-on-year basis, the rate of growth was 1.3% which is significantly less than the average growth rate (2.1%) seen since the financial crisis. This is a trend that can be seen for all four service sectors (Table 3.1). For example, the latest year-on-year growth estimate for the Business services and finance sector was 1.7% in Q1 2018 which is below the post-crisis average of 2.5%.

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

Broad industry group	2016				2017				2018
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Agriculture, forestry, and fishing	-4.9	-6.6	-6.4	-4.4	-1.4	-0.4	1.0	-0.7	-1.3
Mining & quarrying; oil & gas extraction	4.2	-2.0	1.8	-3.8	1.3	-0.2	-3.3	0.5	0.1
Manufacturing	-0.8	1.2	1.0	2.3	2.8	1.4	3.1	2.8	2.5
Electricity gas, steam and air	-2.0	5.8	0.8	5.7	1.2	-4.1	1.7	-1.7	3.9
Water supply, sewage	5.9	4.5	5.0	5.6	6.4	2.6	1.0	-0.5	-3.6
Construction	1.8	2.7	4.4	6.5	8.6	6.5	5.76	2.3	-2.7
Distribution hotels and catering	4.5	4.3	4.9	5.2	3.0	2.5	1.8	0.1	0.8
Transport, storage and communication	4.1	3.3	5.2	6.2	4.3	5.0	2.6	2.0	2.8
Business services and finance	2.0	2.3	2.3	2.3	2.0	1.5	1.6	1.7	1.7
Government and other services	1.3	0.6	0.7	-0.4	-0.2	0.1	0.0	0.4	0.0

Source: ONS (2018). '[Second estimate of GDP: January to March 2018](#)', 25 May 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 refers to Q4 2017 rather than Q1 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			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Households	2.9%	3.3%	3.1%	3.0%	2.6%	1.8%	1.3%	1.2%
Non-profit institutions serving households	0.2%	-0.5%	0.6%	-0.8%	-0.3%	0.0%	0.1%	0.1%
General government	1.6%	0.7%	0.4%	0.7%	-0.4%	0.2%	0.1%	0.6%
Gross fixed capital formation	-0.9%	-0.4%	4.0%	4.6%	4.5%	4.2%	3.6%	4.0%

Source: ONS (2018), 'UK Economic Accounts time series dataset'.

Household expenditure is important to the UK economy, with it contributing around two-thirds (63.3%) to UK GDP in 2017. However, the latest estimates showed that consumer spending grew 1.2% year-on-year in real terms in Q4 2017. This was broadly in line with the rate of growth for Q3 2017 (1.3%) and was one of the weakest expansions in almost six years. The ONS partly attributed this to the recent rise in prices faced by consumers[28] which, as will become apparent later in this section, is expected to be temporary as inflation starts to ease. If this is the case, then household expenditure could support economic growth further in the near term.

The other notable trend is for gross capital formation. This increased at an annual rate of 4.0% in real terms during Q4 2017, up from 3.6% in Q3.

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. Some of these differences can be linked to different interpretations of the impact of Brexit, inflation, productivity and global factors like trade. For example, the impact of Brexit is partly dependent on the negotiations between the UK and the European Commission as well as whether the UK can secure trade deals with other countries. 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.

Box 3.1: Brexit

This box provides an update on the process and impact of Brexit so far. This follows the updates included in the three previous editions of LEO[29] and so covers the period since November 2017.

Since the last edition of London's Economic Outlook (LEO), the talks between the UK and the EU on Britain's exit from the Union have moved from the first to the second phase, with less than a year to go until the 30 March 2019 deadline. The first phase of Brexit talks was concluded on 8 December 2017, with an agreement (in principle) on the three priority issues of citizens' rights, a financial settlement, and Norther Ireland. A joint report[30] was published which set out a common understanding on the future withdrawal agreement, and although a

[27] It also includes net trade in goods and services.
[28] ONS (2018). 'Second estimate of GDP: October to December 2017'.
[29] See: London's Economic Outlook: Autumn 2017, Spring 2017, and Autumn 2016.
[30] UK Government and EU (2017), Joint Report from the negotiators of the European Union and the United Kingdom Government, December 2017.

number of specific aspects are still under discussion, it was decided that sufficient progress had been made that negotiations could move on to the second phase.

These second phase talks – on transitional arrangements and the future EU-UK relationship – are currently ongoing. The European Parliament and European Council have made clear that during any transitional arrangement, the UK will still be subject to existing EU regulations, but will no longer be eligible for inclusion in any EU decision-making processes.

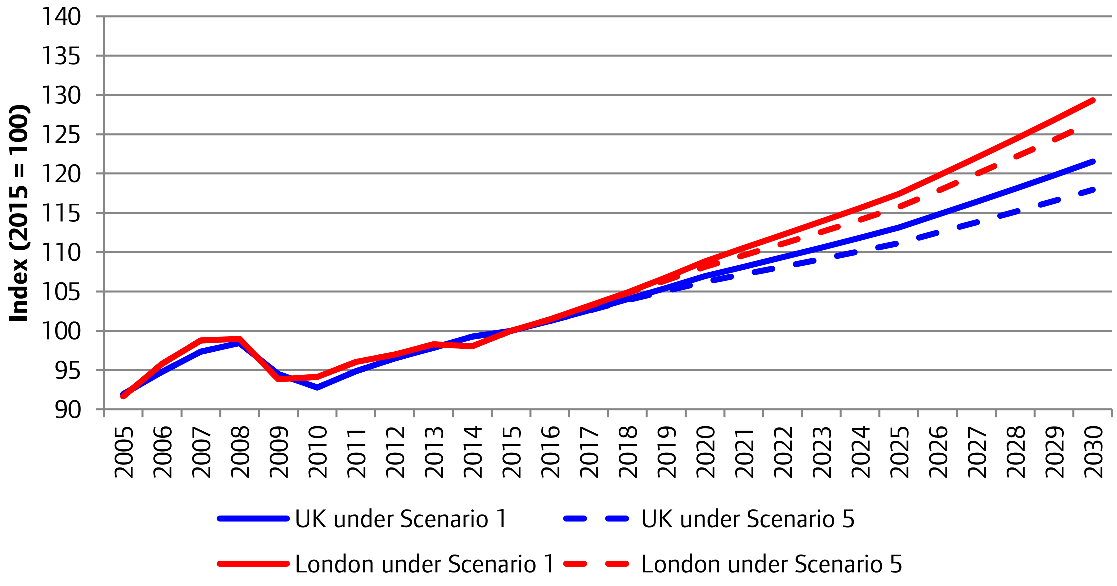
On 2 March 2018, the Prime Minster delivered her second Mansion House speech, in which she outlined how her government sees Britain's future ties with the EU, saying: "we want the freedom to negotiate trade agreements with other countries around the world. We want to take back control of our laws. We also want as frictionless a border as possible between us and the EU – so that we don't damage the integrated supply chains our industries depend on and don't have a hard border between Northern Ireland and Ireland"[31].

The issue of the customs union and Northern Ireland continues to be a sticking point for the Government. In April, the House of Lords voted 348 to 225 to amend the EU Withdrawal Bill in favour of the UK retaining the customs union and the economic linkages this brings. Following this, on 9 May, the Lords further voted, to back keeping the UK in the single market after Brexit. This was just one part of a series of changes made to the UK Withdrawal Bill by the Lords, most of which aim to soften the effects of Brexit. Meanwhile, Brussels has insisted that Britain provides a legally binding guarantee that there will be no hard border between Northern Ireland and the Republic of Ireland. There is currently no plan for how this could be resolved, but remaining in the customs union is seen as the solution to many of the problems associated with the Irish border. Officials have been asked to draw up 'revised proposals' for post-Brexit customs arrangements so that the Brexit sub-committee can try to agree on a new model to replace the UK's membership of the customs union.

The impact of leaving the EU remains one of the largest potential economic risks to London's economy. Forecasts published in January 2018 by Cambridge Econometrics and the Greater London Authority showed, as expected from other forecasts, that the more severe the type of Brexit, the greater the negative impact on London was expected to be[32]. The results showed that Brexit will not only reduce the size of the economy (compared to what it might have been if Britain remained in the Single Market and customs union – Scenario 1), but also put it on a slower long-term growth trajectory (Figure 3.9). In a worst-case scenario (with no transition, no membership of the Single Market or customs union, and no preferential trade agreements – Scenario 5), the UK could experience a loss of 3.0% (£54.5bn) in GVA by 2030, while London could experience a loss of up to 2.1% (£10.8bn) in GVA.

[31] UK Government (2018). 'PM speech on our future economic partnership with the European Union', March 2018.
[32] GLA (2018). 'Preparing for Brexit', January 2018.

Figure 3.9: GVA growth in the UK and London



Source: Cambridge Econometrics

This sentiment was echoed in the Government's own impact assessments, which were leaked in January, before being published in full in March 2018[33]. These documents show that the Government expects the UK to be worse-off under every scenario (with GDP between 2.0% and 8.0% lower in the long-term than in a remain scenario), with the negative effects of Brexit hitting every region and sector. Consistent with the GLA analysis, the Government's analysis also points to London being more resilient than other UK regions (with long-term economic output losses between 1.0% and 3.5%).

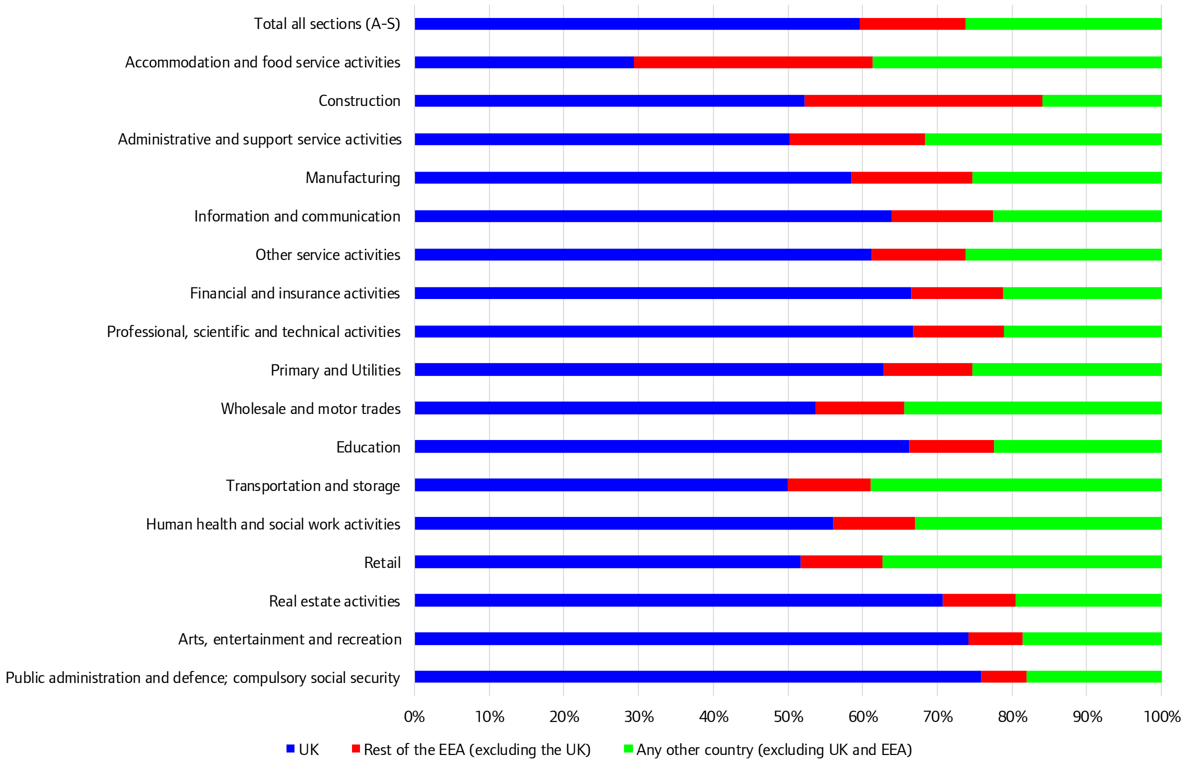
On the issue of migration, the Prime Minster has said that "as we leave the EU, free movement of people will come to an end and we will control the number of people who come and live in our country". This represents the first time the UK has said that migration could be a substantive topic in the negotiations. However, Mrs May went on to say that "UK citizens will want to work and study in EU countries… businesses across the EU and the UK must be able to attract and employ the people they need. And we are open to discussing how to facilitate these valuable links", suggesting some openness in the negotiating process.

EU workers are particularly important to London's economy, making up 14% of the workforce (748,000 jobs) in 2016[34]; for some industries, such as Accommodation and food services, and Construction, the figure is much higher (Figure 3.10). The equivalent figure for the UK is just 6%. Research by GLA Economics shows that these workers tend to be younger, and higher skilled, than average. However, there is evidence that net EU migration to the UK continues to fall amid the ongoing Brexit uncertainty. ONS data shows that over the year to September 2017, the number of EU citizens coming to the UK (220,000) decreased by 47,000, while the number leaving the UK (130,000) is the highest recorded level since 2008[35]. It remains

[33] UK Parliament (2018), Government Brexit analysis material published, Mar. 2018.
[34] GLA Economics (2018), EEA workers in the London labour market, Jan. 2018.
[35] ONS (2018), Migration Statistics Quarterly Report, Feb. 2018.

unclear whether or not this trend will continue, or if this represents a shift in long-term trends.

Figure 3.10: Percentage of jobs by industry and country/area of birth, London, 2016



Source: ONS Annual Population Survey

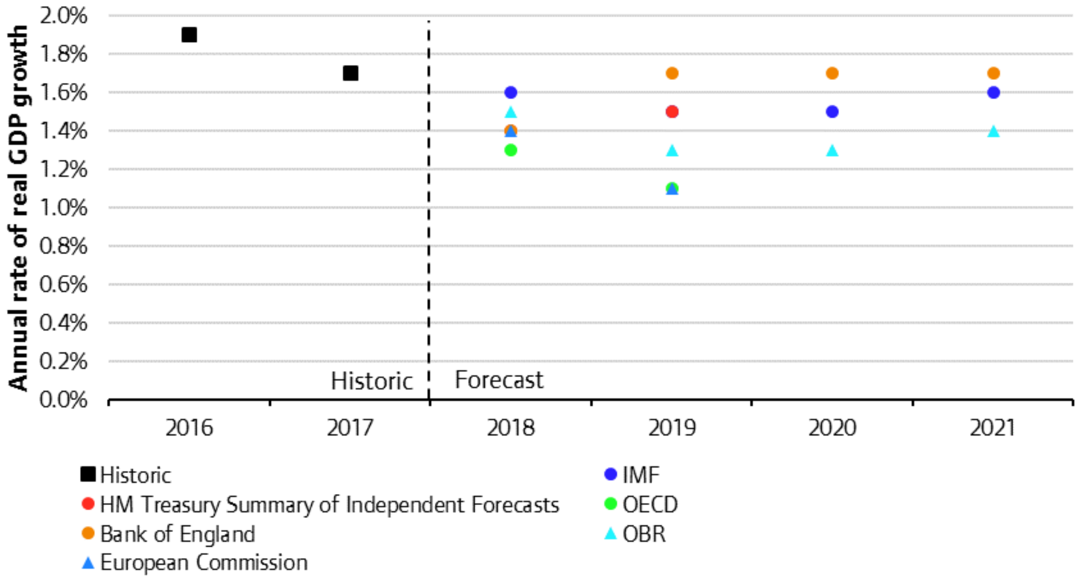
While significant progress has been made towards a final Brexit agreement, the UK's future is far from certain. The Trade Bill has been debated in the Commons on several occasions, and so far remains un-amended, while the customs bill has yet to begin its process through parliament; both are likely to be controversial pieces of legislation. The Immigration Bill is expected in early summer and will involve some significant policy decisions including how Britain plans to treat EU citizens looking to enter the UK. Looking further forward, European summits have been scheduled for 28 June, 18 October and 13 December, by which time a political declaration on a future relationship will be expected to have been signed. With less than a year until the so-called cliff edge, and the Withdrawal Bill still 'ping pong-ing' in Parliament (with a vote expected in late 2018), the government faces a huge number of challenges if they are to be prepared for Brexit.

Acknowledging the above, Figure 3.11 shows the range of forecasts for real UK GDP growth. This includes the International Monetary Fund's (IMF) forecast who in the April edition of the World Economic Outlook expects GDP growth of 1.6% in 2018 (up 0.1 percentage points from October 2017[36] but unchanged from the January 2018 update), followed by 1.5% in 2019

[36] IMF (2017). 'World Economic Outlook', October 2017.

(down 0.1 percentage points but unchanged from the January update) and 2020 (down 0.2 percentage points)[37]. It also includes HM Treasury consensus forecast for the UK economy based on research from a variety of organisations. From this, the latest average forecast is for growth of 1.4% in 2018 and 1.5% in 2019[38], so marginally weaker than the IMF. Meanwhile, the Office for Budget Responsibility (OBR) raised their forecast of UK GDP growth for 2018 from 1.4% to 1.5%, though they then expect the rate of expansion to slow to 1.3% in 2019 and 2020 before picking up to 1.4% in 2021.

Figure 3.11: Forecasts of real UK GDP growth



Source: ONS (2018), 'GDP Q1 2018 preliminary estimate'; IMF (2018), 'World economic outlook' April 2018; HM Treasury (2018), 'Forecasts for the UK economy', May 2018; OECD (2018), 'Economic outlook', interim March 2018; Bank of England (2018), 'Inflation report', May 2018; OBR (2018), 'Economic and fiscal outlook', March 2018; and European Commission (2018), 'Winter 2018 economic forecast'.

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.

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 (March 2018)	
	2018	2019	2018	2019
Annual real GDP growth rate	1.4%	1.5%	1.5%	1.3%
LFS unemployment rate	4.3%	4.4%	4.4%	4.5%
Current account	-£72.0bn	-£63.9bn	-£92.5bn	-£86.2bn
Public sector net borrowing (financial year)	£41.7bn	£36.4bn	£37.1bn	£33.9bn

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

Other UK economic indicators

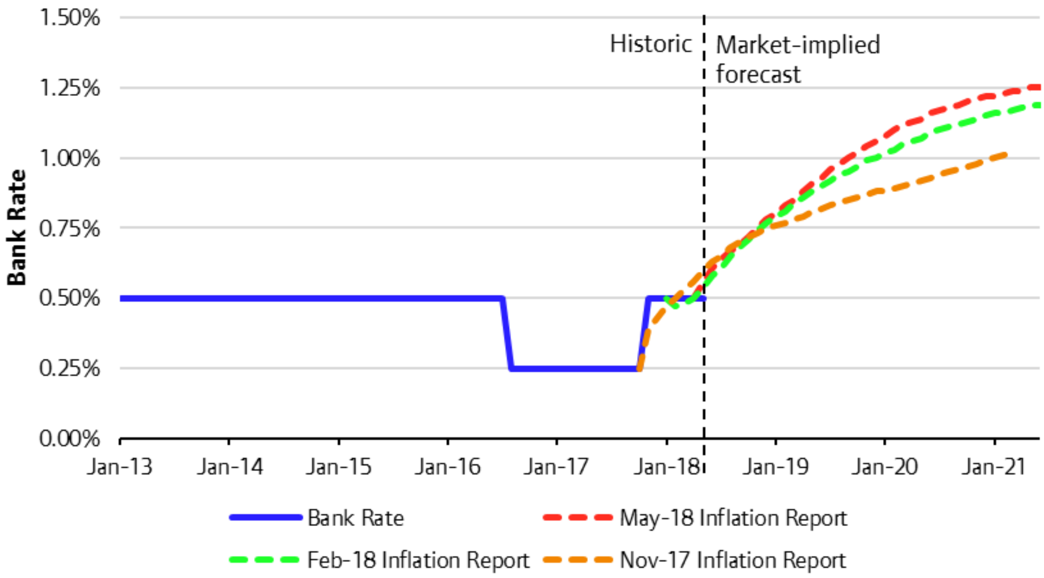
Besides GDP, another important economic indicator is inflation as measured by the Consumer Price Index (CPI). As noted in the autumn 2017 edition of London's Economic Outlook, the rate

[37] IMF (2018). 'World Economic Outlook', April 2018.
[38] HM Treasury (2018). 'Forecasts for the UK economy: a comparison of independent forecasts', May 2018.

of inflation had been picking up largely because of the depreciation of sterling following the EU referendum result. This made 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 been the case – inflation peaked at 3.1% in November 2017, but has since fallen back with the latest estimate for April at 2.4%. The Bank of England has an inflation target of 2% so, in that context, the current rate of inflation is still relatively high.

Given this, there has been increased speculation that the Bank of England may raise interest rates in the coming months. Previously, the Monetary Policy Committee voted to raise interest rates by 0.25 percentage points to 0.5% in November 2017 – the first increase since the financial crisis. The Governor of the Bank of England has already indicated that there would probably be several interest rate rises over the next few years, especially as the Bank attempts to 'normalise' interest rates from the current ultra-low levels. Even in the Bank's latest Inflation Report, it was restated that "were the economy to develop broadly in line with the May Inflation Report projections, an ongoing tightening of monetary policy over the forecast period would be appropriate"[39]. 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 like the EY Item Club[40] are currently expecting one or two increases in both 2018 and 2019 (see Figure 3.12).

Figure 3.12: Market-implied interest rate path for the UK



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

Higher interest rates can have several influences on the economy[41]. This is discussed in greater detail in Box 3.2. All other things held constant, it can bolster sterling as [interest] returns on sterling would be relatively higher than other countries leading to an increase in demand for sterling-based assets by foreigners. It can also reduce consumer demand as higher interest on savings raises the 'opportunity cost' of spending. Likewise, it can reduce the appetite to invest

39 Bank of England (2018). 'Inflation Report', May 2018.
40 EY (2018). 'EY Item Club Spring Forecast', April 2018.
41 For more information, see Bank of England (1999). 'The transmission mechanism of monetary policy', Bank of England Quarterly Bulletin, May 1999.

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.

Box 3.2: Monetary policy

This box discusses the importance of monetary policy at influencing an economy with reference to the current path of monetary policy in the UK and other advanced economies like the US and Eurozone.

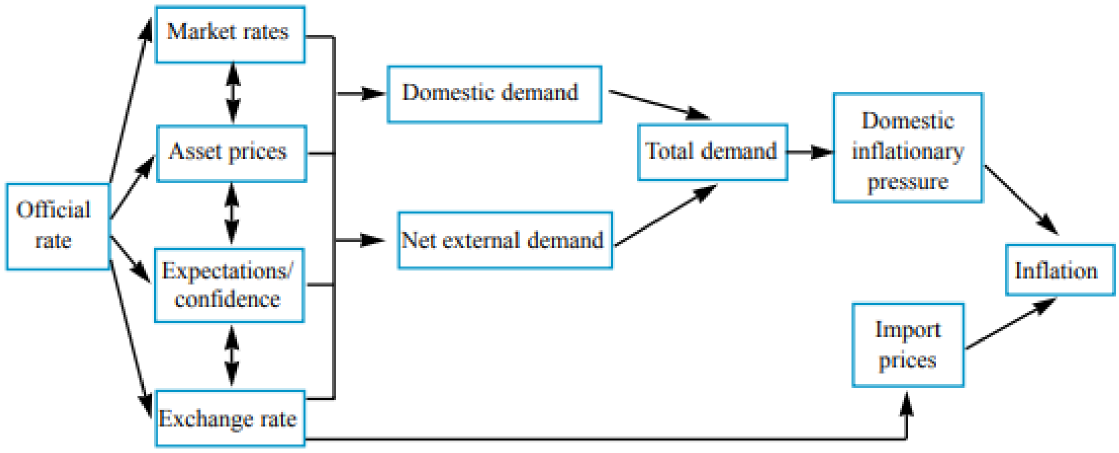
How monetary policy can affect an economy

Monetary policy is one of the main tools to influence the economy, alongside the other main tool which is fiscal policy which includes government spending and taxation. At a basic level, monetary policy involves changing the interest rate charged by a central bank to access funds and this is often the reference point for other market interest rates within an economy. A reduction in interest rates can lower the opportunity cost of spending, so it can lead to higher levels of consumer spending and business investment. For example, lower savings interest can increase spending, banks can lower interest rates on loans increasing credit, and greater demand for assets can lead to higher prices which in turn can create a positive wealth effect. Lower interest rates can also lead to a depreciation in exchange rates as it becomes less attractive to save money in the economy relative to other economies. This depreciation can also make it more expensive to import goods and services, thereby raising prices. It can also affect expectations for future interest rates (and inflation) which can influence wage and price setting that often needs to be agreed in advance. For example, if inflation expectations are high, wages may be set higher in expectation of higher prices in the future. All in all, lower interest rates can stimulate demand and economic activity and push up inflation. The reverse is true for an increase in interest rates.

The way that interest rate changes works through an economy is called the transmission mechanism and is summarised in Figure 3.13. However, it should be noted that a change in interest rates does not instantly work its way through an economy. For example, fixed interest rates on savings and borrowing mean that sometimes the change will not be felt until the end of the fixed period. Some estimates suggest it can take 18-24 months for a change in interest rates to fully work through an economy[42].

[42] Dale, S & Haldane, A (1993). 'Interest rates and the channels of monetary transmission: some sectoral estimates', Bank of England Working Paper.

Figure 3.13: The transmission mechanism of monetary policy



Note: not all interactions between variables are shown for simplicity. Taken from: Bank of England (1999). 'The transmission mechanism of monetary policy', Quarterly Bulletin, May 1999.

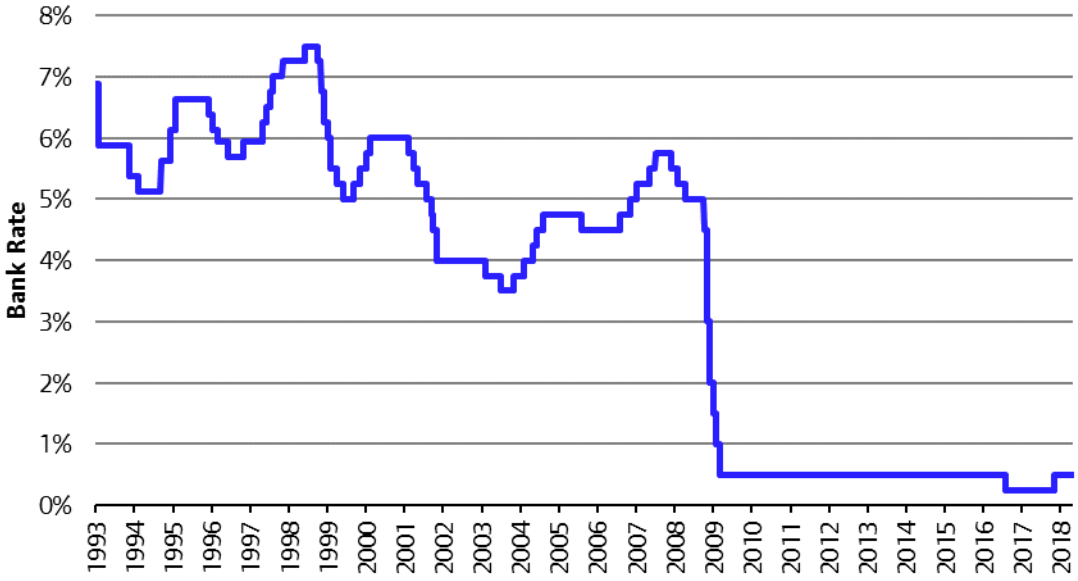
Another monetary policy tool is the monetary base, i.e. the amount of money in the economy. Policy to increase this is sometimes called quantitative easing and was used during the financial crisis. By increasing the amount of money in an economy, the amount available to spend rises, pushing up demand and stimulating economic activity.

Update on monetary policy in the UK

In the UK, the interest rate the Bank of England changes is called the Bank rate. The Monetary Policy Committee (MPC) meets monthly to decide monetary policy. While the Bank is politically independent, the Government has set it a central symmetrical target of 2% consumer price index (CPI) inflation plus or minus 1%. The Bank should also try to support strong, sustainable and balanced economic growth by achieving price and financial stability.

In November 2017, the Bank of England raised the Bank rate for the first time since July 2007 (Figure 3.14). The interest rate increase was only by 0.25 percentage points to 0.5% - reversing a cut following the EU referendum – meaning it remains at historically low levels. As noted in the November 2017 edition of London's Economy Today, this announcement was expected given the improving labour market and inflation being above the 2% target.

Figure 3.14: Official Bank Rate since 1993
Last data point is May 2018



Source: Bank of England

Additionally, there is growing speculation of further interest rate rises in 2018 and beyond. At the MPC meeting in May 2018, the minutes showed that "an ongoing tightening of monetary policy over the forecast period will be appropriate to return inflation sustainably to its target at a conventional horizon"[43]. This means that it is relatively likely that there will be future interest rate rises at a gradual pace and to a limited extent – especially as the Bank attempts to 'normalise' interest rates back to historical levels – but the precise timing of them is still uncertain.

The Governor of the Bank of England, Mark Carney, said that a potential rise in interest rates will partly depend on the data for the UK economy which he says is currently 'mixed'. For instance, while inflation remains above target, it has eased back from its recent highs to 2.5% in March, a one-year low. While an above target inflation rate may cause the Bank to increase interest rates, the recent downward trend could mean inflation would fall to target without the need for any action on the part of the MPC.

Besides the inflation data, the Bank recalls that "in such exceptional circumstances, the MPC has still a significant trade-off between the speed at which it intends to return inflation sustainably to the central symmetrical target and the assistance that monetary policy might provide to support economic growth during this period"[44].

The Bank of England also introduced a quantitative easing programme during the financial crisis that still remains in place. This involves the purchase of public and private financial assets like bonds. As there is greater demand for these assets, it raises the price and

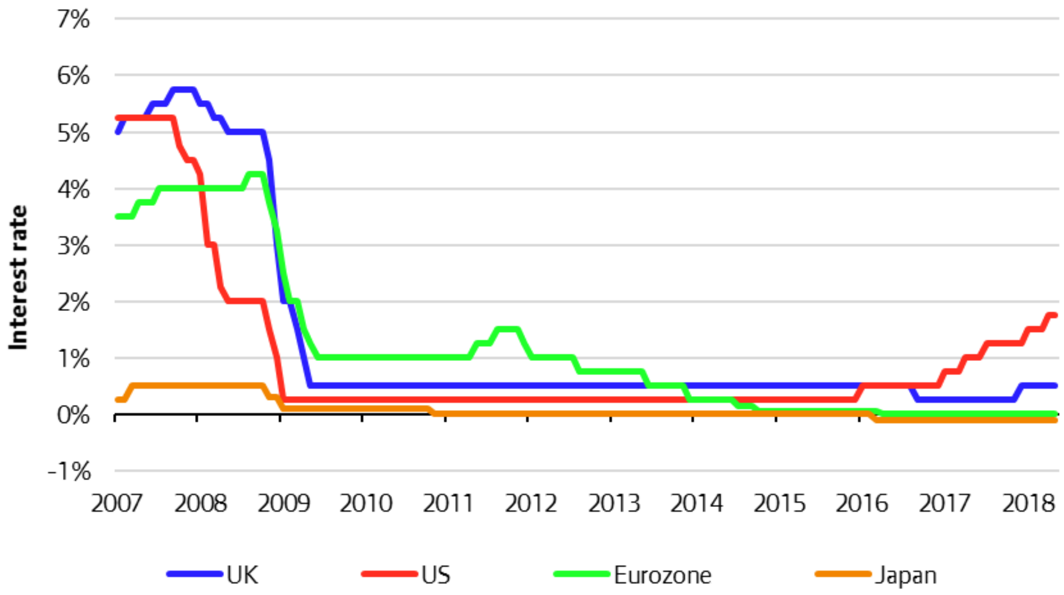
[43] Bank of England (2018). 'Monetary policy summary and minutes of the Monetary Policy Committee meeting ending on 10 May 2018'.
[44] Ibid.

consequently lowers the yields or returns on them. This enables the institutions selling these assets to use the money from the sale to buy assets with higher returns or to invest which can affect both inflation and economic activity. It also allows them to borrow more cheaply further incentivising spending or investment. Initially, the Bank injected £75bn into the economy in March 2009, though this has since risen and currently stands at £435bn in government bonds (or gilts) and £10bn in corporate bonds.

Update on monetary policy elsewhere

Central banks in other advanced economies like the US Federal Reserve and the European Central Bank (ECB) have similarly adopted conventional and unconventional monetary policies during the past decade. Figure 3.15 shows the official interest rates for these economies since 2007 and show large cuts during the financial crisis and a gradual increase more recently.

Figure 3.15: Official bank rates from a selection of advanced economies since 2007



Source: Bank of England, US Federal Reserve, European Central Bank, Bank of Japan

In the US, the Federal Reserve raised interest rates to 0.5% in December 2015 – the first increase in seven years. Since then, the Fed has raised interest rates another five times and it currently stands at 1.75%. This in part is due to inflation being above the 2% target and the strong labour market. Expectations are for further interest rate hikes with the Federal Reserve Open Market Committee (FOMC) expecting "economic conditions will evolve in a manner that will warrant further gradual increases in the federal funds rate"[45]. That said, while the exact timing of these interest rate rises is uncertain, the Fed expects interest rates to "remain, for some time, below levels that are expected to prevail in the longer term"[46].

For the Eurozone, interest rates set by the ECB have remained unchanged since March 2016. The main refinancing operations rate which provides the bulk of liquidity to the financial system stands at 0%, while the marginal lending facility stands at 0.25% and the deposit

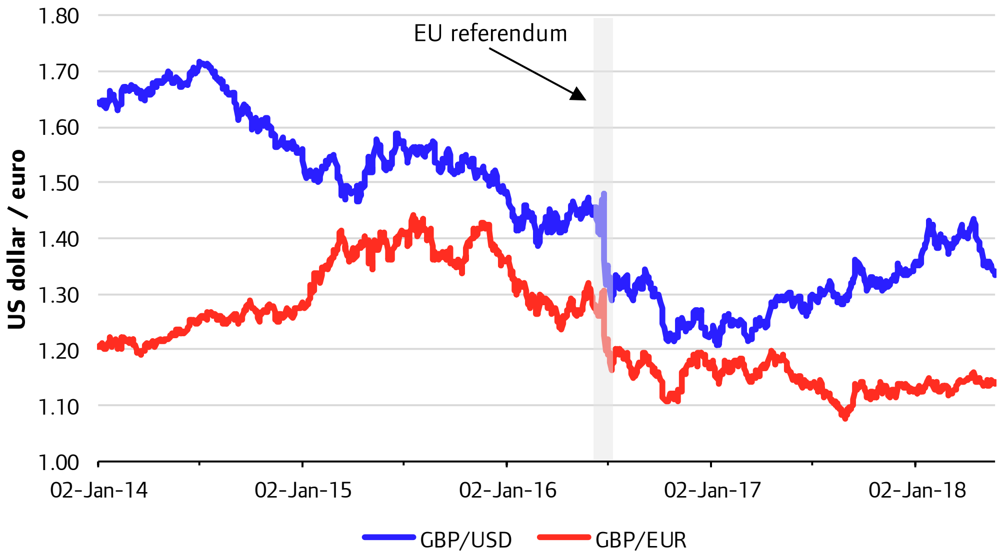
[45] Federal Reserve (2018). 'Federal Reserve issues FOMC statement', 2 May.
[46] Ibid.

facility stands at -0.4% (meaning that banks need to pay to keep money at the ECB). The ECB also has a bond purchasing programme of €30bn per month until at least September 2018 with the exact end date depending on economic trends and whether these are sustainable. However, interest rates are not expected to increase any time soon with minutes from the last ECB Governing Council meeting showing that they expect "policy rates remaining at their present levels well past the end of the net assets purchases"[47].

How the changes to global interest rates will affect the UK is uncertain. As noted previously, an increase in interest rates can lead to an appreciation of exchange rates. This can then affect exports and imports. Therefore, if the US Federal Reserve raised interest rates with everything else held constant, the sterling to dollar exchange rate could depreciate making it more expensive to import goods and services to the UK while making it cheaper to export. However, if both the Federal Reserve and the Bank of England raised interest rates at the same time (all other things constant), this could balance out and have no effect on exchange rates. Given this uncertainty, GLA Economics continues to monitor global monetary policies as part of London's Economy Today (our monthly newsletter) and London's Economic Outlook both of which can be found on the publications page.

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 3.16. However, against the US dollar at least, sterling has appreciated in recent months largely because of the progress made with the Brexit negotiations (see Box 3.1). Still, sterling against the dollar is around 5% lower than before the referendum. Although this depreciation of sterling has led to higher import prices and been a factor behind the relatively high rates of inflation, it could also boost exports 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 3.16: Sterling to US dollar and euro exchange rates
Last data point is 24 May 2018



Source: Bank of England

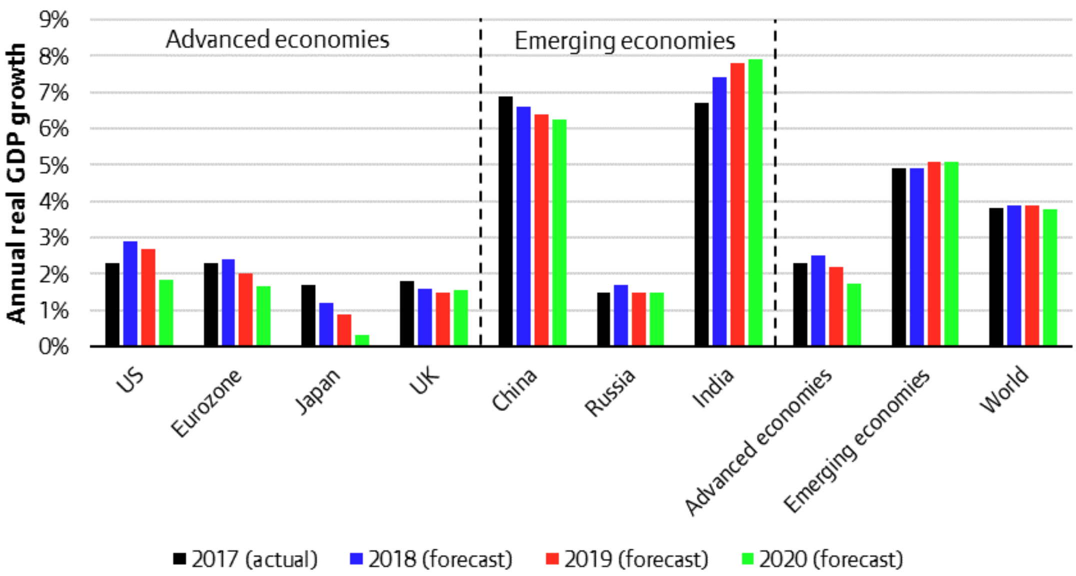
[47] European Central Bank (2018). 'Account of the monetary policy meeting', 12 April.

Overall, the second estimate of UK GDP growth in Q1 2018 was the lowest since 2012. Trends for the Services sector – which represents a large part of the economy – also shows a general slowdown in recent quarters. However, this slower trend was to some extent expected with economic forecasts largely pointing to slower growth in 2018 and 2019 compared with 2017. Meanwhile, despite inflation starting 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 could act as a boost to growth.

3.3 The world economy

The global economy was estimated to have grown 3.8% in 2017 by the IMF – it's fastest rate since 2011. Moreover, in the latest IMF World Economic Outlook (WEO)[48], the world economy is expected to grow faster still by 3.9% in 2018 and 2019. This has been revised up 0.2 percentage points since WEO October 2017, though unchanged from the January 2018 update. The IMF noted the strong growth momentum, favourable market sentiment and financial conditions, and the expansionary fiscal policy in the US which should bolster global growth. However, they also warned that this is not assured. While the upside and downside risks are largely balanced in the short-term, the IMF said that they lean towards the downside in the longer-term. They warn of a "potential further build-up of financial vulnerabilities [that] could give way to rapid tightening of global financial conditions". As outlined in the latest IMF Global Financial Stability Report[49], these vulnerabilities have built-up during the years of accommodative monetary policies and could be triggered by central banks tightening monetary policy more quickly than currently expected. The IMF also warns about inward-looking policies, such as in the US, that could affect global trade. Figure 3.17 shows the IMF economic forecasts for selected countries.

Figure 3.17: IMF forecasts of annual rate of real GDP growth for selected countries



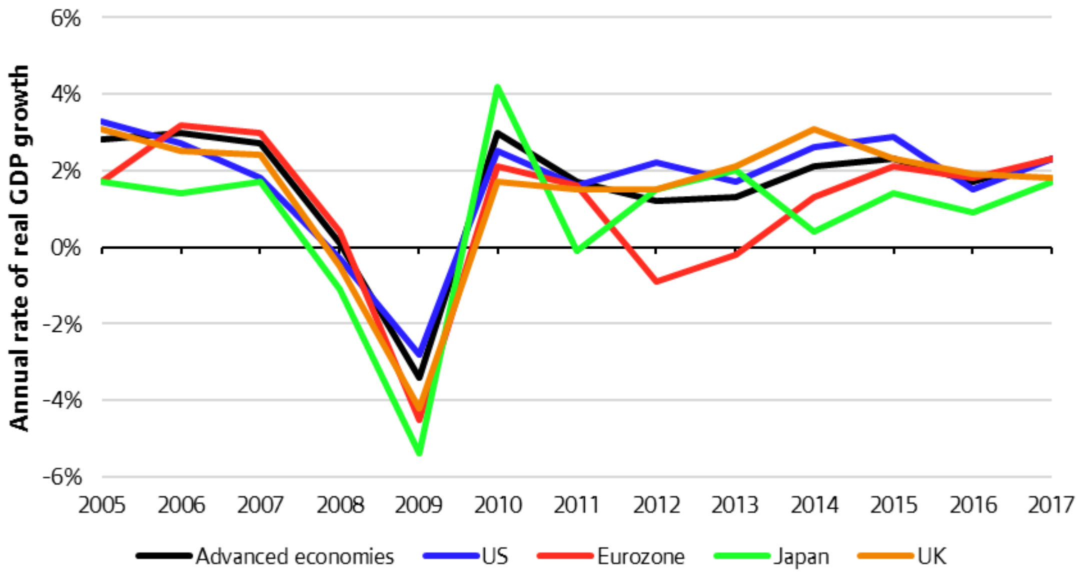
Source: IMF (2018). 'World Economic Outlook', April 2018.

[48] IMF (2018). 'World Economic Outlook', April 2018.
[49] IMF (2018). 'Global Financial Stability Report', April 2018.

Advanced economies

The advanced economies collectively grew 2.3% on an annual basis in 2017. That was one of the strongest rates of growth since the financial crisis and follows a 1.7% expansion for 2016. The IMF expects the recovery to strengthen further in 2018 with growth of 2.5% expected, up 0.2 percentage points since the October 2017 forecasts. This partly reflects stronger economic prospects in some advanced economies as well as the expansionary fiscal policy in the US.

Figure 3.18: Annual rate of real GDP growth for selected advanced economies



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

Looking at the advanced economies in greater detail, the **US** economy grew 2.2% at an annualised quarter-on-quarter rate in Q1 2018 (or 0.6% on a quarterly basis). This follows a 2.9% expansion in Q4 2017 and was the weakest rate of annualised growth for a year. It partly reflected the weakest growth in US consumer spending for nearly five years. However, despite this, the IMF expects the US to grow 2.9% in 2018 overall and 2.7% in 2019. These forecasts have been revised up from 2.3% and 1.9% respectively in October 2017 and also up from 2.7% and 2.5% respectively in January 2018. The IMF attributed these upward revisions to better economic data for 2017, but also accommodative government policies. The latter includes the tax reform announced in December that reduces corporation tax from 35% to 21% and the temporary allowance for expensing investment among others, as well as higher government spending. Indeed, the IMF expects some of the impact of the accommodative policies to spill over to other countries and global growth. Altogether, the fiscal policy changes are expected to add 1.2% to the US economy by 2020 compared with if they did not go ahead[50]. The temporary nature of some of these policies and the knock-on effect on the fiscal deficit could, however, constrain growth in the long-run. There is also a downside risk of higher interest rates which could negatively affect consumer spending and business investment. Already, the Federal Reserve has raised interest rates twice since the previous LEO (in December 2017 and in March 2018) so that, at 1.5%, it currently stands at its highest level for over nine-and-a-half years.

Meanwhile, the **Eurozone's** economic recovery continued. In Q1 2018, GDP in the Zone increased 0.4% on a quarter-by-quarter basis. This was down from 0.6% in Q4 2017 and was

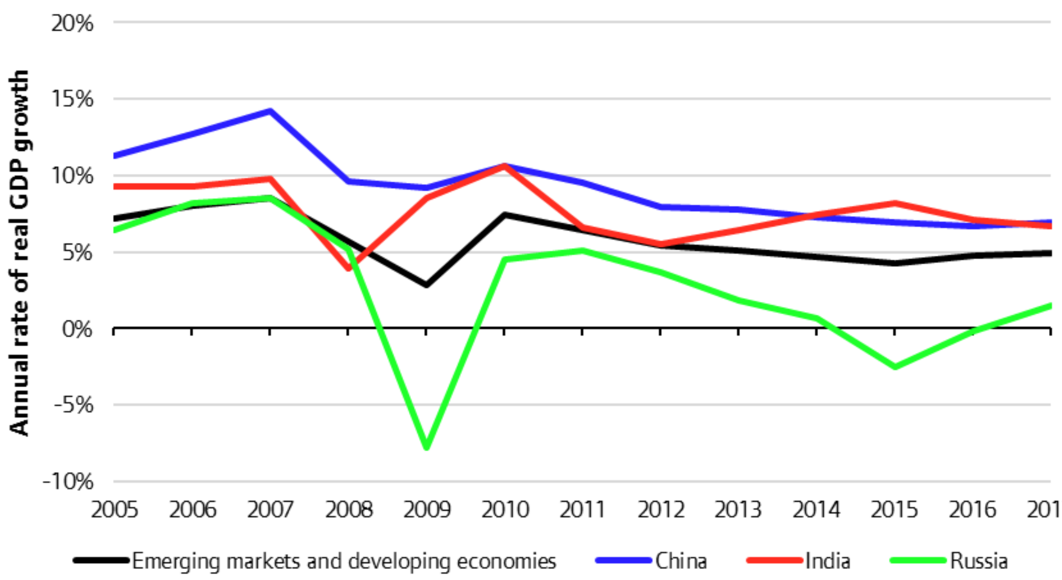
[50] Ibid

the weakest expansion in six quarters suggesting the recovery is still fragile. Given this, the IMF forecasts the Eurozone to grow by 2.4% in 2018 before slowing to 2% in 2019 and eventually to 1.4% by 2022. The IMF notes that while the supportive monetary policy and better-than-expected demand can support growth in the short-run, low productivity and demographic factors could hold back growth in the long-run.

In **Japan**, the economy contracted at the start of 2018 ending the longest expansionary period for 28 years. The latest estimate showed that GDP fell 0.2% quarter-on-quarter in Q1 2018. Previously, GDP growth had been supported by greater demand and a rise in private sector investment, but private consumption was stagnant and private non-residential investment fell 0.3% during the first quarter. And while exports grew 0.6% in Q1, the rate of growth was much slower than in Q4 2017 (2.2%). Nonetheless, the IMF has raised its growth forecasts to 1.2% for 2018 (up 0.5 percentage points since October 2017) and 0.9% for 2019 (up 0.1 percentage points). That said, an aging population that can affect the future size of the labour force could constrain growth in the medium to long-term.

Emerging market economies
Growth in the emerging market economies is expected to strengthen because of further strong growth in Asia but also improving conditions facing commodity exporters. The IMF expects growth to rise from 4.8% in 2017 to 4.9% in 2018 and 5.1% in 2019. In the long term, the IMF predicts growth to settle around 5% per annum as growth for commodity exporters will be "much more modest than over the past two decades" and also due to a steady slowdown in China's rate of expansion[51].

Figure 3.19: Annual rate of real GDP growth for selected emerging market economies



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

Of the major emerging markets, **China's** economy grew 6.8% year-on-year in Q1 2018 (the equivalent of 1.6% on a quarter-on-quarter basis). That is in line with the rates of growth recorded in both Q3 and Q4 2017 and remains above the government's target of 6.5% annual growth. The latest expansion was buoyed by strong consumer demand and the fastest rise in

[51] Ibid.

private sector investment in two years. However, the outlook is uncertain. For instance, China's exports growth has continued to grow strongly – rising 13% in Q1 2018 compared with a year earlier – but the US has introduced a 25% tariff on 1,300 Chinese goods and services affecting around $50bn worth of trade and could affect future exports growth if this tariff war is extended[52]. Meanwhile, the Bank of International Settlements reported that China is one of the economies most vulnerable to a banking crisis in its latest Quarterly Review[53]. This follows research by the IMF that identified three tensions in China's financial system: the rapid build-up of risky credit, growth of complex investment vehicles and a rise in moral hazard and excessive risk taking[54]. Consequently, the IMF expects Chinese economic growth to remain strong at 6.6% in 2018 and 6.4% in 2019 but the various vulnerabilities "clouds" this outlook[55]. This is in line with the forecasts by the Asian Development Bank (ADB) that similarly expects growth of 6.6% in 2018 and 6.4% in 2019[56]. The ADB attributed this slowdown to macroeconomic policy being tightened to reach the government's 6.5% growth target.

Meanwhile, **India's** economy grew 7.2% year-on-year in Q4 2017 (or 1.8% on a quarter-on-quarter basis) which was the fastest rate since Q3 2016. This partly reflected higher consumer and government spending, as well as increased investment. Reflective of this, the Reserve Bank of India raised its growth forecast citing signs of a revival in investment activity, a pick-up in global growth and progress with various structural reforms that can boost productivity and raise potential output[57]. Overall, the IMF expects India's economic growth to rise from 6.7% in 2017 to 7.4% in 2018 and 7.8% in 2019. Likewise, the ADB expects faster growth too – 7.3% in 2018 and 7.6% in 2019 – linking this to stronger domestic demand, an increase in investment and an improving business environment[58].

In **Russia**, the economy contracted 0.4% quarter-on-quarter in Q4 2017 following four quarters of growth. Nonetheless, across 2017, the economy grew 1.5% which was the first time the economy expanded in the last three years. The IMF attributed the return to growth to "improved oil export revenue, stronger business confidence and looser monetary policy"[59]. For instance, the Central Bank of the Russian Federation has cut interest rates seven times since February 2017, down from 10% to 7.25%. The IMF expects this growth period to continue with forecasts of 1.7% growth in 2018 and 1.5% in 2019 though risks are on the downside as "structural headwinds and sanctions weigh on activity"[60].

3.4 Risks to the economy

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 economy and global trade flows. These are looked at in greater detail below.

Brexit represents a large amount of uncertainty to the economic outlook. While the UK and the EU have agreed to a transition period meaning that there is some certainty for the immediate short-run, negotiations especially about the future relationship are still ongoing and creating uncertainty in the medium and long-term. For example, uncertainty around the future trading

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52 GLA Economics (2018). 'London's Economy Today', Issue 188, April 2018.
53 Bank of International Settlements (2018). 'BIS Quarterly Review', March 2018.
54 IMF (2017). 'People's Republic of China: financial system stability assessment', December 2017.
55 IMF (2018). 'World Economic Outlook', April 2018.
56 Asian Development Bank (2018). 'Asian Development Outlook 2018', April 2018.
57 Reserve Bank of India (2018). 'Minutes of the Monetary Policy Committee meeting', April 4-5, 2018.
58 Ibid.
59 Ibid.
60 Ibid.

relationship could affect business confidence and investment, as well as affect sales (i.e. exports) and supply chains (i.e. imports). Similarly, uncertainty around the future migration system in the UK could affect firms' ability to recruit qualified staff which could inhibit their capability to operate and grow. There is also uncertainty surrounding whether the UK will continue to be able to collaborate on research such as Horizon 2020 and be able to access funding; the perception of London and the UK as a place to do business and to visit; and the post-Brexit fiscal environment such as whether the UK will continue contributing to the EU budget and whether the UK and EU tax and regulation systems will diverge. These factors have the potential to negatively affect the UK's and London's economic growth.

There could be upside risks to Brexit should the UK be able to negotiate new or more favourable trade deals with other countries besides the EU. In the long-term this could support economic growth by increasing London's and UK's exports and stimulating business investment for example. Government policies like the Industrial Strategy could also mitigate against the downside risks of Brexit by driving productivity and economic growth.

Another risk to the economic outlook is UK interest rates. For several months now, the rate of inflation in the UK has been above the Bank of England's inflation target. 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. 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. Inflation has been higher than the rise in wages suggesting a fall in real earnings in recent months until the past month or so. If prolonged, this could have knock-on effects on consumer spending for instance. However, the rate of inflation has already started to ease – down from 3.1% in November 2017 to 2.5% in March – meaning the pressure on real earnings growth could lessen.

There is also a risk around fiscal policy in the UK. Based on the latest economic and fiscal forecasts produced by the OBR[61], the Government would meet three fiscal targets but miss the broader objective of balancing the budget by the middle of the next decade. Acknowledging this, if the UK Government is downgraded further by international ratings agencies, it could lead to higher borrowing costs and have a knock-on effect on public spending and, consequently, economic growth. Additionally, the fiscal situation in the UK is still tight which could have a negative effect on the outlook, but it could become more relaxed in coming years which could have a positive effect instead.

In addition to these UK-level risks, another relates to the strength of the global economy. As noted in section 3.3, the rate of global growth has picked up to a six-year high in 2017 and the IMF is expecting this momentum 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 there are downside risks in the

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

medium-term that can slow the rate of growth for the US, the Eurozone and China among others. These are key trading partners of London and the UK meaning that a slowdown in these international economies could have an adverse effect domestically.

Some of the downside risks mentioned by the IMF include the increasing financial vulnerabilities appearing in some economies like China[62]. While the direct impact of a Chinese financial crisis on London may be limited, given London's role in the global financial system, it could be negatively affected indirectly.

Similarly, as noted above, stronger global economic growth can support an increase in global trade flows. However, a downside risk is the increasing inward-looking, protectionism policies particularly coming from the US. For instance, the US has announced plans to increase tariffs on around $50bn worth of Chinese goods and services[63]. There is also a threat of US tariffs on aluminium and steel which could affect European producers as well. While the possibility of increased protectionism attitudes in the US in and of itself is a risk to global growth, it can also negatively affect global trade flows. That said, the World Trade Organisation still expects global trade to grow by 4.4% in 2018 and 4% in 2019, though the risks are on the downside[64].

Finally, there is a risk associated with geopolitical uncertainty. Any conflicts or sanctions has the potential to dampen or reverse growth in that country or region which could have wider effects depending on how globally interconnected they are.

Still overall, the risks to the economic outlook is dominated by Brexit. There are also other risk factors such as the strength of the global economy which tend to be on the downside.

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 has strengthened and is likely to promote growth in global trade flows which could benefit economies that are particularly outward looking (like the UK and London). However, there are downward risks to the global outlook with threats of financial vulnerabilities in some economies and increasing protectionism policies especially by the US.

Meanwhile, for the UK, economic growth at the start of 2018 was the slowest since 2012 and 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, though some forecasts suggest growth will pick up again in the medium-term. Nonetheless, prospects of an increase in interest rates by the Bank of England have heightened. 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 supportive to economic growth.

The picture for London is also largely positive. Indicators generally 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 much slower

[62] IMF (2018). 'World Economic Outlook', April 2018.
[63] GLA Economics (2018). 'London's Economy Today', Issue 188, April 2018.
[64] World Trade Organisation (2018). 'Strong trade growth in 2018 rests on policy choices', 12 April 2018.

than the average since the financial crisis. This outlook for London is by no means certain, however, with the main risk 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 25 May 2018 on the first three of these indicators is summarised[65], drawing on forecasts from outside (independent) organisations[66]. Both annual growth rates and 'standardised' absolute levels are reported. All the data is in real terms (constant prices). The source for the historic data in the following tables and charts is for GVA and workforce jobs GLA Economics modelling using ONS data, while the source data for Household Income and Expenditure is Experian Economics (EE) for the historic growth rates and GLA Economics modelling using EE data for the levels data.

Additionally, both the consensus[67] and GLA Economics' own forecasts provide predictions of employment and output growth in six broad sectors:

- Manufacturing
- Construction
- Transportation and storage
- Distribution[68], accommodation and food service activities
- Finance and business services[69]
- Other (public & private) services[70].

It should be noted, that since our spring 2012 forecast GLA Economics has been using the new Standard Industrial Classification (SIC 2007)[71].

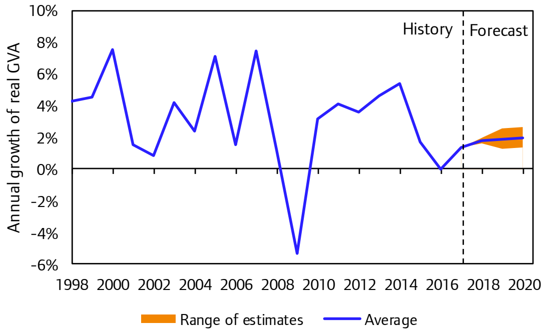
[65] The consensus forecast for GVA and employment is based on the latest available forecast from CE, CEBR, EE and OE, while the consensus forecast for household expenditure is based on the latest available forecast from CE, EE and OE only.
[66] Most forecasters do not yet provide forecasts of household income.
[67] 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.
[68] Distribution is made from the summation of Wholesale and Retail.
[69] 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.
[70] This is made from the summation of Public admin and defence, Education, Health, Arts, entertainment and recreation and Other services.
[71] For more information see Appendix A of: GLA Economics (2012). 'London's Economic Outlook: Spring 2012', June 2012.

Output

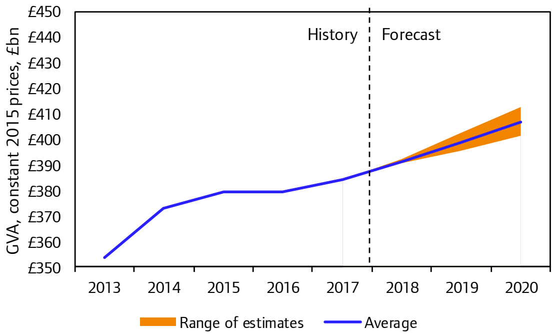
(London GVA, constant prices (base year 2015), £ billion)

The consensus (mean average view) is for real output growth to be 1.8% in 2018, rising slightly to 1.9% in 2019, and to 2% in 2020.

Annual growth



Level (constant year 2015, £ billion)



Annual growth (%)					Level (constant year 2015, £ billion)			
	2018	2019	2020			2018	2019	2020
Average	1.8	1.9	2.0		Average	391	399	407
Lowest	1.7	1.2	1.4		Lowest	391	396	401
Highest	2.0	2.6	2.7		Highest	392	402	413

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	1.4

History: Level (constant year 2015, £ billion)

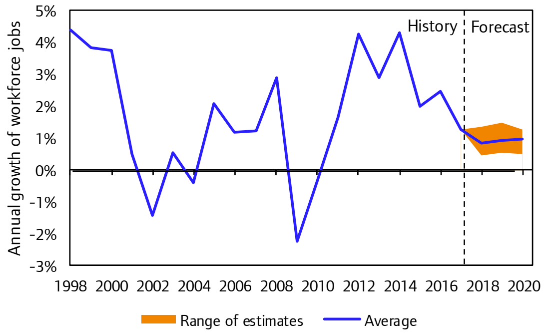
1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
212.4	221.4	231.5	248.9	252.7	254.7	265.3	271.6	291.0	295.4	317.3	321.0	304.0	313.7	326.6	338.2	353.8	372.9	379.2	379.2	384.4

Employment

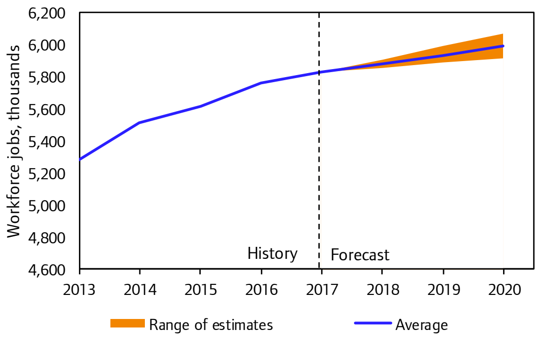
(London workforce jobs)

The consensus view is for the number of workforce jobs to continue to grow slowly. With them increasing by 0.8% in 2018, by 0.9% in 2018, and by 1% in 2020.

Annual growth



Level (millions of persons)



Annual growth (%)					Level (millions of persons)			
	2018	2019	2020			2018	2019	2020
Average	0.8	0.9	1.0		Average	5.88	5.93	5.99
Lowest	0.4	0.5	0.5		Lowest	5.86	5.89	5.92
Highest	1.3	1.5	1.3		Highest	5.91	6.00	6.07

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	2.1	1.2	1.2	2.9	-2.3	-0.3	1.6	4.3	2.9	4.3	2.0	2.5	1.3

History: Level (millions of persons)

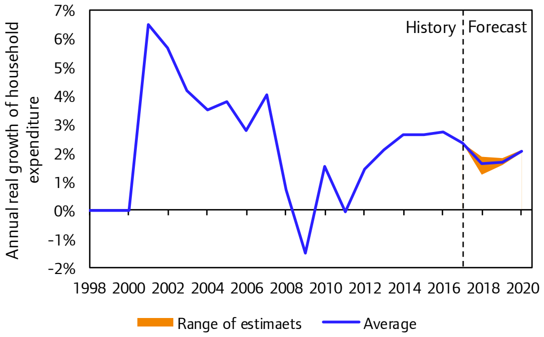
1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
4.14	4.32	4.49	4.66	4.68	4.62	4.64	4.62	4.72	4.77	4.83	4.97	4.86	4.84	4.92	5.13	5.28	5.51	5.62	5.76	5.83

Household expenditure

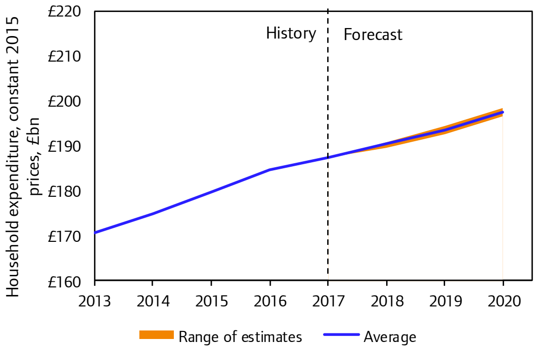
(London household spending, constant year 2015, £ billion)

The consensus view is for moderate household expenditure growth of 1.6% in 2018, 1.7% in 2019, and 2.1% 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	1.7	2.1		Average	190	193	197
Lowest	1.3	1.6	2.0		Lowest	190	193	196
Highest	1.9	1.8	2.1		Highest	191	194	198

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	2.8	1.5

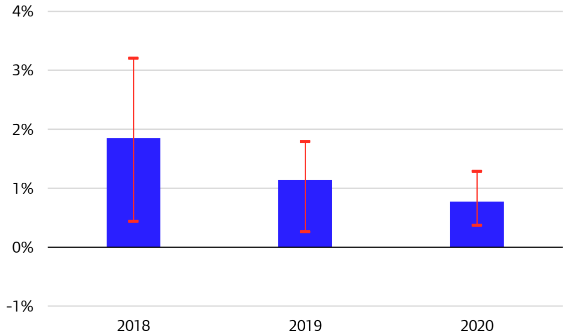
History: Level (constant year 2015, £ billion)

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	184.6	187.2

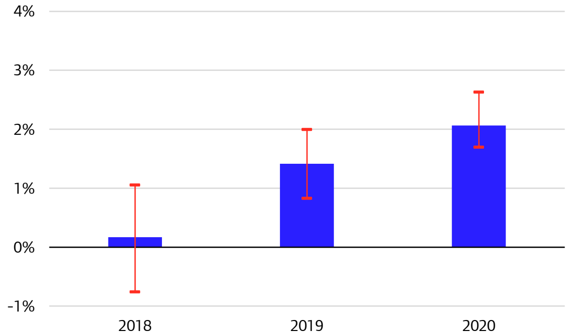
Output growth by sector (annual change)

The positive outlook for the whole economy can be observed at the breakdown by sectors as well; for the period 2018-2020, positive output growth on average is expected in all sectors for all years.

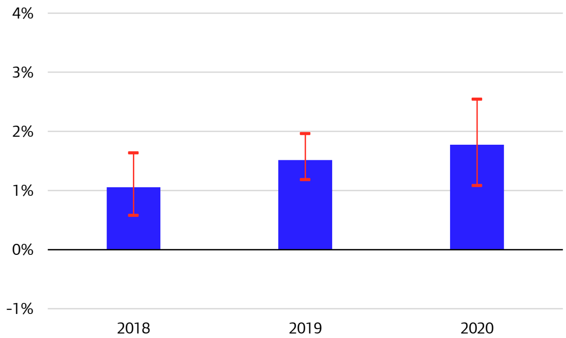
Manufacturing



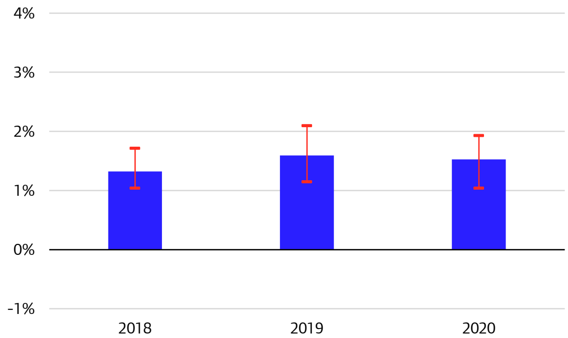
Construction



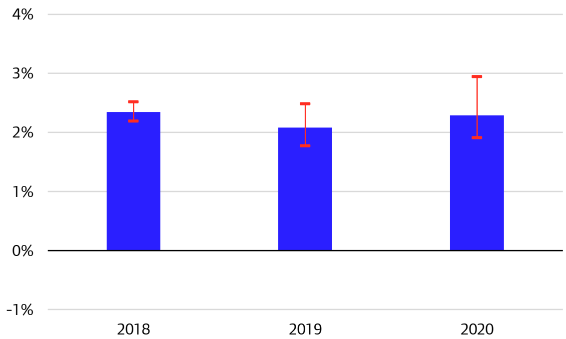
Distribution, accommodation and food service activities



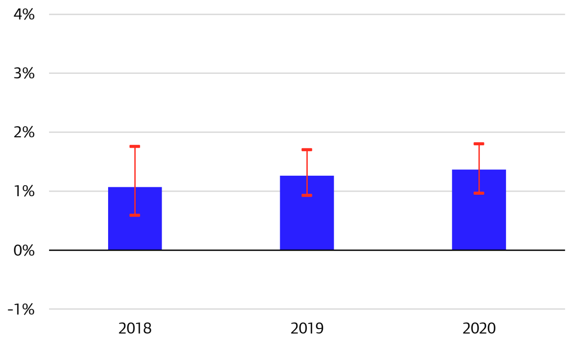
Transportation and storage



Finance and business



Other (public & private) services

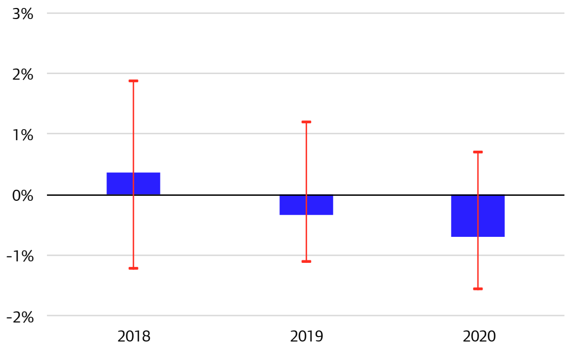


		2018	2019	2020			2018	2019	2020
Manufacturing	*Average*	1.8	1.1	0.8	**Construction**	*Average*	0.2	1.4	2.1
	Lowest	0.4	0.3	0.4		*Lowest*	-0.8	0.8	1.7
	Highest	3.2	1.8	1.3		*Highest*	1.1	2.0	2.6
Distribution, accommodation and food service activities	*Average*	1.1	1.5	1.8	**Transportation and storage**	*Average*	1.3	1.6	1.5
	Lowest	0.6	1.2	1.1		*Lowest*	1.0	1.1	1.0
	Highest	1.6	2.0	2.5		*Highest*	1.7	2.1	1.9
Finance and business	*Average*	2.3	2.1	2.3	**Other (public & private) services**	*Average*	1.1	1.3	1.4
	Lowest	2.2	1.8	1.9		*Lowest*	0.6	0.9	1.0
	Highest	2.5	2.5	2.9		*Highest*	1.8	1.7	1.8

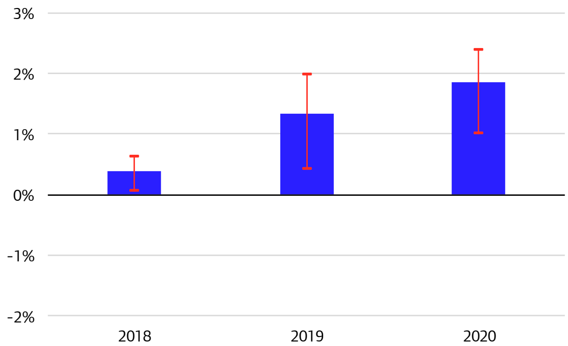
Employment growth by sector (annual change)

Most sectors are forecast to see a weak to modest increase 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.

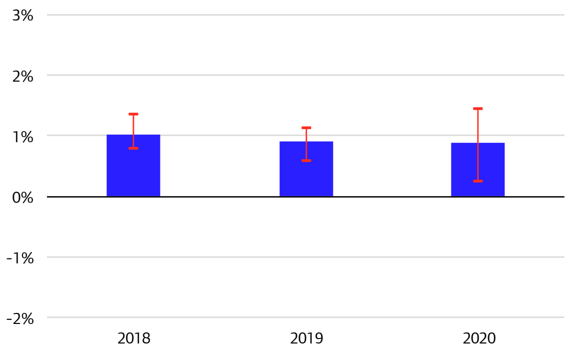
Manufacturing



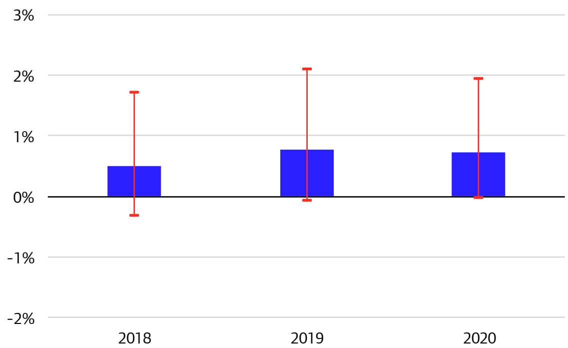
Construction



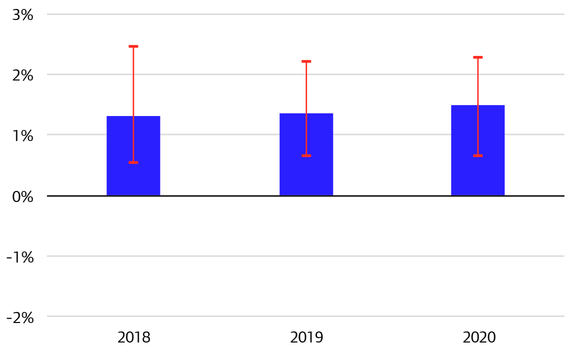
Distribution, accommodation and food service activities



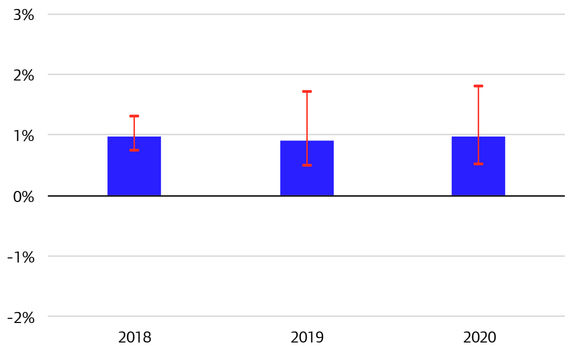
Transportation and storage



Finance and business



Other (public & private) services



		2018	2019	2020			2018	2019	2020
Manufacturing	*Average*	0.4	-0.3	-0.7	**Construction**	*Average*	0.4	1.3	1.9
	Lowest	-1.2	-1.1	-1.6		*Lowest*	0.1	0.4	1.0
	Highest	1.9	1.2	0.7		*Highest*	0.6	2.0	2.4
Distribution, accommodation and food service activities	*Average*	1.0	0.9	0.9	**Transportation and storage**	*Average*	0.5	0.8	0.7
	Lowest	0.8	0.6	0.3		*Lowest*	-0.3	-0.1	0.0
	Highest	1.3	1.1	1.4		*Highest*	1.7	2.1	1.9
Finance and business	*Average*	1.3	1.4	1.5	**Other (public & private) services**	*Average*	1.0	0.9	1.0
	Lowest	0.5	0.7	0.6		*Lowest*	0.7	0.5	0.5
	Highest	2.5	2.2	2.3		*Highest*	1.3	1.7	1.8

5. The GLA Economics forecast

5.1 The background

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

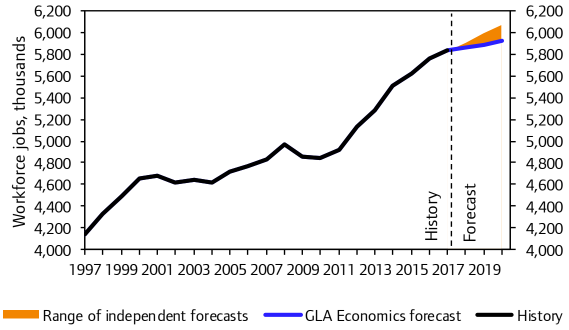
5.2 Results

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 rates.

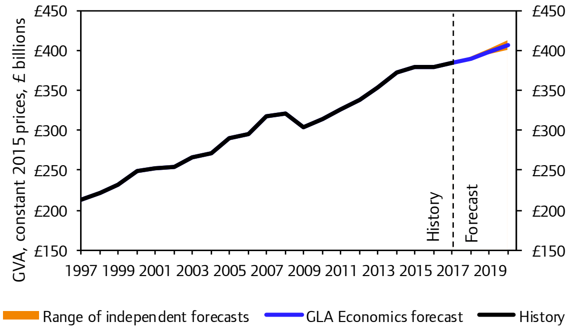
Household income and spending is also expected to grow throughout the forecast period, with growth rates between 1.2% and 1.6%.

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	1.4	1.6	1.9	2.2
Workforce jobs	4.3	2.9	4.3	2.0	2.5	1.3	0.6	0.3	0.7
Household spending	1.4	2.1	2.7	2.7	2.8	1.5	1.3	1.3	1.2
Household income	3.6	3.6	2.6	6.2	0.4	0.5	1.6	1.4	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	384.4	390.5	397.7	406.3
Workforce jobs (millions)	5.13	5.28	5.51	5.62	5.76	5.83	5.87	5.89	5.92
Household spending	166.9	170.4	175.0	179.6	184.6	187.2	187.9	192.1	194.4
Household income	204.4	211.7	217.3	230.7	231.5	232.8	236.4	239.7	243.4

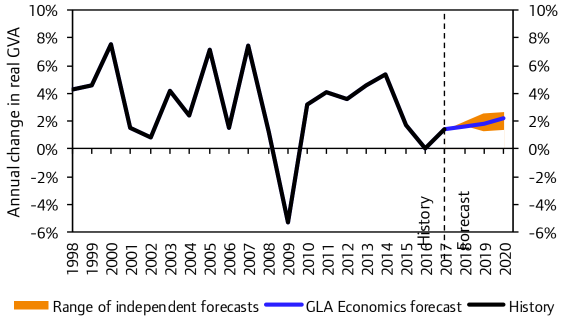
Output

(London GVA, constant year 2015, £ billion)

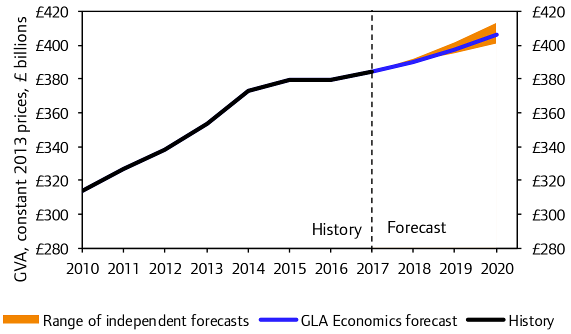
London’s real GVA is forecast to grow increasingly between 2018 and 2020. Forecast growth rates are 1.6% in 2018, 1.9% in 2019 and 2.2% in 2020.

The GLA Economics’ forecast is lower for the year 2018 and higher for the year 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	1.4	1.6	1.9	2.2		GLA	384.4	390.5	397.7	406.3
Consensus		1.8	1.9	2.0		Consensus		391.4	398.8	406.7

History: Annual growth (%)

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
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

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
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

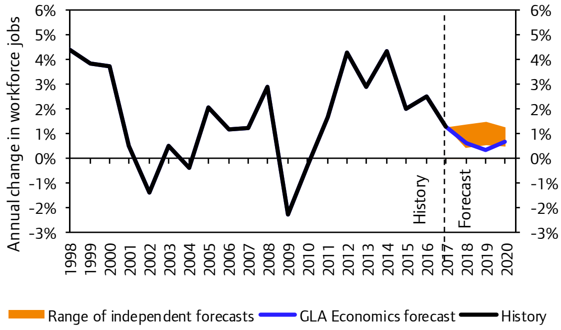
Employment

(London workforce jobs)

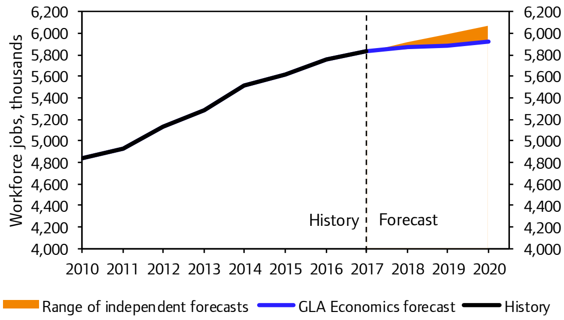
London's employment is forecast to rise slightly between 2018 and 2020. The rates of growth are predicted at 0.6% in 2018, 0.3% in 2019, and 0.7% in 2020.

GLA Economics' forecasts for employment growth in London are lower than the consensus average forecasts for all years of the forecast period.

Annual growth (%)



Level (millions of workforce jobs)



Growth (annual %)						Level (millions of workforce jobs)				
	2017	2018	2019	2020			2017	2018	2019	2020
GLA	1.3	0.6	0.3	0.7		GLA	5.83	5.87	5.89	5.92
Consensus		0.8	0.9	1.0		Consensus		5.88	5.93	5.99

History: Annual growth (%)

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
4.4	3.8	3.8	0.5	-1.4	0.5	-0.4	2.1	1.2	1.2	2.9	-2.3	-0.3	1.6	4.3	2.9	4.3	2.0	2.5

History: Level (millions)

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

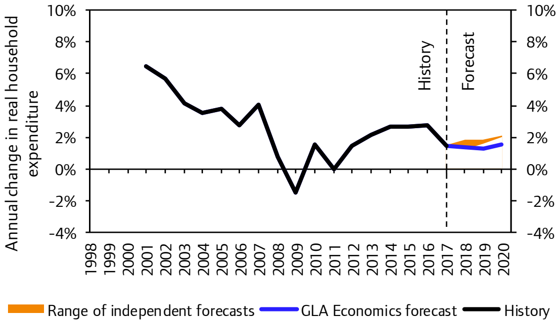
Household expenditure

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

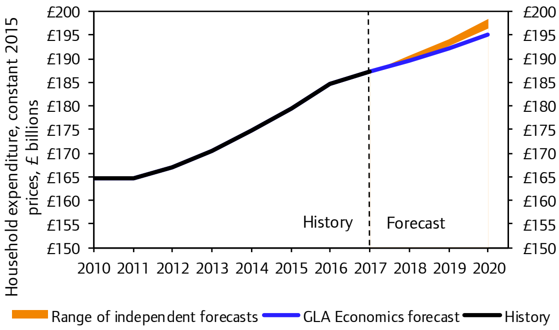
Growth in London's household spending is forecast to be between 1.2% -1.5% over the whole forecast period.

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	1.5	1.3	1.3	1.5		GLA	187.2	187.9	192.1	194.4
Consensus		1.6	1.7	2.1		Consensus		190.3	193.4	197.4

History: Annual growth (%)

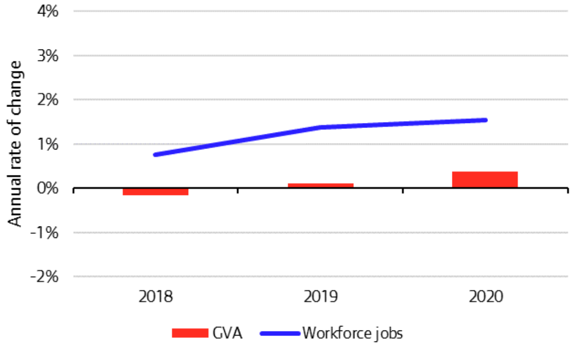
2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
6.5	5.7	4.2	3.5	3.8	2.8	4.0	0.7	-1.5	1.6	0.0	1.4	2.1	2.7	2.7	2.8

History: Level (constant year 2015, £ billion)

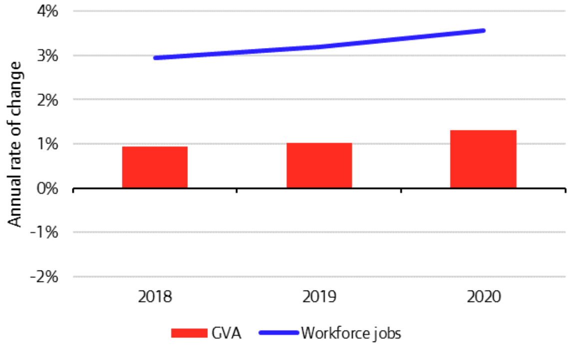
2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
121.3	129.2	136.5	142.2	147.2	152.8	157.0	163.4	164.5	162.1	164.6	164.6	166.9	170.4	175.0	179.6	184.6

Output and employment growth by sector (% annual changes)

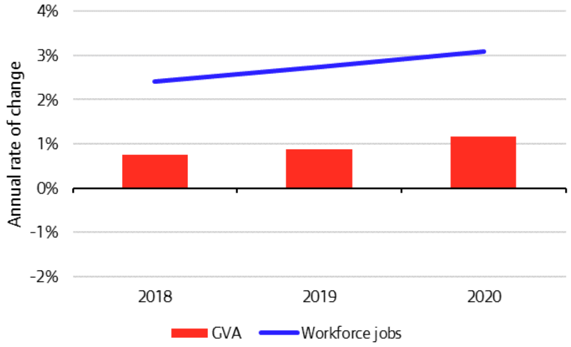
Financial services



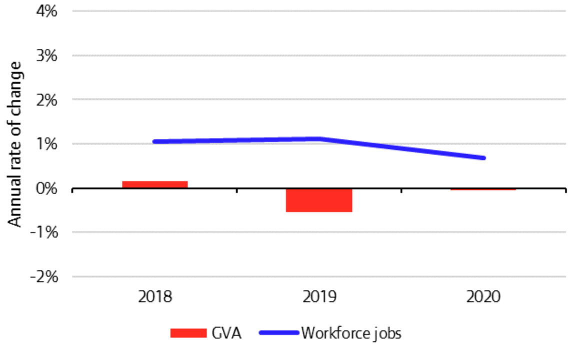
Business services



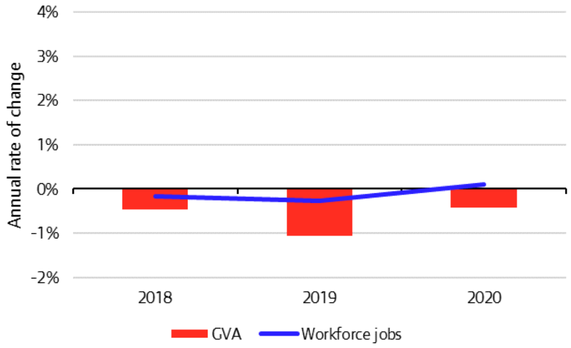
Finance and business (combined)



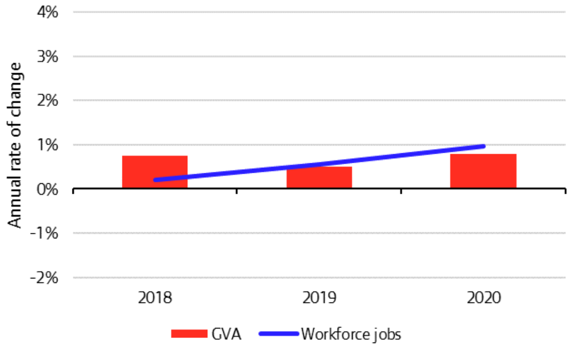
Distribution, accommodation and food service activities



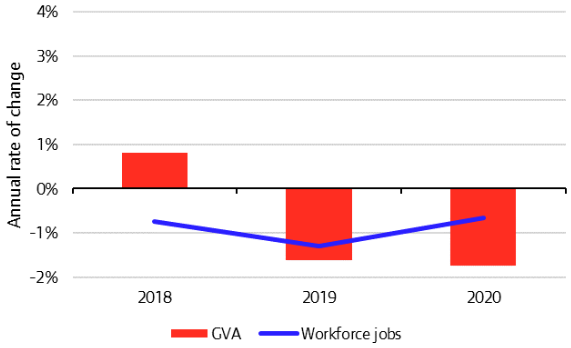
Transportation and storage



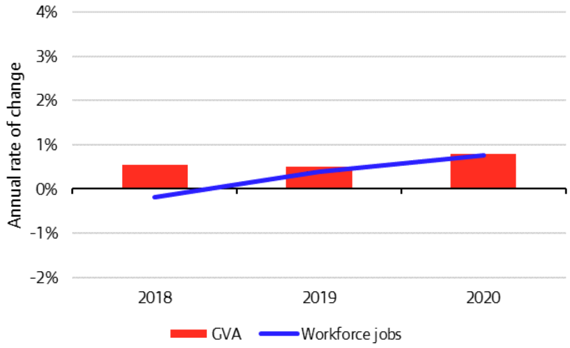
Other (public & private) services



Manufacturing



Construction



Output and employment growth by sector (% annual change)

	2018	2019	2020
Financial services			
Output	0.8	1.4	1.5
Employment	-0.2	0.1	0.4
Business services			
Output	2.9	3.2	3.6
Employment	0.9	1.0	1.3
Financial and business services combined			
Output	2.4	2.7	3.1
Employment	0.8	0.9	1.2
Distribution, accommodation and food service activities			
Output	1.1	1.1	0.7
Employment	0.1	-0.5	0.0
Transportation and storage			
Output	-0.2	-0.3	0.1
Employment	-0.5	-1.1	-0.4
Other (public & private) services			
Output	0.2	0.5	1.0
Employment	0.7	0.5	0.8
Manufacturing			
Output	-0.7	-1.3	-0.7
Employment	0.8	-1.6	-1.7
Construction			
Output	-0.2	0.4	0.8
Employment	0.5	0.5	0.8
(Memo: non-manufacturing)			
Output	1.6	1.9	2.2
Employment	0.6	0.4	0.7

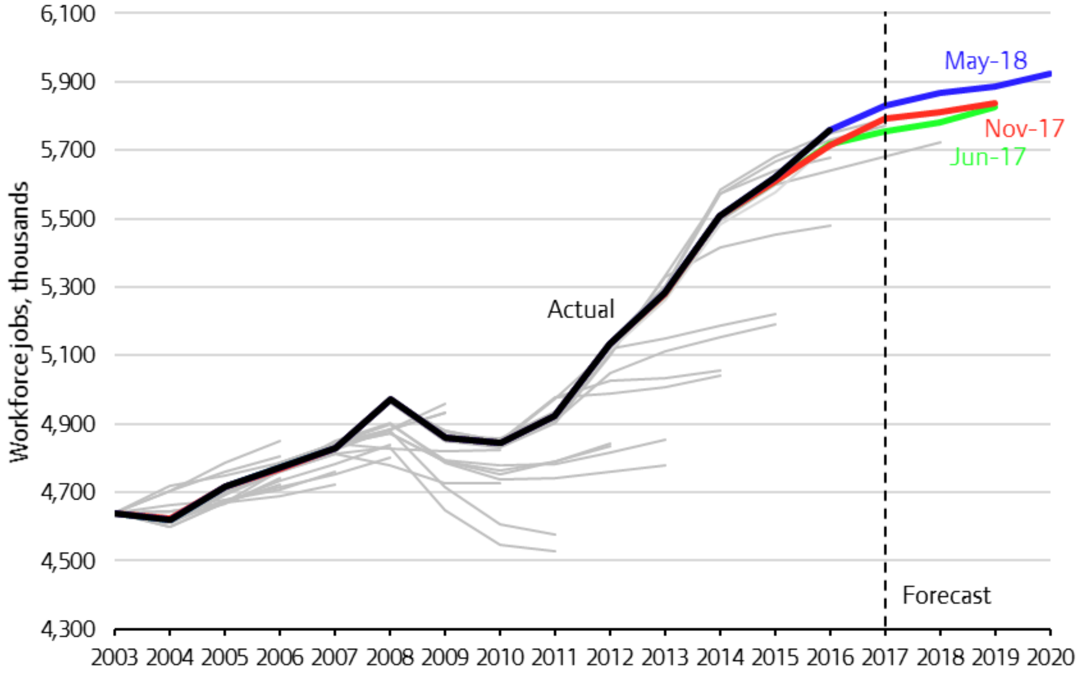
5.3 Comparison with previous forecasts

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 forecast for the number of London's workforce jobs is higher than the November 2017 forecast. In terms of growth rates, the May 2018 forecast is also higher than the previous forecast for the year 2018 but not for the year 2019.

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

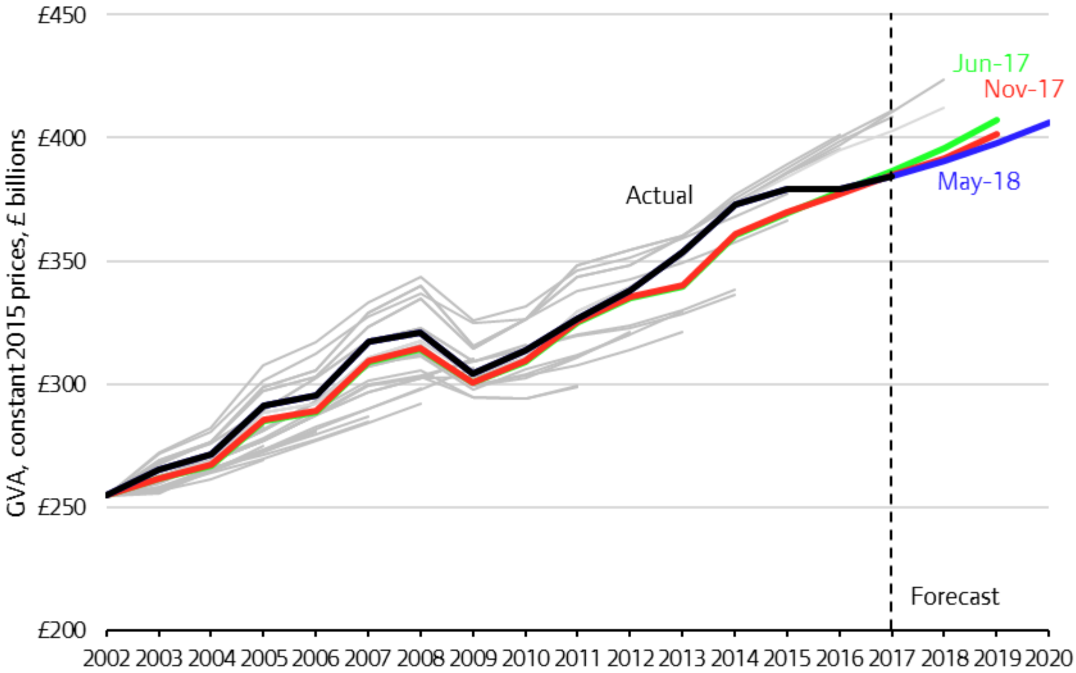
(London workforce jobs, % annual growth)

Forecast	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
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

Meanwhile, the most recent forecast for London's GVA growth is lower than the November 2017 forecast for all three years. This is also evident in terms of the actual forecast size of London's economy.

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
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[72]. So far only experimental official estimates of real regional GVA[73] 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[74]. 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.

[72] ONS Regional GVA (income approach)
[73] ONS Regional GVA (production approach)
[74] 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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