GLAECONOMICS

Forecast report

London's Economic Outlook: Spring 2019
The GLA's medium-term planning projections

June 2019

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Contents

1. Executive summary

GLA Economics' 34th London forecast[1] suggests that:

- London's Gross Value Added (GVA) growth rate is forecast to be 1.5% in 2019. The growth rate is expected to increase marginally to 1.6% in 2020, before reaching 2.2% in 2021.
- London is forecast to see increases in the number of workforce jobs[2] in 2019, 2020 and 2021.
- London's household income and spending are both forecast to increase over the next three years, albeit at a relatively slow rate.

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

Table 1.1: Summary of forecasts

Annual growth rates (per cent)	2018[3]	2019	2020	2021
London GVA[4] (constant 2016, £ billion)	1.8	1.5	1.6	2.2
Consensus (average of independent forecasts)		1.6	2.0	2.0
London civilian workforce jobs	1.6	0.8	0.7	0.8
Consensus (average of independent forecasts)		1.0	0.9	0.8
London household spending (constant 2016, £ billion)	1.7	1.1	1.2	2.4
Consensus (average of independent forecasts)		2.0	2.1	2.2
London household income (constant 2016, £ billion)	1.8	1.0	1.7	2.3
Memo: Projected UK RPI[5] (Inflation rate)	3.3	2.6	2.8	3.0
Projected UK CPI[6] (Inflation rate)	2.3	1.9	2.0	1.9

Sources: GLA Economics' Autumn 2019 forecast and consensus calculated by GLA Economics

[1] The forecast is based on an in-house model built by GLA Economics. For more detail, see: Douglass, G & van Lohuizen, A (2016). 'The historic performance of the GLA's medium-term economic forecast model', GLA Economics Current Issues Note 49, November 2016.
[2] Unless stated otherwise any reference to jobs in the main text refers to workforce jobs.
[3] Historic data for London GVA is based on GLA Economics 'now-casting' estimates, and for workforce jobs from ONS estimates, while household spending and household income is based on Experian Economics data. It should be noted that the 2018 figures for London GVA are estimates.
[4] The methodology used to estimate London's GVA is outlined in Keijonen, M & van Lohuizen, A (2016). 'Modelling real quarterly GVA data for London', GLA Economics Current Issues Note 50, December 2016.
[5] RPI = Retail Price Index. Although not part of the GLA Economics forecast for London. Instead the consensus forecasts provided by HM Treasury are reported here. See: HM Treasury (2019). 'Forecasts for the UK economy: a comparison of independent forecasts', May 2019. Data for 2018 is from the ONS, Inflation and price indices - Office for National Statistics.
[6] CPI = Consumer Price Index. Although not part of the GLA Economics forecast for London. Instead the consensus forecasts provided by HM Treasury are reported here. See: HM Treasury (2019). 'Forecasts for the UK economy: a comparison of independent forecasts', May 2019. Also, since December 2003, the Bank of England's symmetrical inflation target has been annual CPI inflation at 2 per cent. Data for 2018 is from the ONS, Inflation and price indices - Office for National Statistics.

After a request from the UK Government the European Union (EU) has extended the Article 50 process to leave the EU to the end of October from what was the expected leave date of 29 March 2019. A subsequent transition period is expected to last to 31 December 2020. The five London's Economic Outlook's (LEO)[7, 8, 9, 10, 11] since the June 2016 referendum result have examined London's position given this vote in detail. Although progress was made in the talks with a draft withdrawal agreement agreed between the UK and EU, there remains considerable uncertainty about the outcome of the Brexit process as this agreement was rejected by Parliament. It would still, though, only set out the high-level terms of the UK's future relationship with the EU, and this would be the next stage of discussions to the end of 2020. Box 3.2 in Chapter 3 of this forecast summarises what has occurred in the Brexit process since the publication of the Autumn 2018 LEO, and its implications for the economy.

Beyond the large depreciation of sterling seen in the aftermath of the vote and the uncertainty caused about future relationships during the negotiation process the economic shock of the decision has been a bit more delayed than some expected in the run up to the referendum. However, the evidence indicates there has been a dampening effect on the economy and these effects continue as the negotiation process becomes more extended. Overall, economic indicators remain mixed especially compared to where they stood at the beginning of 2016. In the last few months, noticeably as the UK approached the date when it was expected to leave the EU in March, indicators of economic sentiment have declined. In contrast, and in an unusual diversion of trends, the ONS continued to report growth even though it remains below the trend seen in the middle of the decade. There has been a one-off boost to the economy from manufacturer stockpiling in case of a no-deal Brexit. That said, the effects of the decision to leave the EU of lower net international migration, and lower business investment from uncertainty may well continue.

Although trends generally are for an ongoing expansion of London's economy, they indicate as well slower growth than that seen in the middle years of the decade. This moderation in growth is also seen at the UK level. For example, the Bank of England's agents[12] found in the first quarter of 2019 that "contacts reported a further softening in activity over the past few months compared with a year ago", and that "growth in exports of services slowed, in part due to weaker demand for consultancy services". While "54% of businesses reported that Brexit is currently one of the top three sources of uncertainty for them. This proportion has increased from just below 40% in the first half of 2018 and is now at the highest value recorded since the survey was launched". It continued, "over the period since the referendum, there appears to have been three phases to the impact of Brexit uncertainty on [weakening of] investment …" with the "third phase since the middle of 2018 when investment growth has weakened again for firms who say they are more exposed to Brexit uncertainty". Further, the agents noted that "growth in consumer demand slowed a little further, especially for major household purchases". Overall, the underlying picture remained one of modest growth, with softer demand for credit from corporates, slower demand for commercial real estate, intensifying recruitment difficulties, and capacity constraints above normal, particularly in the logistics sector partly due to stockpiling.

There is a broader reputational risk to London and the UK from a drawn-out Brexit process, and its longer-term consequences. For example, a recent Centre for London report[13] finds that London and the Wider South East host 55% of the world's largest 500 companies' European HQs. The most influential element in HQ location decisions is access to talent, which in part in the future will be contingent on the immigration

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[7] GLA Economics (2016). 'London's Economic Outlook: Autumn 2016 The GLA's medium-term planning projections', November 2016.
[8] GLA Economics (2017). 'London's Economic Outlook: Spring 2017 The GLA's medium-term planning projections', June 2017.
[9] GLA Economics (2017). 'London's Economic Outlook: Autumn 2017 The GLA's medium-term planning projections', November 2017.
[10] GLA Economics (2018). 'London's Economic Outlook: Spring 2018 The GLA's medium-term planning projections', May 2018.
[11] GLA Economics (2018). 'London's Economic Outlook: Autumn 2018 The GLA's medium-term planning projections', November 2018.
[12] Bank of England (2019). 'Agents' summary of business conditions - 2019 Q1 | Bank of England', 21 March 2019.
[13] See: Bosetti, N. & Brown, J. (2019). 'Head Office: London's rise and future as a corporate centre'. Centre for London May 2019.

policy adopted. Although at the current time the decline in work-related migration by EU citizens has stabilised.

In terms of credit conditions, the Bank noted that "the availability of secured credit to households had increased slightly in the three months to end-February 2019 (Q1) and was expected to be unchanged over the next three months to end-May 2019 (Q2)". They added that, "the availability of unsecured credit to households was reported to have decreased in Q1 and was expected to decrease further in Q2". And "the overall availability of credit to the corporate sector was reported to have remained unchanged in Q1, and this was the case for small, medium and large businesses. The overall availability of credit to the corporate sector was expected to remain unchanged in Q2"[14].

Consumer confidence in London has alternated between being positive and negative on a month-on-month basis in recent months, having being generally positive over the end of 2016 and all of 2017. Overall it remains above its long-run average and continues to be above the UK average, which has been negative for most of the post-referendum period[15]. Growth by companies in London appears to have stalled as measured by the business activity measure of the Purchasing Managers' Index, despite having bounced back from their post-referendum fall. Unusually, compared with historic experience, reported activity for London had been below that for the UK between October and April.

Data from the Office for National Statistics (ONS) show that the UK economy continues to grow and at a slightly better than expected pace in 2019 so far, with output increasing by 0.5% in Q1 2019 compared with the previous quarter. This was a bit faster than the 0.2% quarterly growth rate seen in Q4 2018, although some of it can be attributed to manufacturer stockpiling to manage the uncertainty around Brexit. On a year-on-year basis output growth in Q1 2019 remained sluggish at 1.8%, although this was an improvement on the 1.4% growth seen in Q4 2018[16].

Meanwhile, inflation – having risen due in part to the large depreciation of sterling after the referendum – has continued to fall back and is now around the Bank of England's inflation target. Consumer Prices Index (CPI) inflation fell to 1.8% in January 2019 and had risen 0.3 percentage points to 2.1% by April 2019[17]. Although inflation has eased and output growth remains sluggish, the Governor of the Bank has stated, "based on the MPC's [Monetary Policy Committee's] conditioning assumption of a smooth Brexit, the Committee continues to judge that an ongoing tightening of monetary policy over the forecast period, at a gradual pace and to a limited extent, would be appropriate to return inflation sustainably to the 2% target"[18]. This is because the Bank's view is that the economy is operating at or near capacity.

The growth in jobs in London has continued and at a faster rate than that seen in the UK as a whole. The number of jobs in London increased to 6.087 million in Q1 2019, an increase of 123,000 jobs (2.1%) from a year earlier[19] and a new record high for this series which began in 1996. The employment rate in London stood at 74.9% in the three months to April 2019, a near record high. However, although real weekly earnings in Great Britain have continued to rise into 2019 they remain below their March 2008 peak[20]. While inflationary pressures remain, and with employment standing at around record levels there is speculation in both directions as to the future course of real earnings.

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[14] Bank of England (2019). 'Credit Conditions Survey', 2019 Q1, 18 April 2019.
[15] Douglass G. & Orellana, E. (2019). 'London's Economy Today - Issue 200' - April 2019 | London City Hall
[16] ONS (2019). 'GDP first quarterly estimate, UK - Office for National Statistics', 10 May 2019.
[17] ONS (2019). 'Consumer price inflation, UK - Office for National Statistics', 22 May 2019.
[18] Bank of England (2019), 'Inflation Report - May 2019 | Bank of England', 2 May 2019.
[19] Regional labour market statistics in the UK Statistical bulletins - Office for National Statistics.
[20] ONS (2019). 'Labour market overview, UK - Office for National Statistics', 14 May 2019.

Risks to the economy have continued their slow upward trajectory seen throughout 2018. The main risk remains associated with the ongoing Brexit process, which appears to continue to dampen economic sentiment. The extension of the Article 50 process has increased uncertainty, and so is unlikely to be beneficial to growth over the coming year. As observed in all published LEOs since the Brexit vote, the longer-term impact of the vote remains hard to model precisely although the consensus from scenario analyses is that they will be negative and increasingly so the 'harder' Brexit scenarios get. The exact long-term growth prospects will ultimately be highly dependent on what post-Brexit economic relationships and policies are followed.

Other risks to the UK economy also persist. Thus, despite slight improvement over 2018 as a whole[21], UK productivity growth fell in the last two quarters of the year. If there is not a pick-up in productivity growth, as some forecasters think may be the case, it will continue to act as a dampener on GDP growth. It is one of the reasons to believe the economy may be near capacity despite slow growth.

There have also been concerns for the global economy. One risk, as highlighted in previous LEOs, is the high debt levels seen in China which may affect the economic stability of that country in the longer run and therefore have potential knock-on impacts on the global economy. The disruptive effects on the world economy of an intensification of the current regional conflicts also cannot be discounted. But, at the beginning of May, the BoE was seeing improved prospects for global growth[22].

In the following weeks a major risk materialised. The continuing trade tensions between the US and China became a trade war as both countries increased tariffs on imports. More generally the increased protectionist sentiment in the US and to an extent in other countries is by itself a risk to global growth.

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

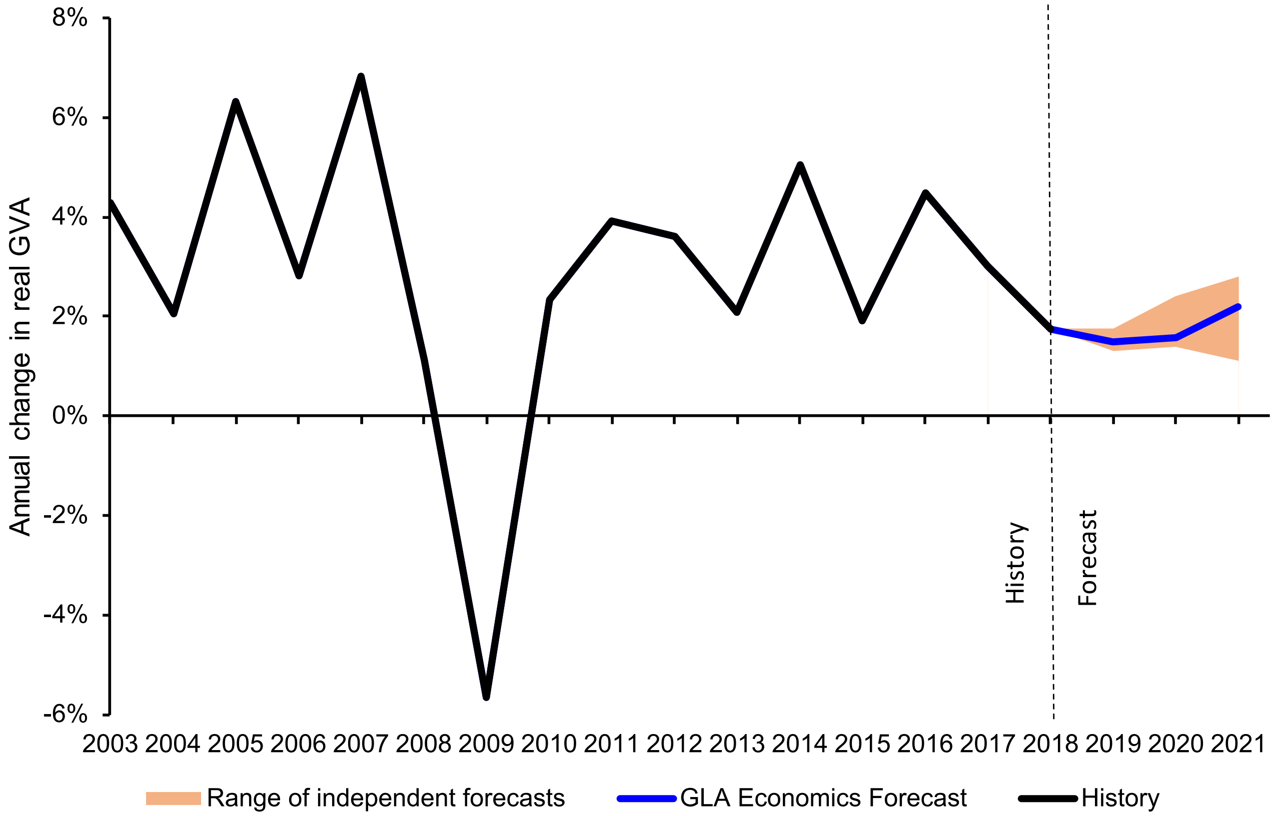
The normalisation of monetary policy in the United States continues and this has the potential for some negative knock-on effects. This could be especially destabilising if differing stages in various countries monetary policy cycles interact to exacerbate the effect. The normalisation is also impacting on the prices of other financial assets as shown by the recent instability in global stock markets. Still, although the tightening in US monetary policy continued into the end of 2018, it is likely to take some time yet to return fully to a more historically normal monetary policy regime with speculation that the pace of tightening may be relaxed.

In conclusion, the economic environment continues to be more uncertain than usual at both the UK and London levels. However, despite this the outlook for the London economy remains one of expected growth for the coming few years. Although inflation remains moderate, as there are inflationary pressures it is possible that growth in real income will be somewhat subdued in the coming years. In turn, this is likely to put some restraint on household spending, which had been a large driver of economic growth in the first half of the decade. Still, despite the likelihood of further tightening in the coming years, UK monetary policy is most likely to stay at what are historically very accommodating levels for a time to come, with this

[21] ONS (2019). 'Productivity economic commentary - Office for National Statistics', 5 April 2019.
[22] Bank of England (2019). 'Inflation Report - May 2019 | Bank of England', 2 May 2019.

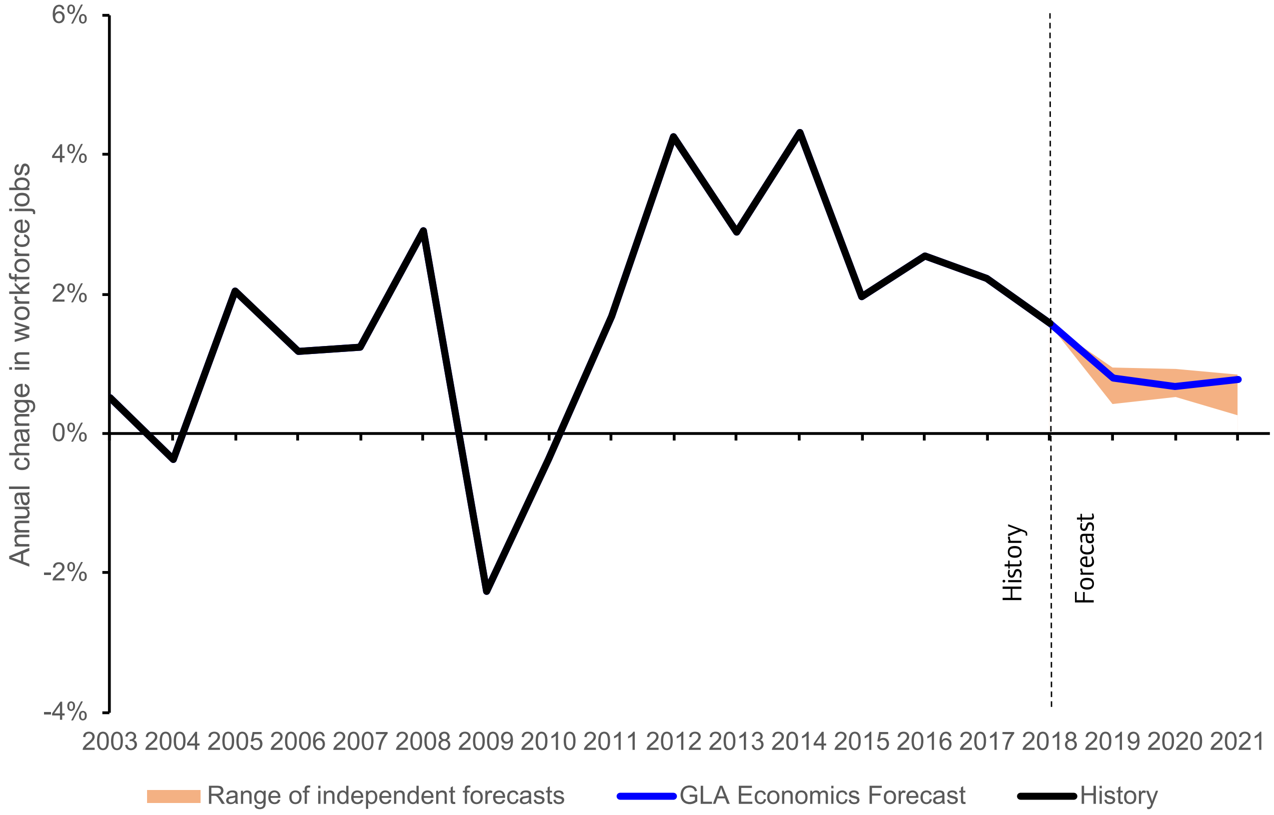
providing support to the national and London economies. While business sentiment has fallen, and London consumer confidence about the short-term future economic outlook has fluctuated markedly since the 2016 referendum, the economy has continued to grow and sterling remains low. Fiscal policy is also moving in a more expansionary direction with the Government announcing the end of austerity. Of the sectors of the UK economy, Business services and finance continues to grow (albeit at a more subdued rate) and given its size in London its continued growth should provide some foundation to London's economic growth. Balancing all these factors acting on London's economy it is likely that both output (Figure 1.1) and employment (Figure 1.2) should see continued growth in the next few years, albeit at a more subdued rate than seen earlier this decade.

Figure 1.1: Trend and forecast output growth



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

Figure 1.2: Trend and forecast employment growth



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

2. Introduction

The spring 2019 edition of London's Economic Outlook (LEO) is GLA Economics' 34^{th} 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: London continues to see growth despite economic uncertainty at home and abroad

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

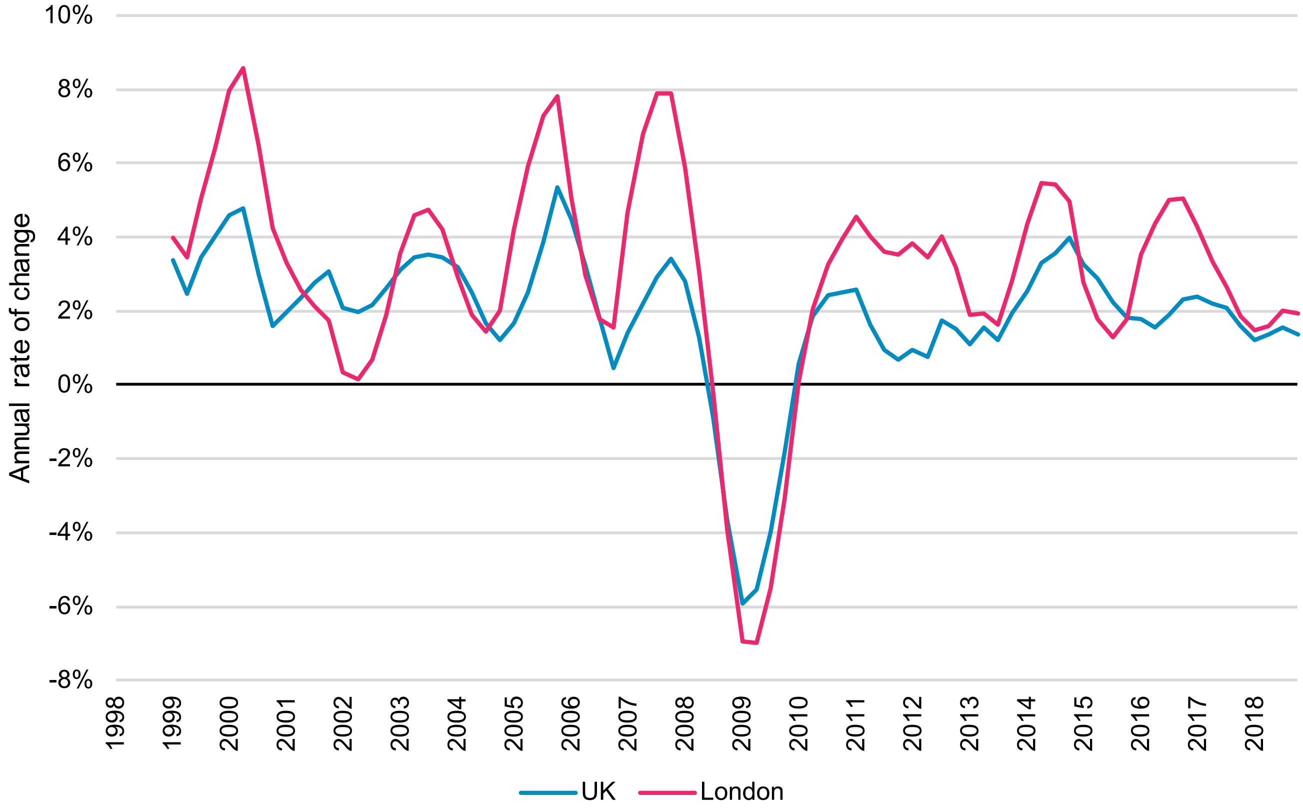
3.1 The London economy

London's economy – as measured by gross value added (GVA) – grew at a moderate pace of 1.9% on average between Q4 2017 and Q4 2018. This continues a year of relatively subdued growth whereby the capital's economy showed growth of just 1.8% on average in 2018.

The UK has also seen generally subdued rates of real GVA growth in recent quarters. The UK grew 1.4% on average in 2018 - down from 2.1% in 2017.

Comparing London and the UK more closely, the capital has generally had a slightly faster rate of annual GVA growth than the rest of the country since the middle of 2017. 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 2018 – shows that London continued the trend seen since Q1 2016 and grew at a faster rate than the UK (1.9% versus 1.4%). Further details on the historic GVA growth rate data for London is given in Box 3.1.

Figure 3.1: Annual rate of GVA growth for London and the UK, constant prices
Last data point is Q4 2018

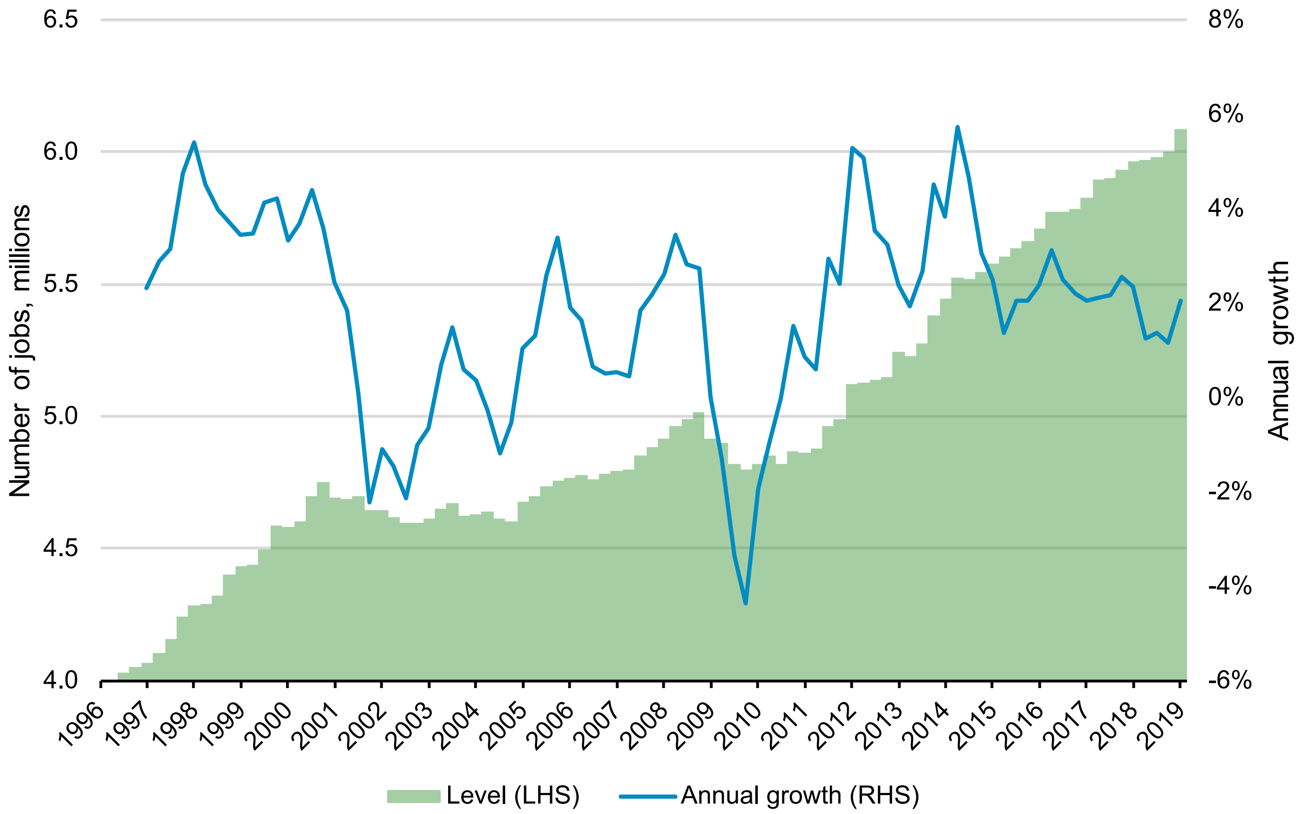


Source: ONS Regional GVA, GLA Economics

Looking at the labour market, London's employment rate has been hovering around at one of the highest levels (and the unemployment rate has been at one of the lowest levels) since data collection began in 1992. The employment rate shows the percentage of residents aged 16-64 who are in work and stood at 74.9% in the three months to April 2019, up 0.2 percentage points on the year. The unemployment rate shows the proportion of the 16 and over resident population who are unemployed but are wanting to work and stood at 4.3% in the three months to April, down 0.9 percentage points on the year. For comparison the UK's employment rate stood at 76.1% in the three months to April and the unemployment rate was 3.8%.

The strong performance of London's labour market is also reflected in the number of jobs. The number of jobs in London (regardless of whether they are taken by London residents or not) grew 2.1% year-on-year in Q1 2019, the equivalent of 123,000 jobs, to reach 6.087 million (Figure 3.2). Moreover, the year-on-year rate of job creation in London was slightly faster than the UK average for Q1 2019 (1.7%).

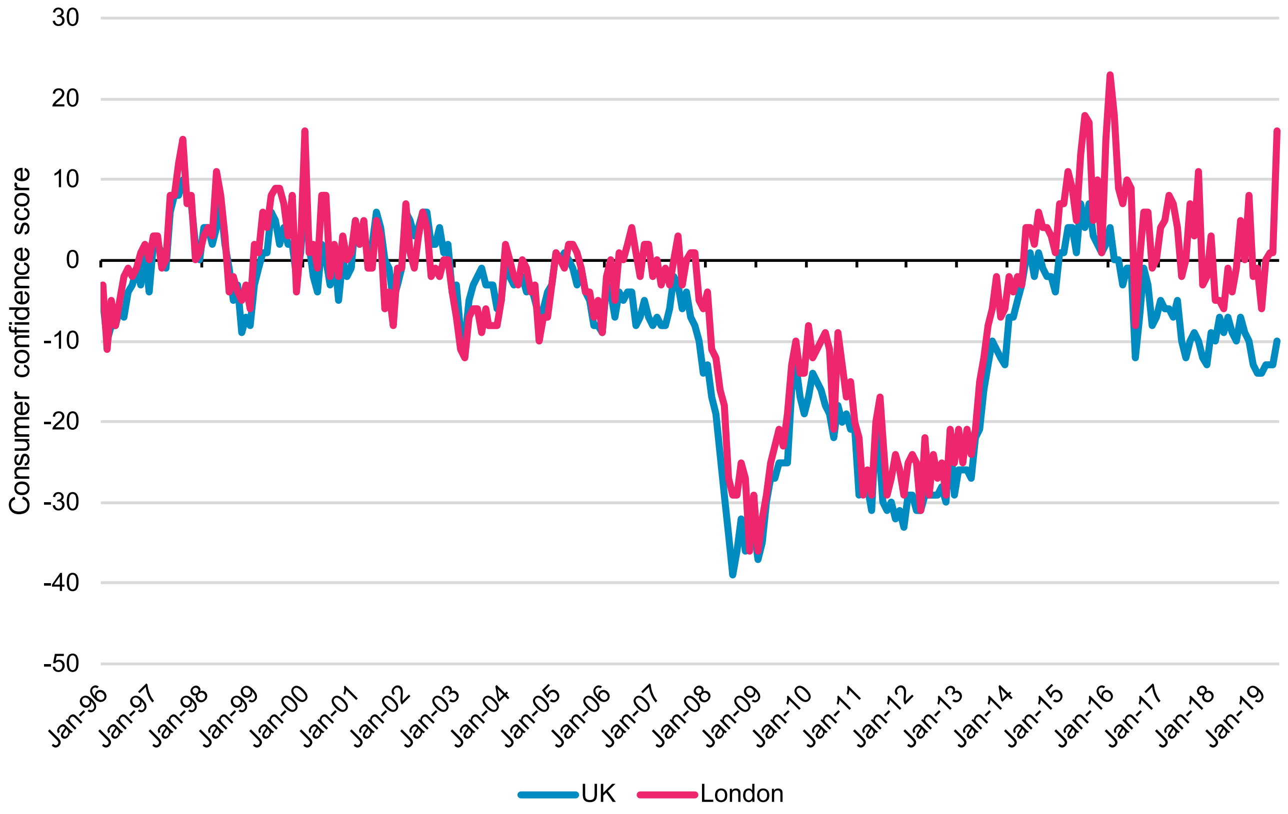
Figure 3.2: Number of workforce jobs in London
Last data point is Q1 2019



Source: ONS Workforce Jobs

London's economy is affected by increases in consumer spending, and linked to and in part driving this is consumer confidence. Data from GfK-NOP suggest that London consumers were positive towards the next 12 months in terms of their household finances, the general economy and the purchasing climate (Figure 3.3). The consumer confidence data for London has remained slightly positive for the past few months before increasing markedly in May (standing at +16 up from +1 in April) after being negative for much of 2018. Consumer confidence in London is also significantly higher than for the UK (-10) as a whole.

Figure 3.3: Consumer confidence
Last data points are May 2019

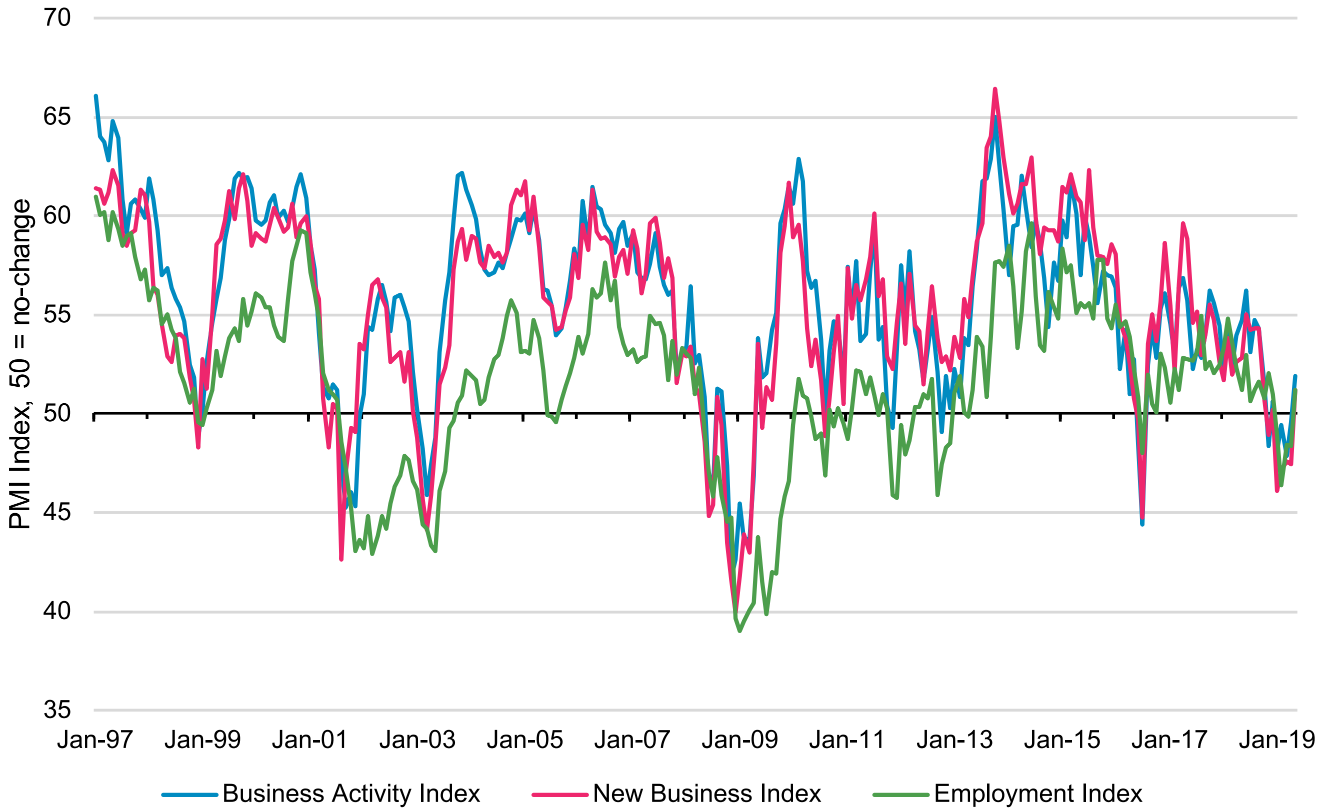


Source: GfK-NOP

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 a slight improvement in business conditions in London, with firms reporting increases in the levels of activity, new business and employment (Figure 3.4). A slowdown in the economy, but without a stalling of economic growth, is supported by London private sector firms remaining optimistic (but at a lower level than before) towards business conditions over the next year. The PMI at 65.6 in May, although up from a recent low of 59.0 in December, remains below the average of 68.2 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 May 2019



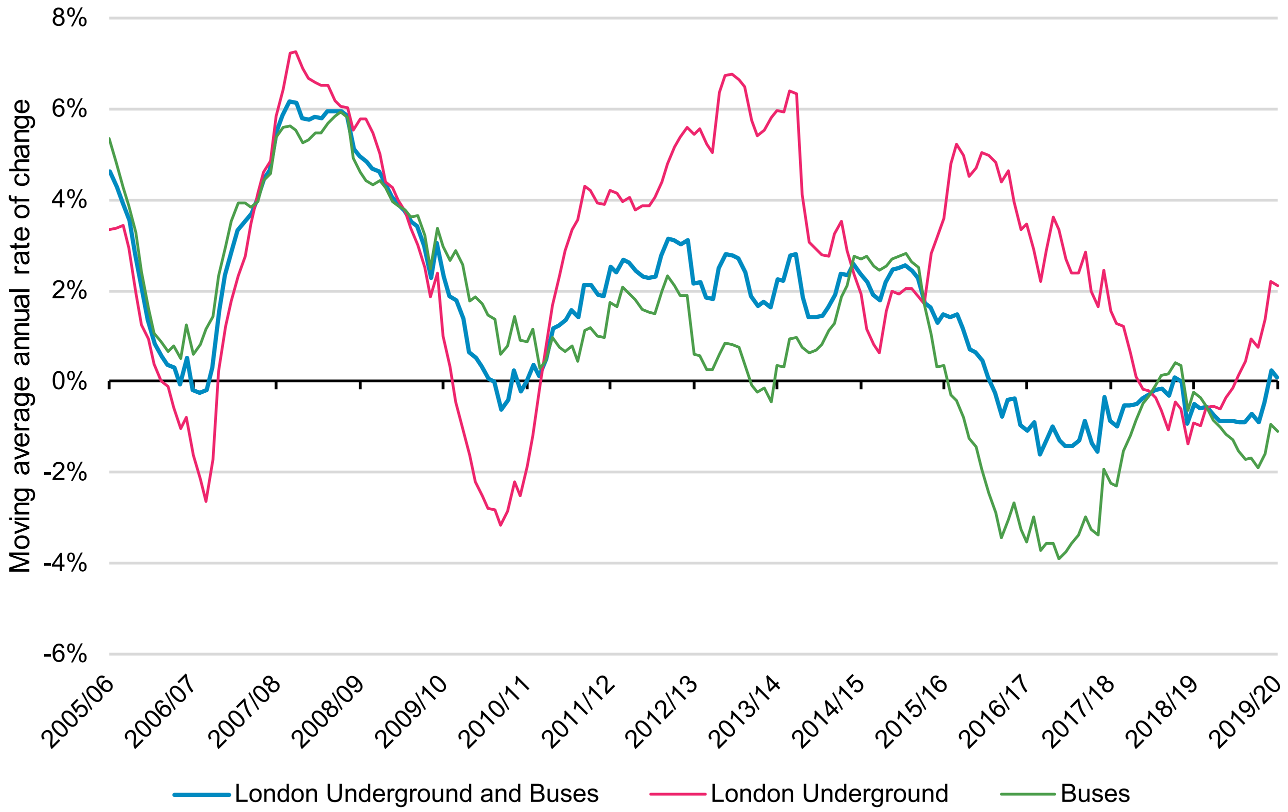
Source: IHS Markit

Despite that positive forward looking PMI other measures of expectations for the London economy in different surveys remain negative. Thus, the London Chambers of Commerce and Industry (LCCI) Capital 500 Quarterly Economic Survey found in Q1 2019 that the net balance of this survey remained negative as it has been since Q2 2017[26], while "for the first time in the history of the Capital 500, all export and domestic demand figures are in negative territory".[27]

Public transport use is also another indicator that can shed light on the current state of the London economy. For example, more people travelling in London could reflect more jobs i.e. they are commuting to work. Alternatively, it could reflect increased leisure activities like shopping, which could indicate an increase in household spending. Having noted this, the moving average of the annual rate of change in total passenger journeys in London had been declining in recent periods but turned marginally positive in March 2019 and remained so into April 2019 (Figure 3.5). In more detail, by mode of transport, the moving average of the annual rate of change in Tube passenger journeys had been negative since mid-2017 (this was the first time it has been negative in almost eight years) but turned positive again in the last few months of 2018, while the corresponding measure for bus use has been negative since the first few months of 2018.

[26] London Chamber of Commerce and Industry (2019), 'Capital 500: London Quarterly Economic Survey – Q1 2019'. April 2019.
[27] Ibid.

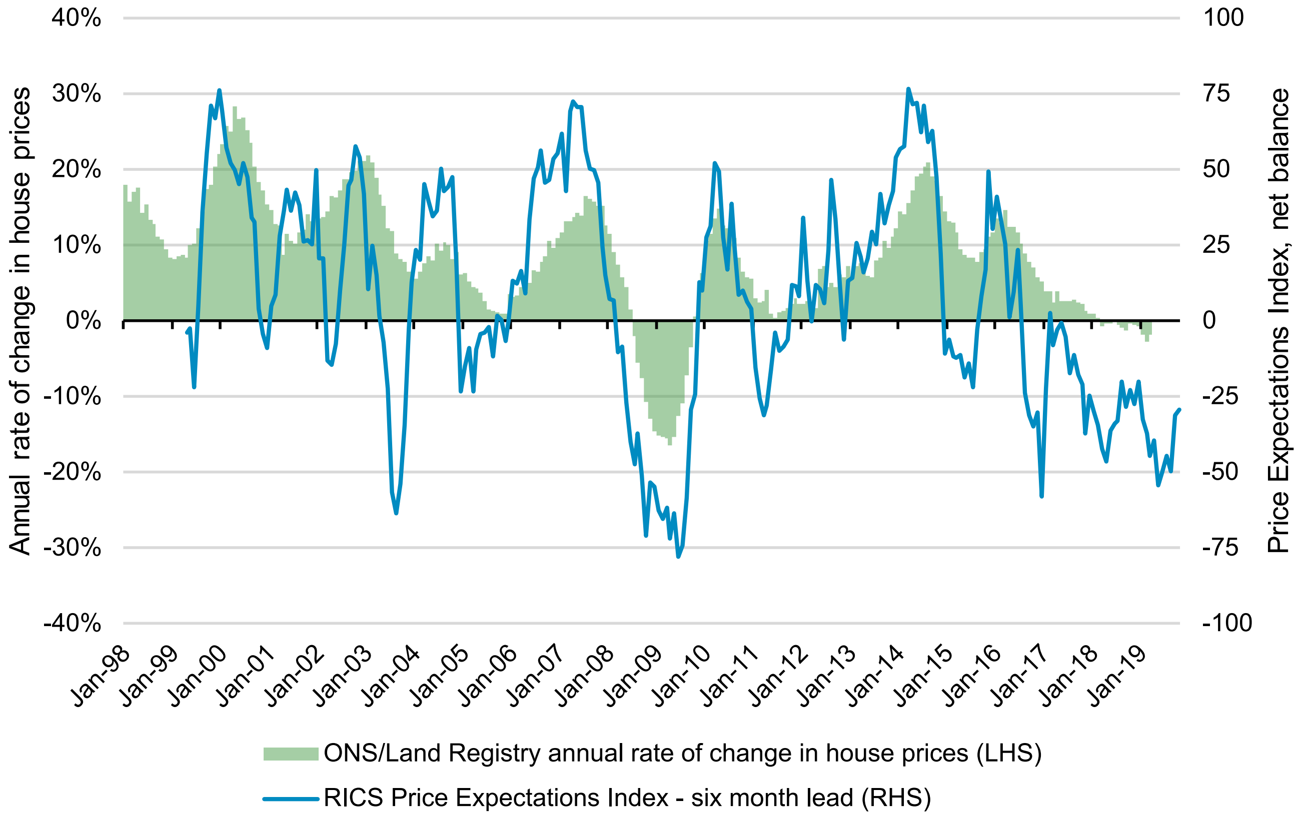
Figure 3.5: Public transport use in London
Last data point is the 27-day period ending 27 April 2019



Source: Transport for London

Finally, most of the evidence on London's housing market points to the moderation in prices seen in 2018 carrying over into 2019. The average house price in London was £467,400 in March, according to data from the ONS and Land Registry. This has fallen 1.9% from a year earlier. This follows on from the price declines for every month since March 2018 which were the first annual declines since September 2009. This is in line with what survey data has been signalling for some months now. For instance, property surveyors responding to the Royal Institution of Chartered Surveyors (RICS) Housing Market Survey in April have been reporting, on balance, a reduction in London's house prices since September 2016. 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 3.6).

Figure 3.6: House price inflation in London and the RICS Future Expectations Index
Last data points are March 2019 for house prices and April 2019 for RICS Housing Market Survey



Source: ONS/Land Registry House Price Index, RICS

Overall, the indicators discussed above suggest that London's economy is facing a challenging environment but appears to still be growing. This is a relatively strong performance given the very prolonged uncertain economic environment it has experienced with this uncertainty unlikely to dissipate in the very near future. While GVA growth in London has continued, it remains slower than most of the rates reported following the financial crisis. Similarly, despite a tight labour market this still appears not to translate into strong real earnings growth, although consumer confidence has remained more buoyant than it has nationally. Additionally, firms' views towards the coming year are mixed.

Box 3.1: Changes to historic GVA estimates for London

The medium-term forecasts for London's economy presented in this publication are based on a revised historic GVA series for London published by the ONS. The historic figures for the year 2017 are also based on this ONS data, whereas the estimates provided in the previous LEO release in November 2018 were based on GLA estimates. This box explains the new data and the implications of this change on GLA Economics' GVA estimations.

In December 2018, the ONS published a first non-experimental "balanced estimate" of historic nominal and real GVA (GVA (B)) for English regions & UK nations[28] between 1998 and 2017. This new measure of output not only 'balances' the old income and production approaches of measuring GVA to measure the economy into a single estimate at the regional level but was also granted National Statistics status, thus

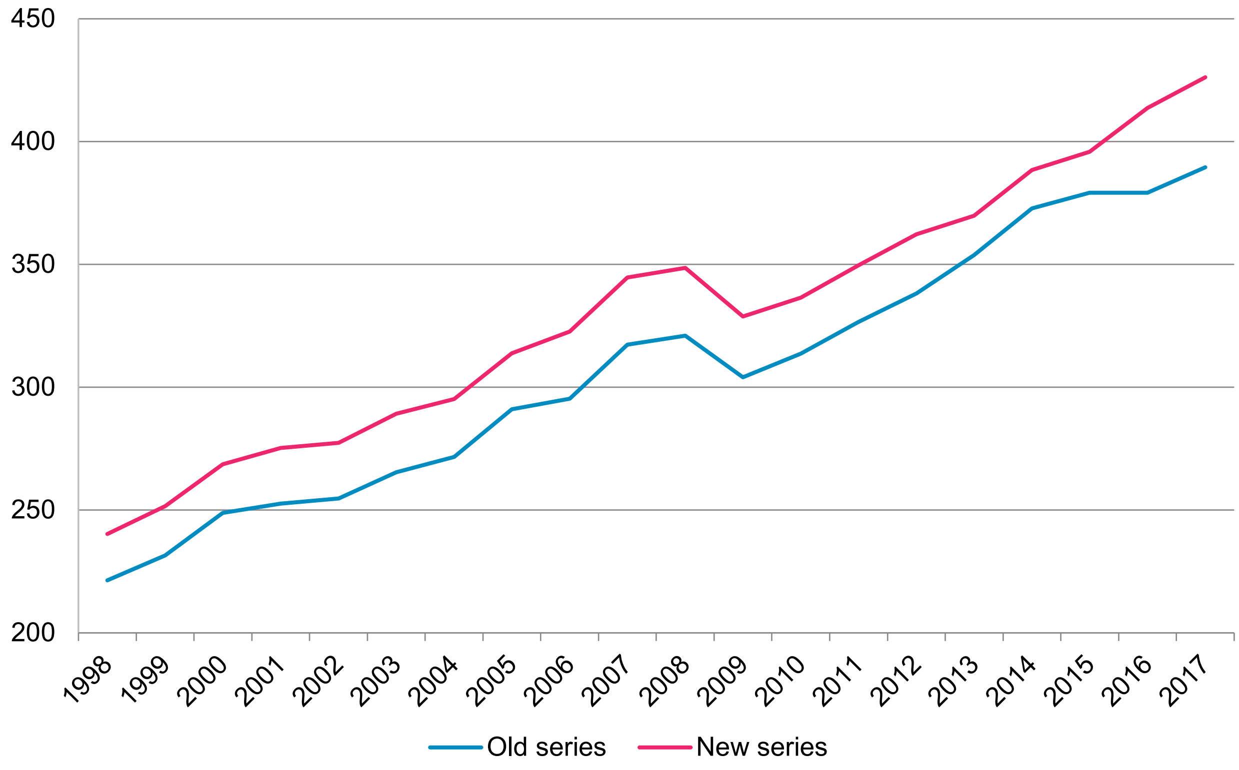
[28] ONS (2018). 'Regional economic activity by gross value added (balanced), UK: 1998 to 2017'. December 2018.

becoming the new preferred reference measure of regional output in the UK. This is what GLA Economics has recently adopted as the back series for the forecasts of London's economy as the new real series is considered to be an improved measure of the old historic real GVA series employed by GLA Economics up to November 2018 – 'old series' hereafter.

Previously, the only available National Statistic in the GVA datasets for London was nominal GVA (as measured by the income approach) for which there was not a deflator, and so no equivalent real measure of income. Consequently, to estimate historic real GVA for London GLA Economics used the ONS experimental GVA (production approach) deflator[29] in its 'old series'. This approach has a clear deficiency that the calculation of real GVA uses two measures of GVA which are estimated through different methodologies.

A comparison between the old historic series of real GVA for London and the new ONS real GVA(B) series is provided below. Figures 3.7 and 3.8 provide the new and old series in terms of level and growth rates, and Figures 3.9 and 3.10 are the differences in the two series.

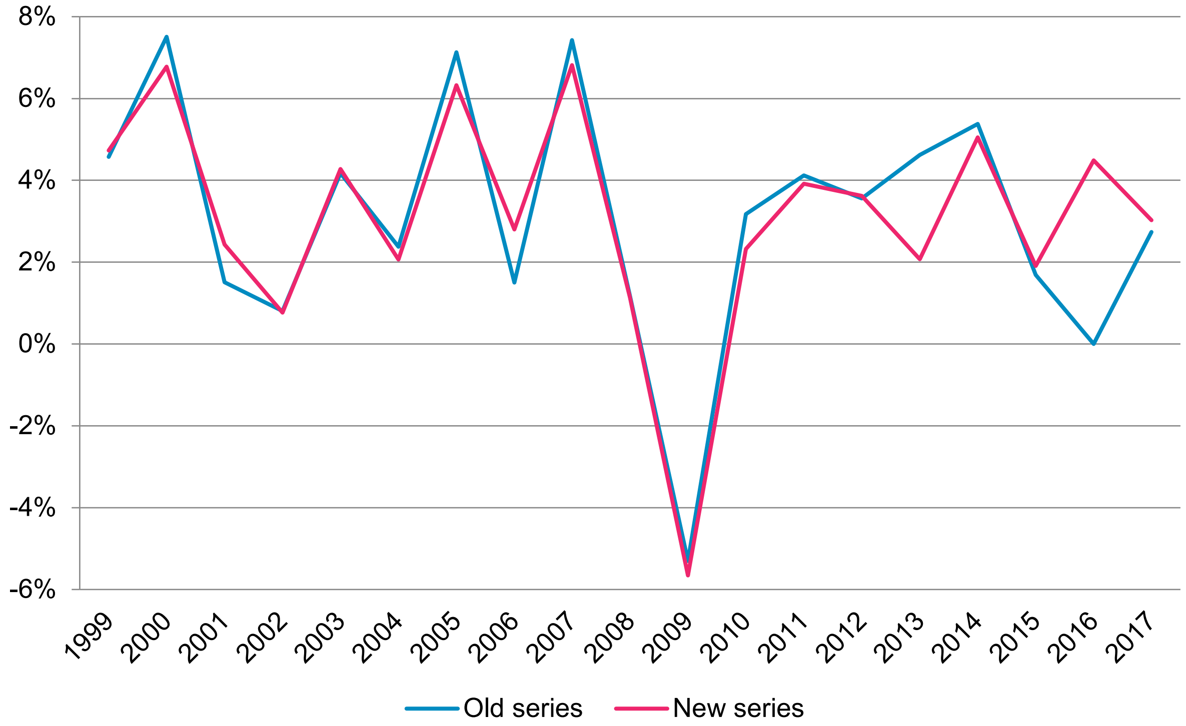
Figure 3.7: Comparison of the London old real GVA series vs the new real GVA series in £billion, 1998-2017



Source: GLA Economics based on ONS data.

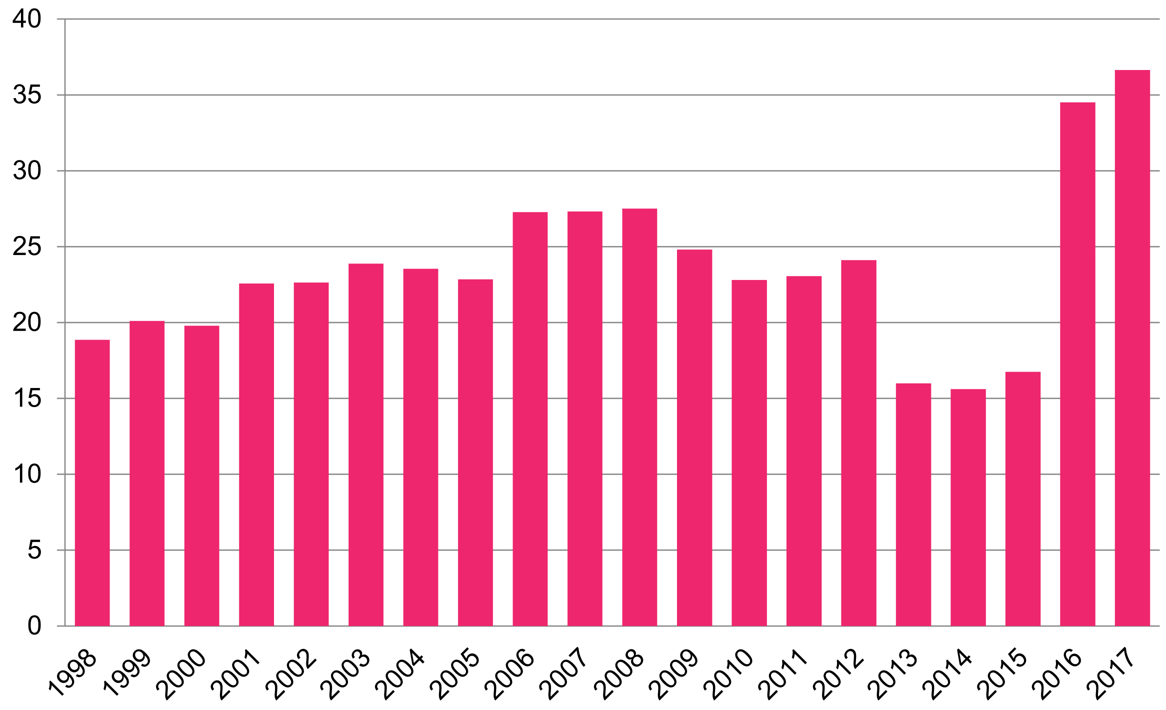
[29] A more detailed explanation of this methodology can be found here.

Figure 3.8: Comparison of the London old real GVA series vs the new real GVA series in annual growth rates (%), 1999-2017



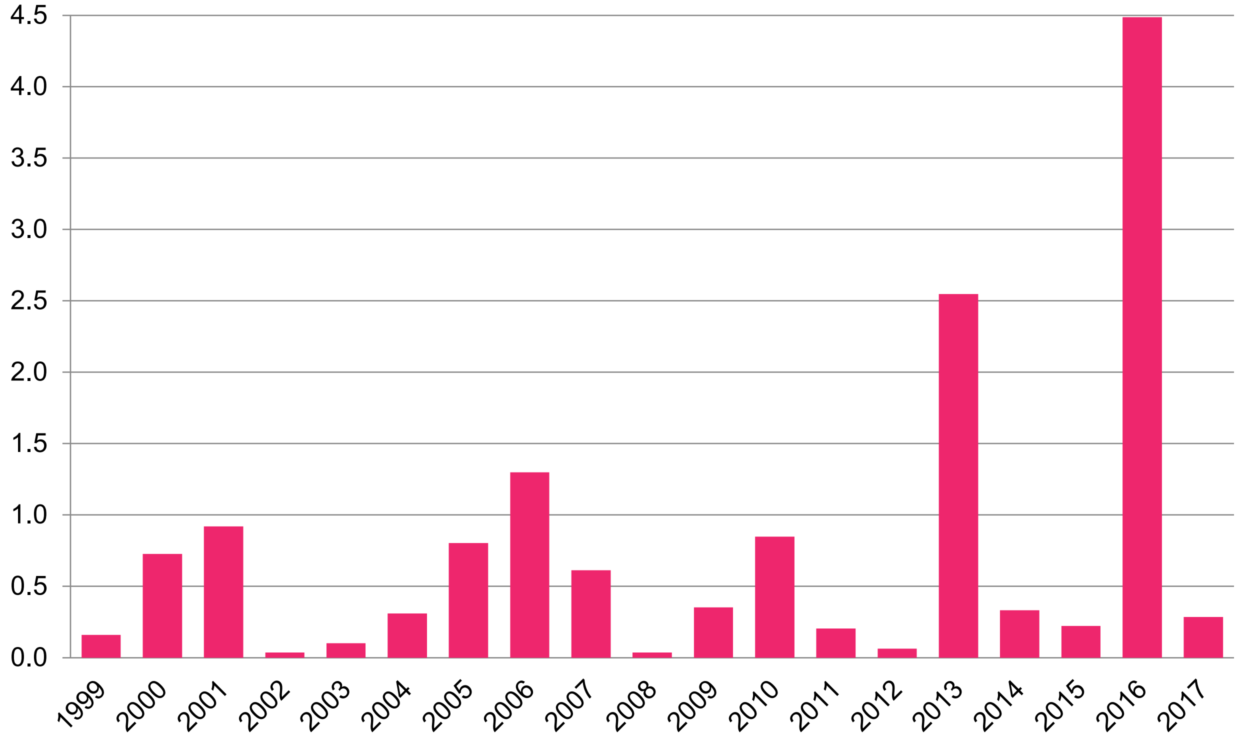
Source: GLA Economics based on ONS data.

Figure 3.9: Absolute difference between the two series in £billion of London real GVA, 1998-2017



Source: GLA Economics based on ONS data.

Figure 3.10: Absolute difference between the two series in terms of annual growth rate of London real GVA (percentage points), 1999-2017



Source: GLA Economics based on ONS data.

As can be observed in the charts above, the new historic real GVA series for London implies a higher starting level[30] at the beginning of the series compared to the old data – the difference is £23.5bn on average for the period 1998 to 2017. In terms of annual growth rates, the average difference between these two series cannot be ignored for the whole period 1999-2017 - 0.8 percentage points in absolute terms – but this average includes important outliers in years 2013 and 2016 with 2.5 and 4.5 percentage points of difference between the two series in absolute terms, respectively. These significant deviations are likely due to large errors in the London inflation estimates provided by the old GLA Economics methodology[31].

The above-explained revisions to the historic real GVA series for London might have an impact on the short-term (year 2019) and the medium-term (years 2020 and 2021) forecasts presented in this publication -chapter 5 - compared to previous LEO releases.

GLA Economics is committed to keep working with the ONS in the future to improve the provision of regional data for London.

[30] This change in level is partly due to the different methodology employed for the new GVA series but also to a different base year (2016) compared to the old GVA series (2015).

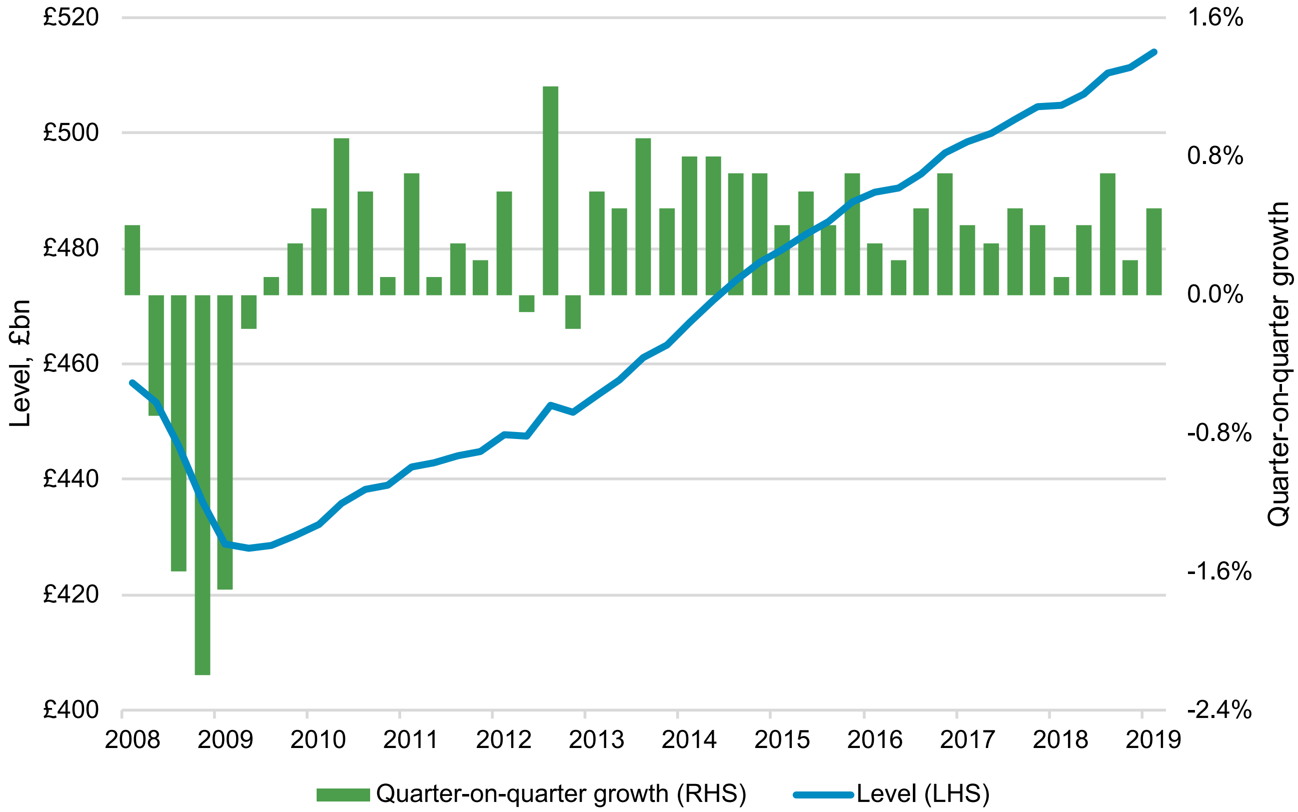
[31] This methodology used the GVA (production approach) deflator in London as a measure of London's inflation rate.

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 0.5% in Q1 2019 according to the first estimate from the ONS (Figure 3.11). While the estimates of GDP are potentially subject to revisions at a later stage, this was an improvement on the slow growth seen in Q4 2018 (0.2%). On the other hand, the Q1 growth rate was no faster than the average growth rate seen since Q1 2013 (0.5%). Commenting on the GDP numbers the ONS noted that "the strength in quarterly growth is in part due to the low December 2018 monthly growth in the base period, which makes the current period look stronger in comparison. Having fallen by 0.3% in December 2018, there was offsetting strength in January 2019 as output increased by 0.5%, followed by a further increase of 0.2% in February 2019. Real GDP growth is estimated to have contracted by 0.1% in March 2019"[32]. Real GDP now stands 12.6% above its pre-financial crisis height of Q1 2008.

Figure 3.11: UK GDP in real terms

Last data point is Q1 2019 (First estimate)



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

Looking at year-on-year changes in GDP gives a mixed picture of the economy's performance. The UK economy grew at an annual rate of 1.8% in Q1 2019 which is below the post 2012 average of 2.2%. Although this is still the highest rate since Q3 2017.

Looking slightly further back most, but by no means all, sectors of the UK economy grew over the year to Q1 2019 although at varying rates of speed. Construction output grew slowly at an annual rate of 2.9%, up from the 0.3% annual growth seen in Q4 2018. Strong growth in output was also seen in the Transport, storage and communication (4.5%), Distribution hotels and catering (4.3%) and Mining & quarrying; oil & gas extraction (6.1%). However, the Business services and finance sector saw growth slow to 0.9% in Q1

[32] ONS (2019). ' GDP first quarterly estimate, UK: January to March 2019', 10 May 2019.

2019, down from 1.5% in Q4 2018, although Manufacturing resumed growth (1.2%) after falling in Q4 2018 (-1.3%) (Table 3.1).

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

Broad industry group	2017			2018				2019
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Agriculture, forestry, and fishing	3.1%	4.0%	3.2%	-1.1%	-2.5%	-3.3%	-2.4%	-2.1%
Mining & quarrying; oil & gas extraction	0.8%	-3.9%	-0.6%	1.4%	2.5%	4.7%	8.7%	6.1%
Manufacturing	1.4%	3.0%	3.2%	2.4%	1.8%	0.9%	-1.3%	1.2%
Electricity gas, steam and air	-4.6%	1.4%	-1.7%	3.5%	-1.3%	-1.8%	-2.6%	-5.9%
Water supply, sewage	2.9%	2.3%	1.7%	-3.3%	-1.8%	0.2%	-0.7%	-0.4%
Construction	7.6%	7.2%	4.5%	-0.4%	0.0%	1.1%	0.3%	2.9%
Distribution hotels and catering	2.8%	2.4%	0.8%	1.4%	2.8%	3.4%	3.5%	4.3%
Transport, storage and communication	6.4%	4.2%	3.7%	3.4%	3.4%	4.6%	3.9%	4.5%
Business services and finance	2.2%	2.1%	2.0%	1.7%	1.8%	1.5%	1.5%	0.9%
Government and other services	0.8%	0.9%	0.4%	0.0%	-0.1%	0.2%	1.1%	1.2%

Source: ONS (2019). 'UK Economic Accounts', 29 March 2019.

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)[33]. The latest data also refers to Q1 2019 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	2017			2018				2019
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Households	2.3%	1.6%	2.0%	1.7%	1.9%	1.8%	1.7%	1.9%
Non-profit institutions serving households	-0.1%	-0.6%	-1.2%	-1.0%	-1.5%	-1.4%	-1.4%	-1.8%
General government	-0.1%	0.0%	0.0%	0.8%	-0.1%	-0.3%	1.0%	2.2%
Gross fixed capital formation	3.8%	2.6%	3.9%	2.1%	-0.4%	0.2%	-1.1%	1.7%

Source: ONS (2019). 'UK Economic Accounts', March 2019.

Household expenditure is important to the UK economy, with it contributing around two-thirds to UK GDP in 2018. However, the latest estimates showed that consumer spending grew modestly at 1.9% year-on-year in real terms in Q1 2019. The other notable trend is for gross capital formation. This saw an annual rate of growth of 1.7% in real terms during Q1 2019, after declining by 1.1% in Q4 2018 and having grown at a relatively subdued pace though 2018.

Forecasts of the UK economy

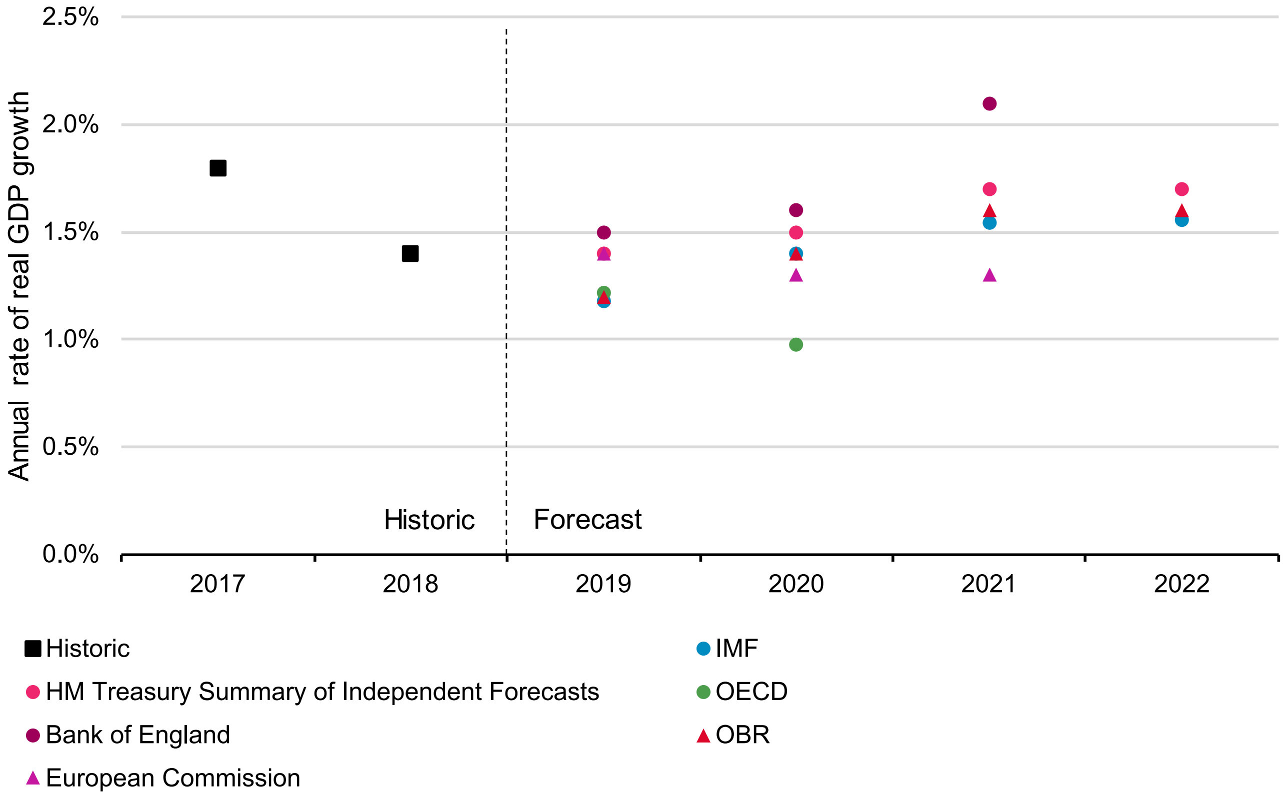
Forecasts suggest that the UK economy will continue growing over the next couple of years, though different organisations take different views on the expected growth trajectory. Most of these differences can be linked to different interpretations of the impacts of Brexit, inflation, productivity and global factors like the disruption caused by trade disputes and general global economic sluggishness. For example, some of the impact of Brexit is dependent on whether a withdrawal agreement with the EU can be passed through the UK Parliament as well as whether the UK can secure trade deals with other countries and/or roll over

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

existing EU trade deals. An update on the progress of Brexit so far is presented in Box 3.2, while the other risks to the forecasts are discussed in greater detail in Section 3.4.

Acknowledging the above, Figure 3.12 shows the range of forecasts for real UK GDP growth. This includes the International Monetary Fund's (IMF) forecast which in the April edition of the World Economic Outlook expects GDP growth of 1.2% in 2019 (down 0.3 percentage points from January 2019), followed by 1.4% in 2020 (down 0.2 percentage points from January)[34]. It also includes the HM Treasury's summary consensus forecast for the UK economy based on research from a variety of organisations. From this, the latest average forecast is for growth of 1.4% in 2019 and 1.5% in 2020[35], so generally unchanged on the slow growth of 2018. Meanwhile, the Office for Budget Responsibility (OBR) lowered their forecast of UK GDP growth for 2019 from 1.6% to 1.2%, though they then expect the rate of expansion to pick up to 1.4% in 2020 before hitting 1.6% in 2021 and 2022[36].

Figure 3.12: Forecasts of real UK GDP growth



Source: ONS (2019), 'GDP first quarterly estimate, UK: January to March 2019', May 2019; IMF (2019), 'World Economic Outlook: Growth Slowdown, Precarious Recovery' April 2019, HM Treasury (2019). 'Forecasts for the UK economy: a comparison of independent forecasts', May 2019; OECD (2019), 'Economic outlook', May 2019; Bank of England (2019), 'Inflation report', May 2019; OBR (2019), 'Economic and fiscal outlook', March 2019; and European Commission (2019), 'Spring 2019 Economic Forecast: Growth continues at a more moderate pace', May 2019.

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.

[34] IMF (2019). 'World Economic Outlook: Growth Slowdown, Precarious Recovery', April 2019.
[35] HM Treasury (2019). 'Forecasts for the UK economy: a comparison of independent forecasts', May 2019.
[36] Office for Budget Responsibility (2019). 'Economic and fiscal outlook'. March 2019.

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

	HM Treasury's Average of Independent Forecasters (May 2019)		Office for Budget Responsibility (March 2019)	
	2019	2020	2019	2020
Annual real GDP growth rate	1.4%	1.5%	1.2%	1.4%
LFS unemployment rate	4.1%	4.1%	4.1%	4.1%
Current account	-£79.6bn	-£73.4bn	-	-
Public sector net borrowing (financial year)	£29.9bn	£26.3bn	£29.3bn	£21.2bn

Sources: HM Treasury (2019). 'Forecasts for the UK economy: a comparison of independent forecasts', May 2019; and OBR (2019). 'Economic and fiscal outlook', March 2019.

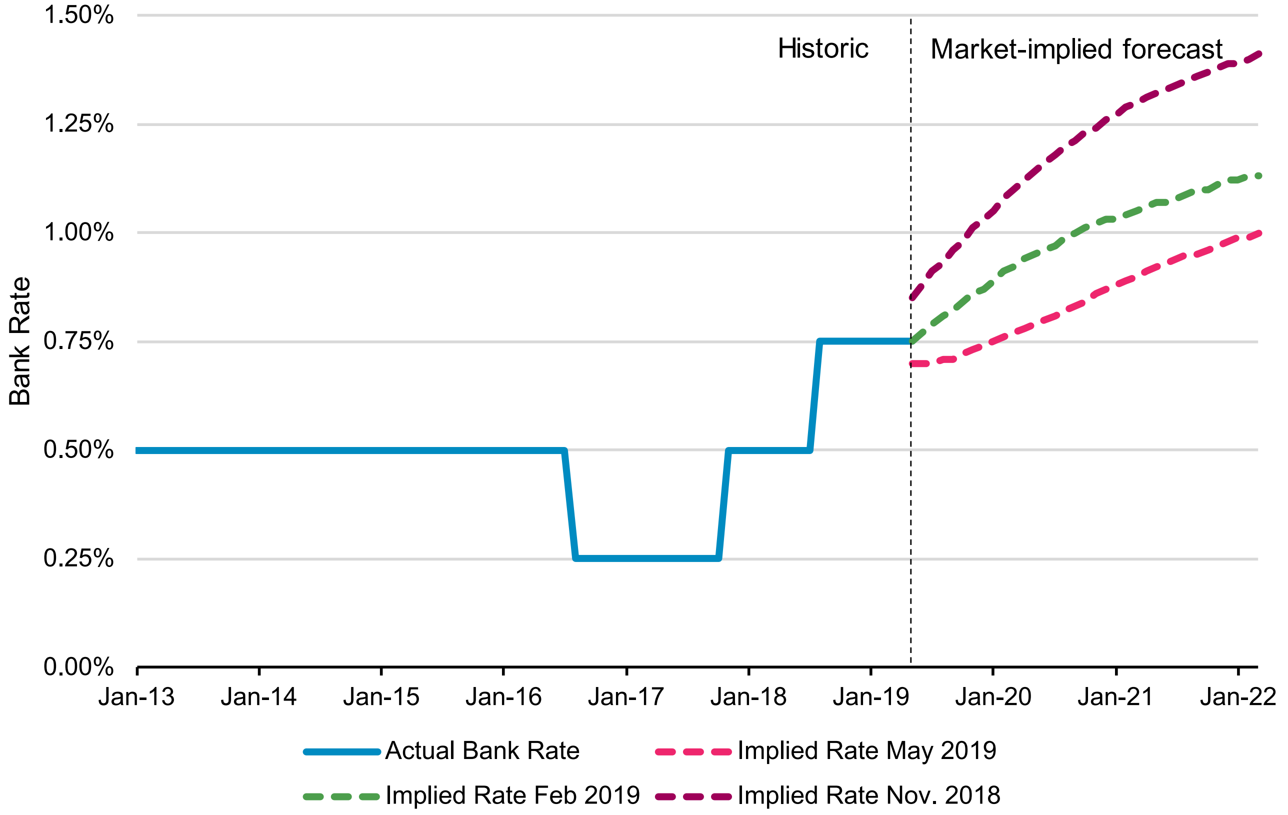
Other UK economic indicators

Beyond GDP, another important economic indicator is inflation as measured by the Consumer Price Index (CPI). Inflation having been above the Bank of England's central symmetrical target of 2% since February 2017 in part due to the large depreciation of sterling following the EU referendum making the price of imported goods and services more expensive, has fallen back in 2019. This decline in inflation was expected as the pickup in inflation from 2017 was expected to be short-lived as the sterling-related price increases worked its way through the economy. This indeed does seem to have now happened with CPI inflation standing at 2.1% in April 2019 up slightly on the 1.9% seen in March[37] and having hovered around the target level since December 2018.

In part given this and the sluggishness of the economy and uncertainty of the economic outlook the Bank has not raised interest rates since August 2018 when rates were raised 0.25 percentage points to 0.75%, this was the second rise in interest rates since the financial crisis of the 2000s. However, there continues to be some speculation on further interest rate rises although these in part are dependent on the outcome of Brexit. Still, the Bank in its latest Inflation Report, reiterated that "the Committee continues to judge that, were the economy to develop broadly in line with its Inflation Report projections, an ongoing tightening of monetary policy over the forecast period, at a gradual pace and to a limited extent, would be appropriate to return inflation sustainably to the 2% target at a conventional horizon"[38]. However, it further noted that "the monetary policy response to Brexit, whatever form it takes, will not be automatic and could be in either direction". Consequently, some commentators and the markets are currently expecting further interest rate rises in the coming years, although these expectations have been dampened compared to earlier months (Figure 3.13).

[37] ONS (2019). 'Consumer price inflation, UK: April 2019', May 2019.
[38] Bank of England (2019). 'Inflation Report', May 2019.

Figure 3.13: Market-implied interest rate path for the UK



Source: Bank of England (2019). 'Inflation Report', May 2019.

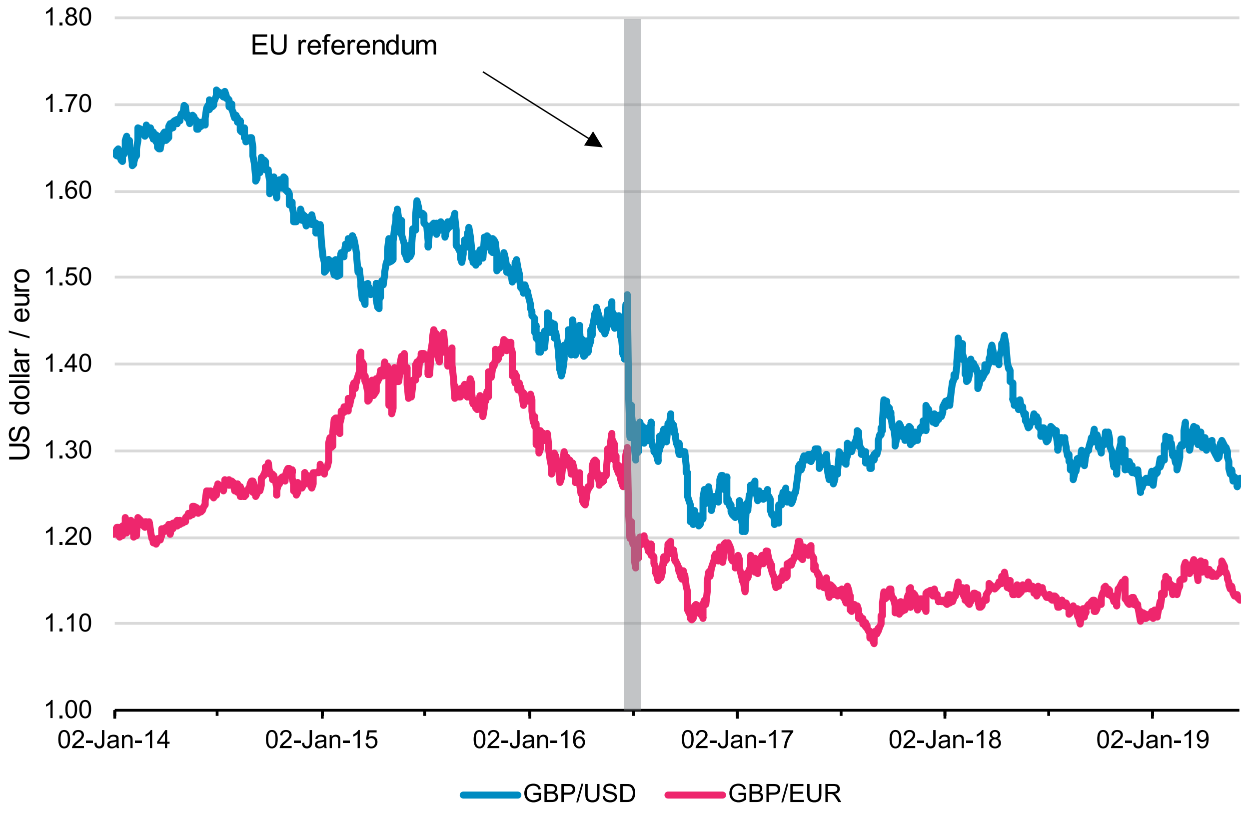
Rising interest rates can have several influences on the economy[39]. All other things held constant, they can bolster sterling as returns (interest) on sterling would be relatively higher than other countries leading to an increase in demand for sterling-based assets by foreigners. They can also reduce consumer demand as higher interest on savings raises the 'opportunity cost' of spending. Likewise, it can reduce the appetite to invest and borrow as the cost in terms of debt interest would be higher. It can thus slow the rate of inflation and negatively affect the rate of economic growth in the short-run through the combined effect of weaker demand for goods and services. However, the magnitude of these effects will be dependent on several factors – i.e. the speed and scale of the interest rate increases, the time it takes for interest rates to work through the transmission mechanism, and the current state of the wider economy – and therefore provides some further uncertainty to economic forecasts. It should also be noted that interest rates in the UK remain at historically very low levels and any rises in rates are expected to be slow and limited, indicating that the dampening effect of interest rates on the UK in the near term is likely to be limited.

It has already been noted that the value of sterling fell following the result of the EU referendum in June 2016 and this is shown in Figure 3.14. Sterling has been relatively steady against the Euro since mid-2017 with a slight upward trend in 2018 followed by a downward trend since then. At the same time, sterling appreciated against the US dollar through 2017 and into the early part of 2018 but has since dropped back largely due to continuing Brexit uncertainty (Box 3.2). With sterling being relatively stable compared to 2016, it is unlikely that these minor fluctuations could either boost or subdue exports by making UK goods and services cheaper/more expensive. Still in the longer term, the 2016 depreciation could still encourage

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

some substitution of imported goods and services to domestically produced alternatives and make the UK a more attractive place to invest and visit.

Figure 3.14: Sterling to US dollar and euro exchange rates
Last data point is 4 June 2019



Source: Bank of England

Overall, the first estimate of UK GDP growth in Q1 2019 was one of the strongest rates seen since the EU referendum. However, trends for the Services sector – which represents a large part of the economy – have shown persistent general weakness in recent quarters. And despite respectable quarter on quarter GDP growth in Q1 2019 the year to the quarter showed relatively weak growth. This was expected by economic forecasts that are largely pointing to slow growth in 2019 and continuing on into 2020. Meanwhile, despite inflation being subdued some pressure remains on the Bank of England to raise interest rates and if this occurs it could dampen growth prospects. That said, sterling remains at a low level and could act as a support to the economy.

Box 3.2: An update on Brexit

This box provides an update on the process to establish a new policy framework after Brexit, and its economic impact so far. This follows the updates included in the five previous editions of LEO[40, 41, 42, 43, 44] and so covers the period since November 2018.

1 New policy framework after Brexit

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

The UK Government and the European Commission published[45] on 14 November 2018 a draft Withdrawal Agreement for the UK to leave the European Union on 29 March 2019. This covers citizens' rights of Britons residing in the EU and vice versa, a financial settlement and arrangements for the border between Northern Ireland and the Republic of Ireland. While this was ratified by the European Council it was not ratified by the UK Parliament, which placed at risk an orderly exit from the EU. In response, after a UK Government request for an extension of the Article 50 process UK membership of the EU has been extended to the end of October. A condition of the extension was that the UK participated in EU-wide elections on 23 May.

Since then, the Prime Minister, Theresa May, entered into negotiations with the Labour Party to find changes to the Withdrawal Agreement that would be acceptable to both parties. These talks broke down. With insufficient support for the Withdrawal Agreement from within the Conservative Party, or the wider House of Commons, Theresa May resigned as leader of the Conservative Party, and so Prime Minister, on 22 May, with effect from 7 June. She, however, continues as PM until a new Conservative Party leader is elected.

If there is a ratified agreement by the end of October between the UK Government and the European Commission, there will be further negotiations on the future relationship between the two parties, including trading relationships. The current deadline for successful completion of these talks has not changed, and still is the end of 2020. Otherwise the UK will face a no deal exit. In addition to any short-term disruption and uncertainty associated with leaving the EU without a defined legal framework for governing post-Brexit relationships, trade with the EU would only happen on the basis of World Trade Organisation (WTO) rules. This would reduce trading opportunities with the EU due to higher tariff and non-tariff barriers.

2 Economic impact of Brexit

a) Context to recent developments

After the EU Referendum the expectation of forecasters was that the UK economy would slow because of the impact of uncertainty on business investment, the expectation of higher trade barriers, and from the likelihood of lower net inward immigration. While these drivers remain the likely explanation for the slowdown in the UK economy that has been registered since then, it has become apparent that the lack of progress to reach decisions on the policy framework after Brexit is in itself creating uncertainty which is compounding the slowdown of the UK economy. The next section summarises the evidence.

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[40] GLA Economics (2016). 'London's Economic Outlook: Autumn 2016 The GLA's medium-term planning projections', November 2016.
[41] GLA Economics (2017). 'London's Economic Outlook: Spring 2017 The GLA's medium-term planning projections', June 2017.
[42] GLA Economics (2017). 'London's Economic Outlook: Autumn 2017 The GLA's medium-term planning projections', November 2017.
[43] GLA Economics (2018). 'London's Economic Outlook: Spring 2018 The GLA's medium-term planning projections', May 2018.
[44] GLA Economics (2018). 'London's Economic Outlook: Autumn 2018 The GLA's medium-term planning projections', November 2018
[45] European Commission (2018). 'Draft Agreement on the withdrawal of the United Kingdom of Great Britain and Northern Ireland from the European Union and the European Atomic Energy Community, as agreed at negotiators' level on 14 November 2018', November 2018.

The Autumn 2018 LEO included a review of economic developments since the EU Referendum for London and the UK and compared this to forecasts made in the second half of 2016. It concluded that:

- the UK GDP growth rate has been lower than it was expected to be prior to the EU referendum;
- the decline is not out-of-line with forecasts before the referendum, although its impact has materialised more gradually;
- a low rate of growth is expected to persist over the forecast horizon, and for longer than had been originally expected by some forecasters;
- London's economy is performing better than the UK economy;
- there is expected to be an ongoing detrimental impact on growth in both the UK and London following Brexit;
- London is expected to be more resilient than the UK and perform better.

In October 2018 the OBR published a discussion paper on Brexit and the OBR's forecasts[46], and reviewed GDP growth trends since the EU referendum result. They noted that:

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

The next section summarises the evidence on the slowdown in the UK economy, and the final section looks at the impact on international migration flows.

b) Economic impact of uncertainty in the Brexit process

Much of the economic focus has been on the effects of a disorderly exit from the EU. In response to the political developments a number of organisations representing business expressed frustration with the ongoing uncertainty with Carolyn Fairbairn, the director-general of the CBI, saying businesses were looking on with "a sense of absolute horror". While looking at the possibility of 'no-deal' she observed that "it's bad enough for large companies, which have prepared contingency plans. They are at least ready with plans to implement post Brexit — lost jobs and factory closures". Adding that "a bigger worry is the 80 per cent that are smaller and simply don't have the resources to plan up front. The shock they will face is severe"[47]. Along with Frances O'Grady - head of the TUC - she sent a joint letter to the Government stating that "our country is facing a national emergency. Decisions of recent days have caused the risk of no deal to soar. Firms and communities across the UK are not ready for this outcome. The shock to our economy would be felt by generations to come"[48].

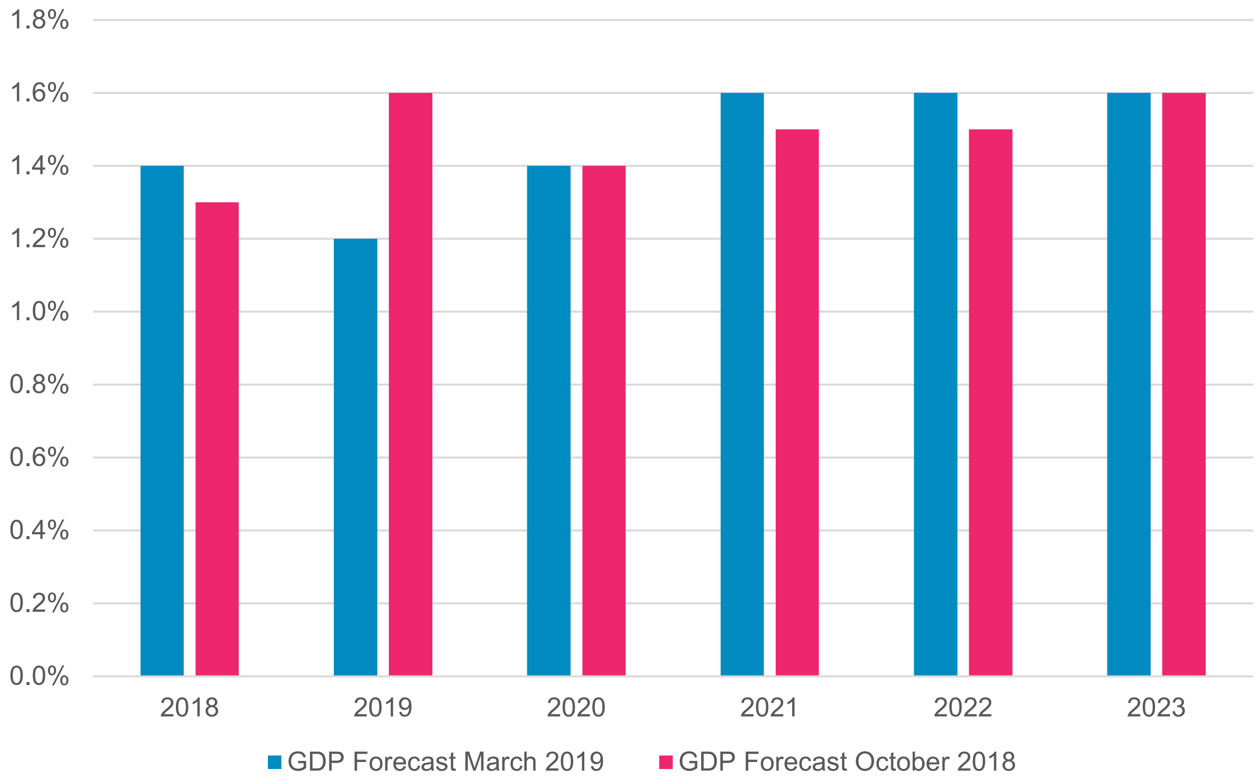
Looking at the impact of a 'no-deal' Brexit the IMF in its April World Economic Outlook[49] considered scenarios for a disorderly Brexit. It finds, "the total negative effect on UK GDP … is about 3.5 percent by 2021" compared with the current position. It concluded, "other studies have typically focused on the

[46] See: Brexit analysis - Office for Budget Responsibility
[47] See UK businesses watch Brexit political chaos with 'sense of horror' | Financial Times
[48] See TUC and CBI call on Prime Minister to urgently change Brexit approach | TUC
[49] See World Economic Outlook, April 2019: Growth Slowdown, Precarious Recovery

long-term impact of Brexit relative to staying in the European Union, with negative effects on output estimated at 3 percent to 10 percent. The long-term results presented here are in the middle of the range, once the effects that are in the current baseline – a long-term loss of 3 percent of GDP … - are included".

With regard to the extension of the Article 50 process, Christine Lagarde, the Managing Director of the IMF, commented, "it is obvious it is continued uncertainty. And it does not resolve other than by postponing what would have been a terrible outcome".[50] Since the Autumn 2018 LEO the OBR, and the Bank of England, have published forecasts with lower output growth paths for the UK economy from 2019 onwards. The OBR forecast for 2019 fell from 1.6% to 1.2%, (Figure 3.15), while the Bank of England also reduced its forecast for 2019 in February to 1.2% from 1.7% in its November report. Subsequently, the Bank increased its forecast for 2019 to 1.5% in its May report.

Figure 3.15: OBR UK GDP forecasts 2018-23, October 2018 and March 2019



Source: OBR

In February, the BoE attributed lower UK growth to "both weakening global growth and the intensification of Brexit uncertainties. The impact of those uncertainties is projected to wane gradually, consistent with the MPC's [Monetary Policy Committee's] assumption of a smooth withdrawal of the UK from the EU". One aspect is that, "uncertainty appears to have weighed on business investment, which has been low recently compared with past expansions. Contacts of the Bank's Agents report that uncertainty is the biggest headwind to investment spending. Moreover, recent business investment growth has been lower in the UK than in other advanced economies".

[50] See, for example, IMF says Brexit delay means businesses face more uncertainty | Business | The Guardian

Uncertainty is also weighing on forecasts for this year. By May, the BoE had improved its UK growth forecast because of improved prospects for global growth, and a lower likelihood of a no-deal Brexit[51]. Less than two weeks later a trade war had started between the US and China as talks broke down, which emphasises the fragility of the global economy to political developments. The OECD estimates that, "renewed tensions between the United States and China could shave more than 0.6% from global GDP over two to three years"[52].

The basis for the shift in perspective on Brexit was that Parliament had rejected a no-deal Brexit in a number of indicative votes, although this remains the default outcome. By the end of May a Conservative leadership election was under way with the likelihood that the successful contender would become a more clearly pro-Brexit Prime Minister than Theresa May.

Brexit developments have not affected all parts of the economy equally. IHS Markit reports[53] that the Manufacturing Purchasing Managers' Index rose to a 13-month high of 55.1 in March. The impact of Brexit negotiations was a prominent feature, "efforts to build safety stocks led to survey-record increases in inventories of both purchases and finished products. Trends in output and employment also strengthened as stockpiling operations at clients led to improved inflows of new work."

This surge may be temporary, as the same report explains that, "apart from ongoing uncertainty, companies indicated that future output growth may be constrained as the current strong pace of inventory building at both manufacturers and their clients is unwound over the coming year". In April, accordingly the index fell to 53.1. While, "rates of expansion in output and new orders slowed", the process of stockpiling "largely continued into April, with further substantial expansions to holdings signalled".[54] And by May the number had dropped below 50.

More broadly, it may be argued that the slowdown in the UK economy from lower business investment, and reduced business and consumer confidence following the 2016 referendum will reverse at some point, and lost output would be recovered. However, this is looking less likely as evidence emerges of the relocation of business and activities outside the UK, although the scale of this activity is imperfectly understood.

It has been reported[55] that Barclays is moving €190bn of assets and 5,000 clients to its Irish subsidiary. While, Goldman Sachs, JP Morgan and Morgan Stanley have switched around 10% of clients affected by loss of compliance with EU regulations. What is less clear is the extent to which there is an associated transfer of staff and operations. Bank of America, for example, is transferring 100 bankers to its Dublin office, and another 400 to a new broker dealer unit in Paris.

For the UK economy, the Dutch investment agency reports 42 companies relocating to the Netherlands last year and citing Brexit as the reason. This has been accompanied by some 2,000 jobs and €300m in investment[56]. While, Sony and Panasonic have announced the transfer of their European HQs from the UK to the Netherlands.

Positively, it may be for the time being that London has some insulation from these effects. A Centre for London report[57] finds that London and the Wider South East host 55% of the world's largest 500

[51] See Inflation Report - May 2019 | Bank of England
[52] See OECD iLibrary | Home
[53] See IHS Markit Manufacturing Purchasing Managers' Index March 2019
[54] See IHS Markit Manufacturing Purchasing Managers' Index April 2019
[55] Financial Times, 14 February 2019, Lombard section
[56] Financial Times, 14 February 2019, front page, although Unilever has reversed a decision to move it HQ from London to Rotterdam
[57] See Centre for London | Head Office: London's rise and future as a corporate centre

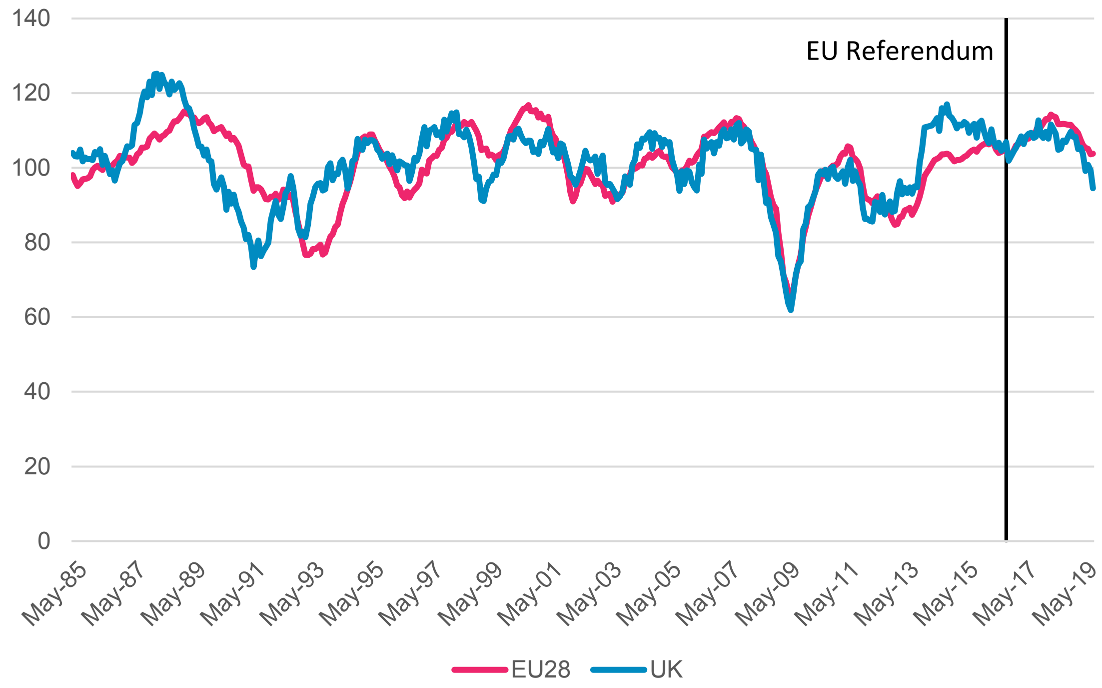
companies' European HQs. The most influential element in HQ location decisions is access to talent, which in part in the future will be contingent on the immigration policy adopted. And, as is argued in the next section, the decline in work-related migration by EU citizens has stabilised.

Another development which has become more prominent is that the EU is taking forward free trade agreements with Asian economies, which curiously may give businesses in these countries better access to EU markets than the UK will have after a hard Brexit. This may then be a factor, but not the only factor, influencing the decisions of some companies to relocate from the UK to Asia. For example, in February the European Parliament approved the EU's free trade agreement with Singapore.

Further, an EU/Japan free trade agreement came into force in February[58]. In a curious coincidence Honda announced the closure in 2022 of its Swindon car factory, which has 3,500 jobs, and Nissan reversed a decision to build the X-Trail vehicle in Sunderland. In both cases production will be in Japan. The companies have stated that Brexit was not a factor. Other considerations such as the restructuring of the car industry as it develops electric cars and declining sales of diesel vehicles, have had a bearing on the decisions.

Perhaps unsurprisingly, economic sentiment in the UK has also been declining. The European Commission's monthly economic sentiment indicator of confidence among consumers, and the industry, services, construction and retail sectors has been dropping for the UK to its lowest level since 2013. Historically, movements in sentiment for the UK have been on trend with those for the EU28. Both have been moving down in recent months perhaps reflecting concerns about a global economic slowdown. It is noticeable, though, that the sentiment in the UK had been ahead of the EU28 after the 2008 recession, but since August 2017 has been less positive, (Figures 3.16 and 3.17).

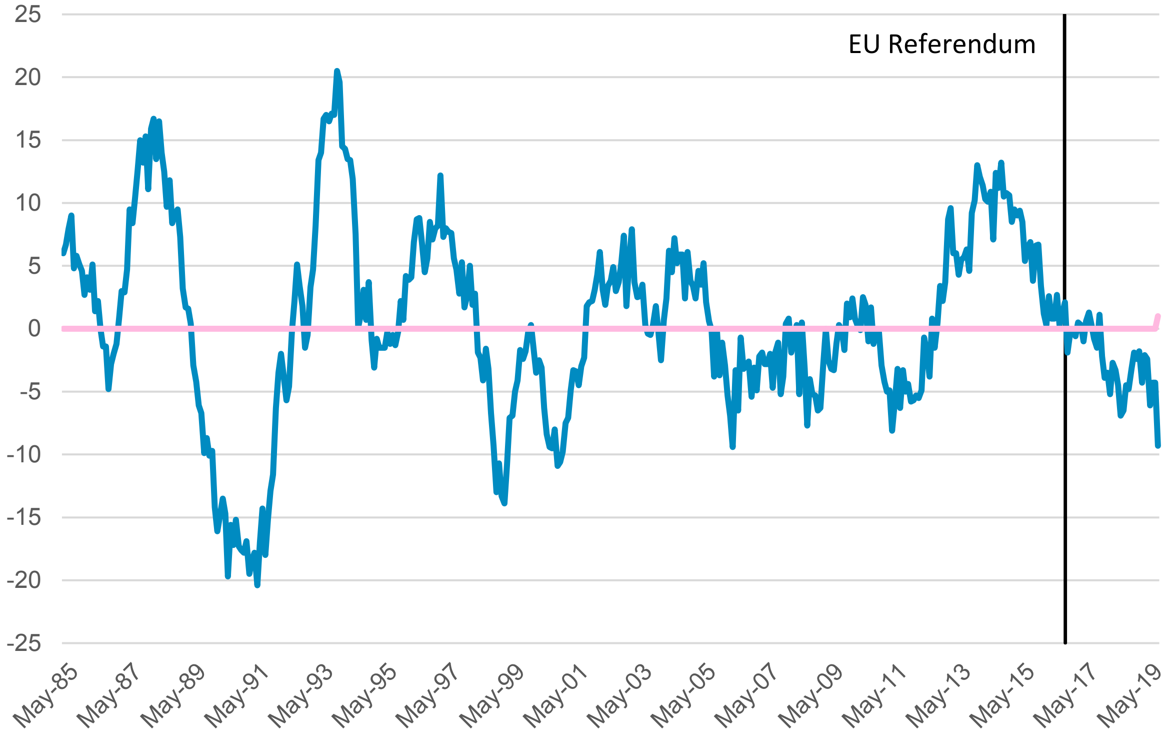
Figure 3.16: Economic sentiment in the UK and EU28, 1985-2019



Source: Economic Commission, Economic Sentiment Index

[58] Although the easing of tariff barriers won't be implemented fully until 2027

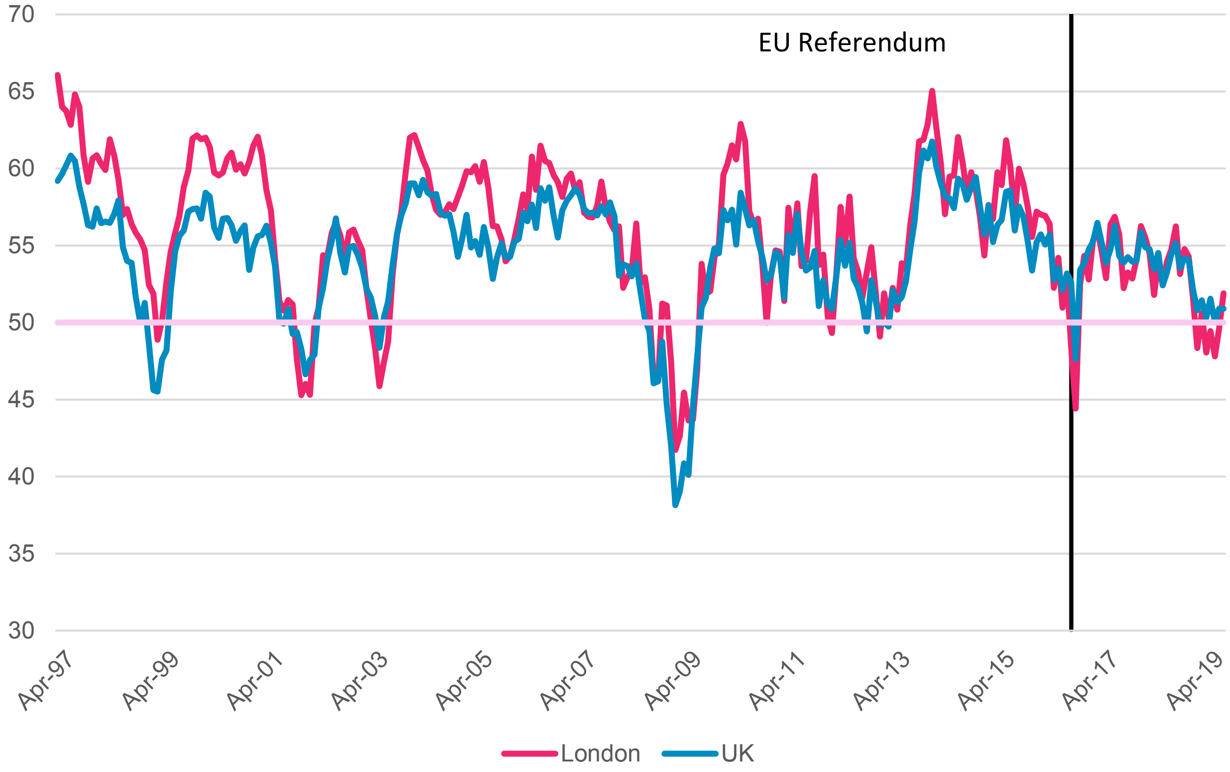
Figure 3.17: Difference in economic sentiment, UK less EU28, 1985-2019



Source: Economic Commission, Economic Sentiment Index

The IHS Markit Purchasing Managers' Index provides a perspective on trends in business activity in the UK. The score is the proportion of respondents who report an increase in business activity. There was a marked drop in businesses reporting an increase in activity at the time of the EU Referendum to below 50 per cent, and a subsequent recovery to above 50 per cent, (Figure 3.18). Since June 2018 the trend has been downwards for both London and UK, although there was a slight recovery in April and May 2019. Unusually, compared with historic experience over a 20-year period, reported activity for London has been below that for the UK since October.

Figure 3.18: Business activity index, London and the UK, 1997-2019



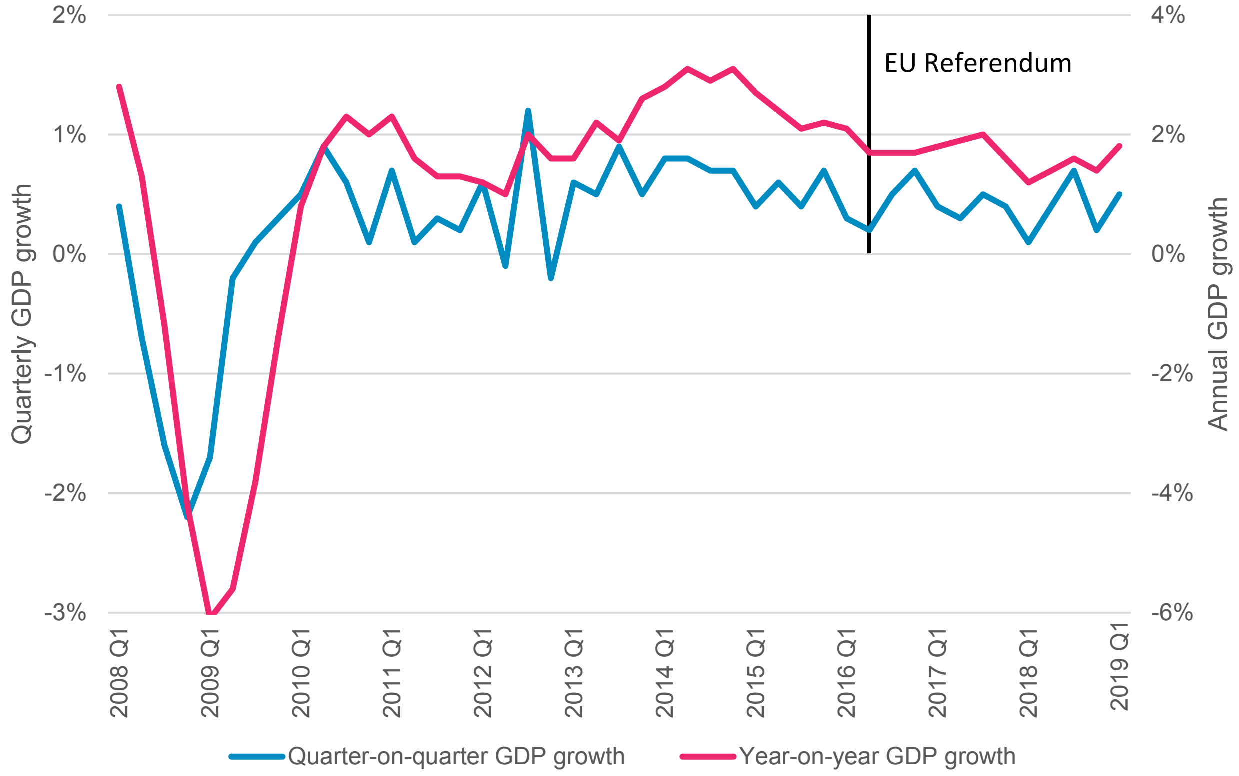
Source: IHS Markit Purchasing Managers' Index

The subdued state of the economy was also shown by the March Bank of England Agents' summary of business conditions[59] which found "a further softening in activity over the past few months compared with a year ago". The summary also found that "growth in consumer demand slowed a little further, especially for major household purchases", while "a majority of contacts in the Agents' Brexit survey said they were making contingency plans in case of a 'no deal' Brexit".

While there was subdued economic sentiment and growth in 2018, for the first quarter in 2019 growth has nudged upwards, (Figure 3.19). The ONS estimates that growth in the services sector was 0.3% in this quarter, and growth in production was 1.4%, while manufacturing growth was 2.2%[60]. This is consistent with the observation of stockpiling due to uncertainty made earlier.

[59] See [Agents' summary of business conditions - 2019 Q1 | Bank of England]
[60] See [GDP monthly estimate, UK - Office for National Statistics]

Figure 3.19: UK GDP growth, quarter-on-quarter and year-on-year, 2008 Q1-2019 Q1



Source: ONS

Despite this further example of the cost of uncertainty due to the Brexit process, the UK and London labour markets continue to perform well. UK unemployment, as measured by the ILO measure, was at 3.8% in the three months to April 2019. This is the lowest rate since the last quarter of 1974. Unemployment in London was also low standing at 4.3% in the three months to April, a near historic low since comparable records began in 1992.

c) Changes in immigration flows

One outcome of the UK leaving the EU is that it will gain full control of immigration policy for EEA nationals. The Autumn 2018 LEO summarised the conclusions and recommendations of the Migration Advisory Committee report[61] for a future immigration policy. The Government incorporated all but one of the recommendations in a White Paper in December[62]. The expectation is that controls will limit migration, which in turn will reduce labour supply growth, and output growth. Home Office modelling in the White Paper estimates that the impact of the government's proposals may bring down long-term net inward work-related migration from the EU to around 10,000 people a year.

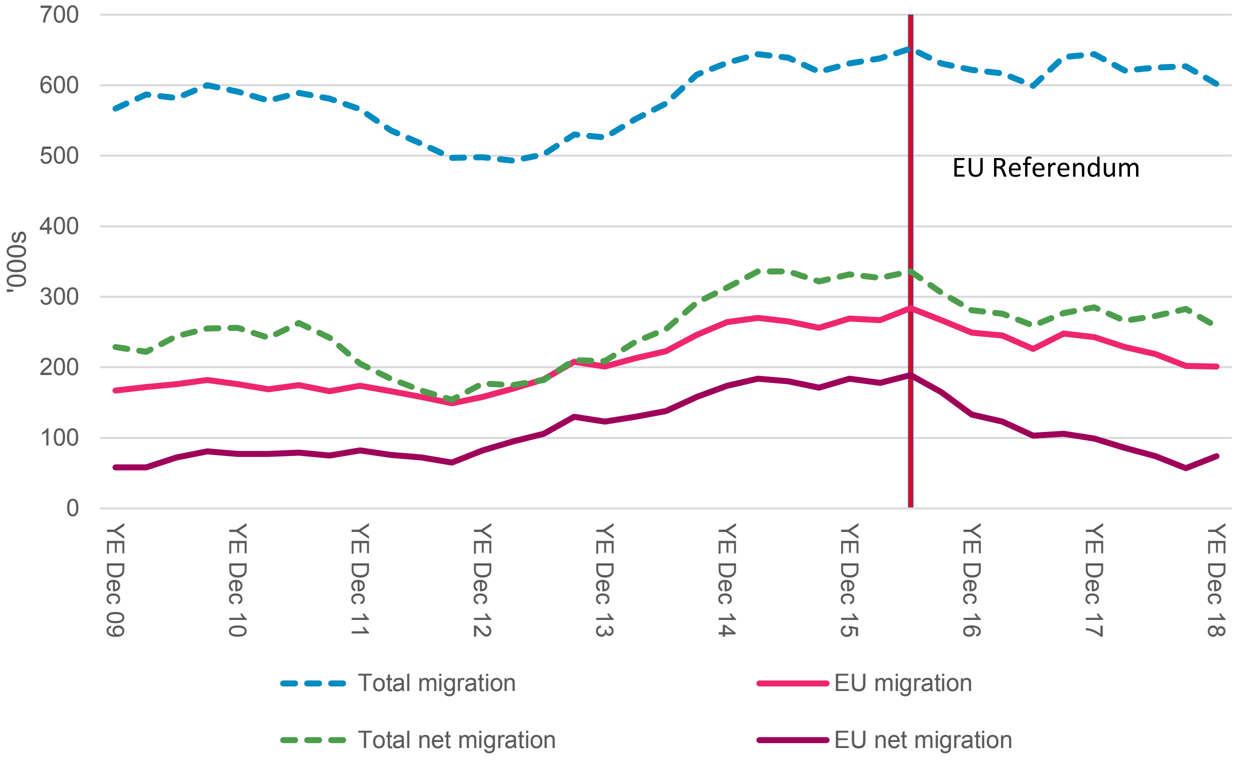
The OBR, see earlier quote, expected that lower net work-related migration would happen in the period after the EU Referendum in June 2016. This section explores what has happened.

The headline figures are that international migration and net migration to/from the UK have changed little in the period around the EU Referendum, Figure 3.20. Migration has remained at around 600,000 a year, and net migration has dipped from a little above 300,000 a year to a little below. This is because

[61] See [Migration Advisory Committee (MAC) report: EEA migration - GOV.UK]
[62] See [The UK's future skills-based immigration system - GOV.UK]

higher migration from outside the EU has partially offset a fall in migration from the EU. Migration from the EU has fallen from 284,000 in the year to June 2016 to 201,000 in the year to December 2018. Net migration from the EU has fallen more sharply over this time period from 189,000 to 74,000.

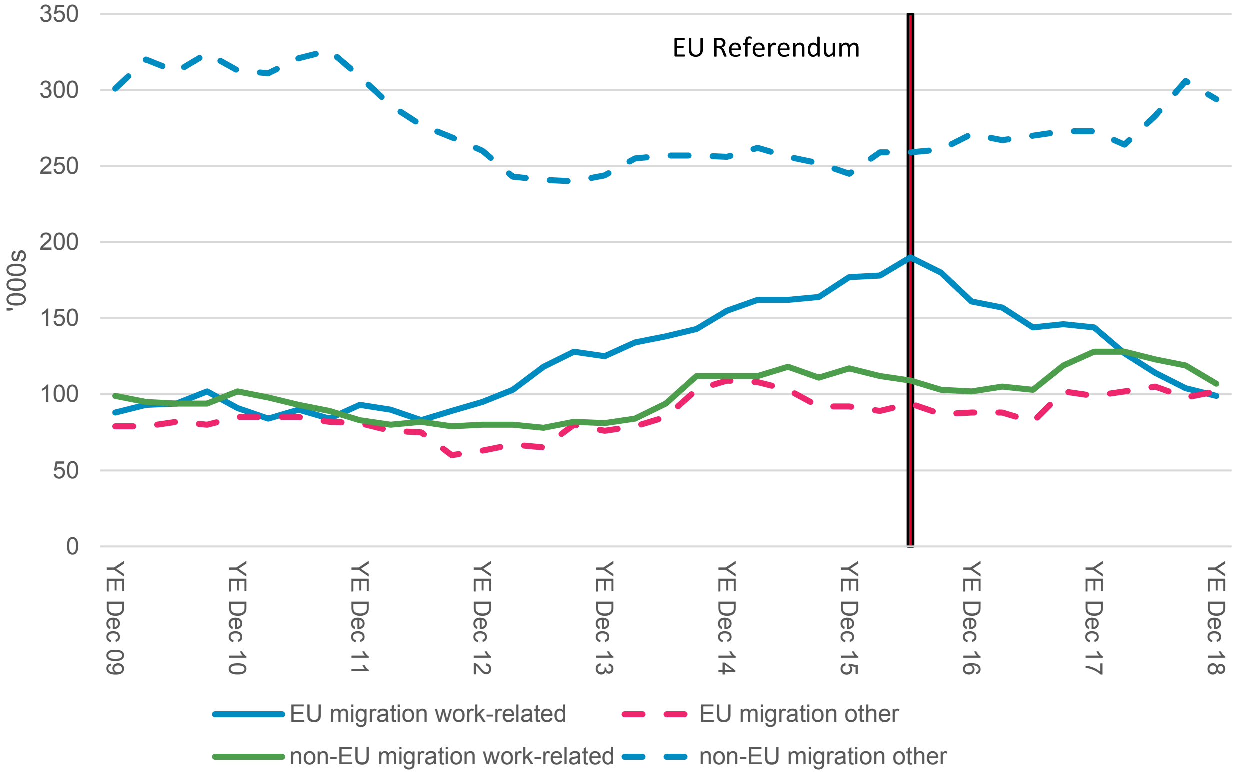
Figure 3.20: Long-term international migration and net migration to the UK, total and from the EU, 2009-2018, '000s



Source: ONS International Passenger Survey

A slightly different conclusion emerges when considering the reasons for migration. In the year to June 2016 there were 299,000 migrants who came to the UK for work-related reasons, which had fallen to 206,000 by the year to December 2018, (Figure 3.21). This is accounted for by the fall in EU migrants coming for work, which fell from 190,000 to 99,000 in this time, although in the last few months the numbers may have stabilised. There are now, though, fewer migrants coming to the UK for work from the EU than the rest of the world. The main reason more people are coming to the UK is to study, and this is by non-EU migrants.

Figure 3.21: Long-term international migration to the UK, work-related and other reasons, EU and non-EU nationals, 2009-2018, '000s



Source: ONS International Passenger Survey

For completeness, over the same period from the year to June 2016, net annual migration to the UK for work reasons fell from 213,000 to 110,000, and for net migration from the EU it has fallen from 138,000 to 30,000.

The ONS also published migration numbers for London for the year to December 2017 (although without the EU non-EU breakdown provided at the national level). These found that net international migration to London stood at +70,000 in the year to December 2017, which was up 19,000 from the year to December 2016. In more detail over this period there were 168,000 international migrants into the capital (up 12,000 on the previous year) and 98,000 out-migrants (down 8,000).

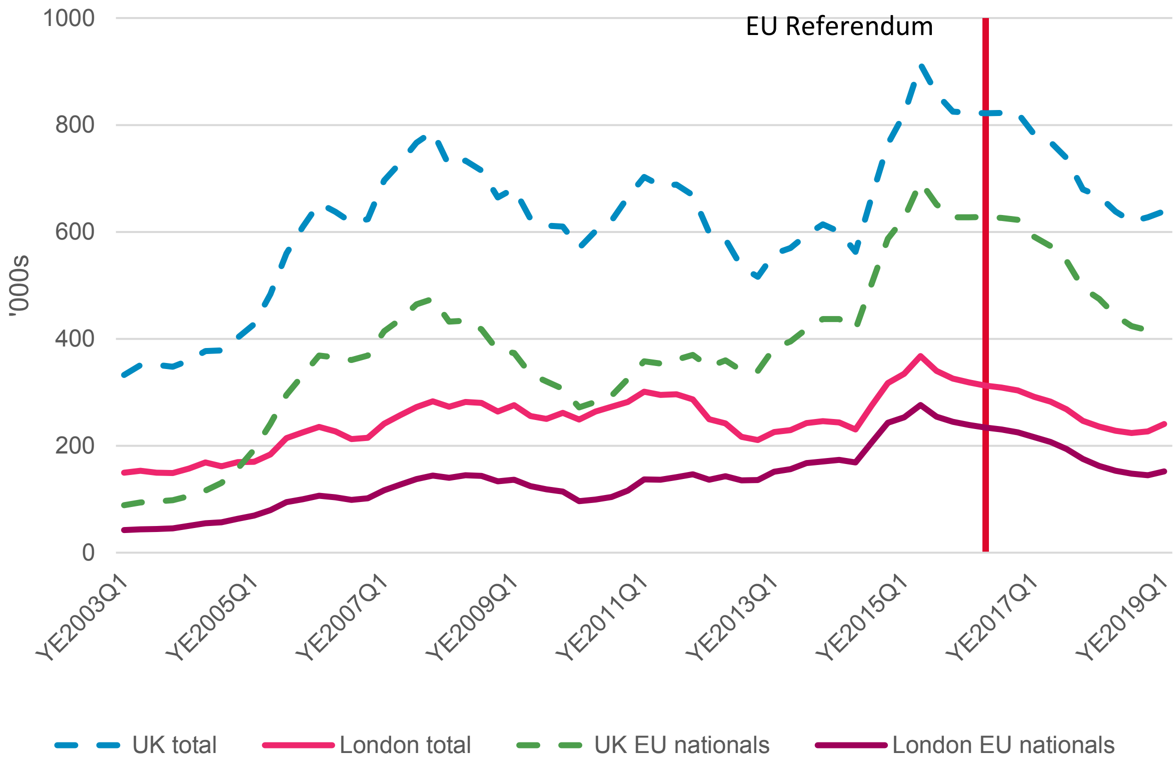
The interpretation of these figures should be treated with caution as London is an important destination for students, and it is possible that the increase in migration was for this reason rather than work-related. National Insurance number (NINO) registrations data is also available at a sub-national level[63], and supports this view. It provides another way to consider the contribution of migrants to the labour market, as it measures migrants who find work for the first time.

The number of migrants by this measure peaked in the last quarter of 2014, had been in decline for nearly four years (after abstracting from seasonal effects), and appears to have levelled off from the third quarter of 2018 onwards. This is the case both for migrants to London and the UK, whether in total or from the EU, Figure 3.22. The decline for both London and the UK can be attributed entirely to

[63] This will provide a more accurate measure of migrants entering work, while the International Passenger Survey (IPS) also includes people looking for work. The IPS reports migrants who expect to stay for more than a year, while NINO registrations are not dependent on period of residency and may include people who find work after coming to the UK for another reason.

registrations by EU nationals. For London it has been by 45,000 from 77,000 to 33,000, over the period from 2014 Q4 to 2018 Q2, and for the UK it has been by 105,000 from 197,000 to 92,000.

Figure 3.22: NINO registrations, total and EU nationals, London and the UK, 2003Q1-2019Q1, '000s



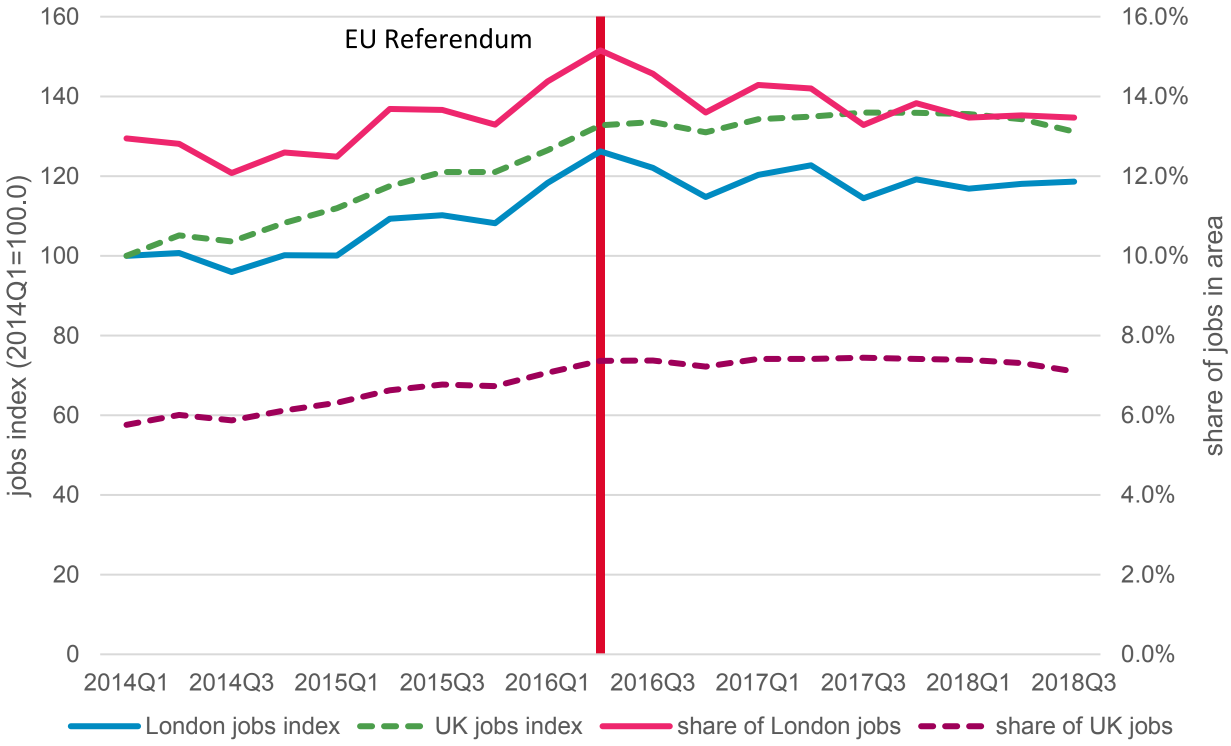
Source: DWP

Note: There was a decline in registrations in 2014Q2 largely due to delays in processing, and those registrations have mostly been recorded in 2014Q3.

Unsurprisingly, the contribution of European Economic Area (EEA)[64] nationals to the London and UK labour markets has stagnated, (Figure 3.23). Prior to the EU referendum there was growth in the number of jobs held by EEA nationals, indeed the growth was more rapid for the UK. This corresponded to a growing share of all jobs, which has subsequently fallen in London, as continued growth in jobs has not been matched by EEA nationals taking them.

[64] These are EU nationals, and nationals of Iceland, Liechtenstein and Norway.

Figure 3.23: Contribution of EEA nationals to London and UK labour markets, jobs index, and share of all jobs, 2014-2018



Source: ONS Labour Force Survey

The analysis of this section supports the expected outcome that following the EU Referendum result there would be lower total and net work-related migration to the UK in the absence of any policy changes. The available evidence for London, while more limited, suggests that so far London has not been disproportionately affected relative to the rest of the UK in terms of EU migrants entering the labour market. The contribution of European Economic Area (EEA) nationals to the London and UK labour markets has at best stagnated, and possibly declined since June 2016. There is also some reason to believe that these trends have stabilised in the last few months.

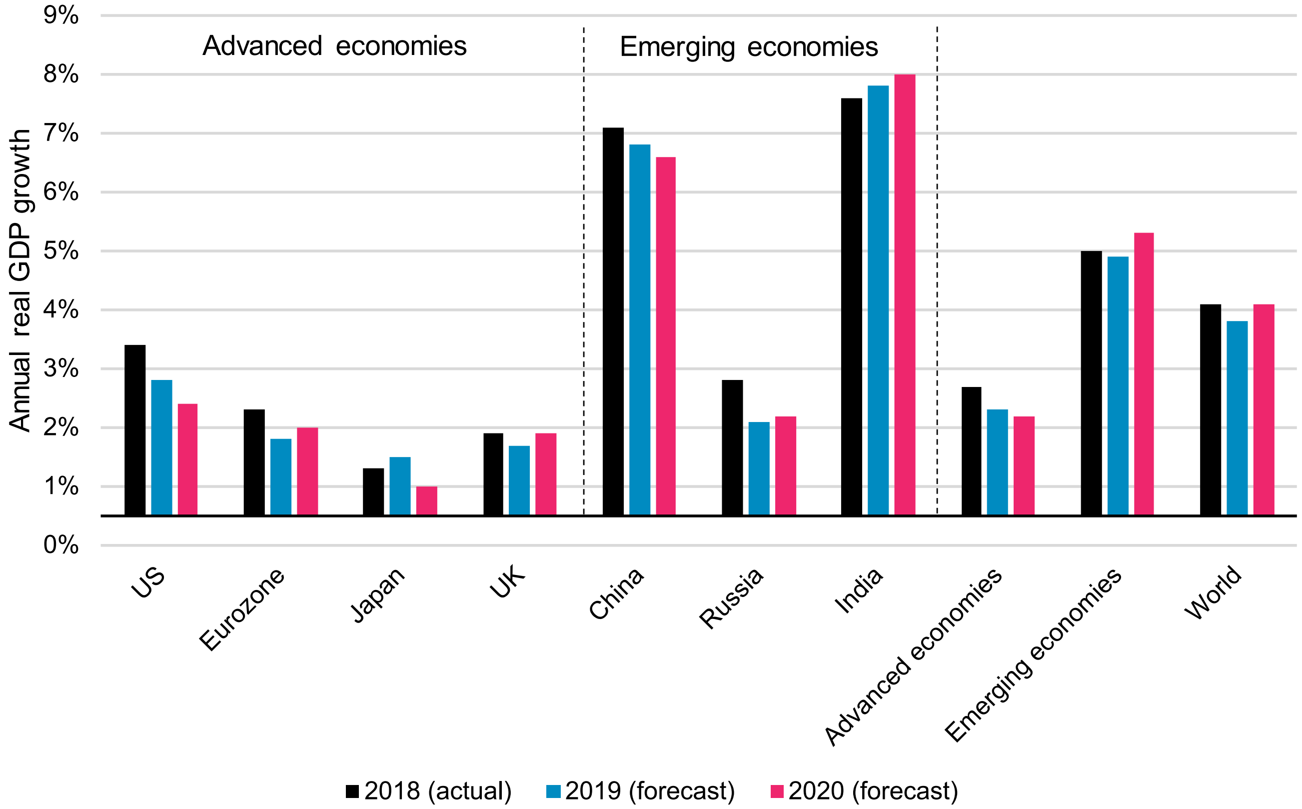
3.3 The world economy

The global economy was estimated to have grown 3.6% in 2018 by the IMF. However they note that the over the year there had been an "escalation of US–China trade tensions, macroeconomic stress in Argentina and Turkey, disruptions to the auto sector in Germany, tighter credit policies in China, and financial tightening alongside the normalization of monetary policy in the larger advanced economies" [65]. In the latest IMF World Economic Outlook (WEO), the world economy is expected to grow at a slower rate of 3.3% this year before picking up again to 3.6% growth in 2020, with the 2019 figure being revised down by 0.2 percentage points since the WEO Update of January 2019. The IMF projects "a decline in growth in 2019 for 70 percent of the global economy". However, they also observed that "while 2019 started out on a weak footing, a pickup is expected in the second half of the year. This pickup is supported by significant policy accommodation by major economies, made possible by the absence of inflationary pressures despite closing output gaps". They note that a forecasted pick up in growth in 2020 "is predicated on a rebound in

[65] IMF (2019), 'World Economic Outlook: Growth Slowdown, Precarious Recovery' April 2019.

Argentina and Turkey and some improvement in a set of other stressed emerging market and developing economies, and therefore subject to considerable uncertainty". In its latest Global Financial Stability Report[66] the IMF also observes that although having recently tightened, financial conditions "remain relatively accommodative". However, they also warn that "with financial conditions still accommodative, vulnerabilities continue to build. The tightening in financial conditions in the fourth quarter of 2018 was too short-lived to meaningfully slow the buildup of vulnerabilities, leaving medium-term risks to global financial stability broadly unchanged. Financial vulnerabilities are currently elevated in the sovereign, corporate, and nonbank financial sectors in several systemic countries. As the credit cycle matures, corporate sector vulnerabilities—which appear elevated in about 70 percent of systemically important countries (by GDP)—could amplify an economic downturn". Figure 3.24 shows the IMF economic forecasts for selected countries.

Figure 3.24: IMF forecasts of annual rate of real GDP growth for selected countries



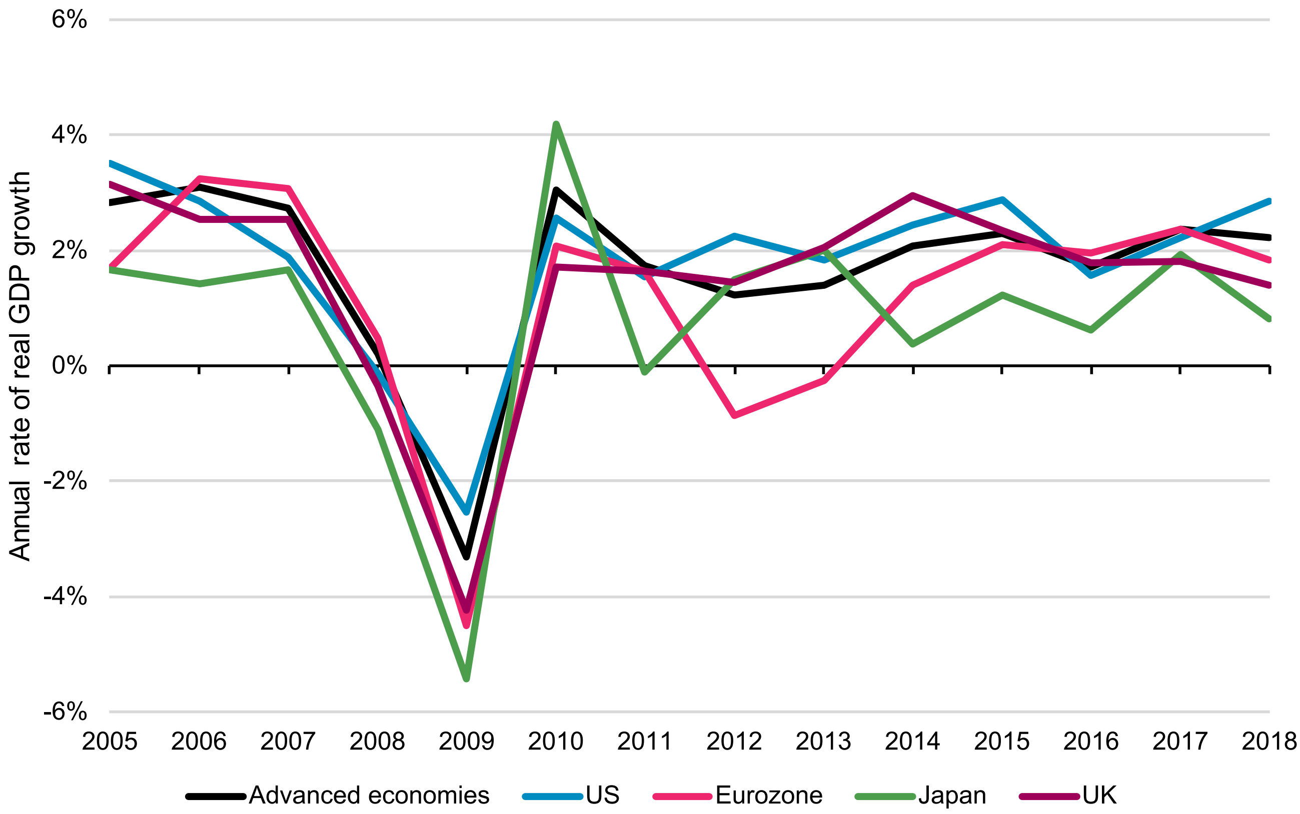
Source: IMF (2019), 'World Economic Outlook: Growth Slowdown, Precarious Recovery' April 2019.

Advanced economies

The advanced economies collectively grew 2.2% on an annual basis in 2018, a slight slowdown on the previous year but still one of the strongest rates of growth since the financial crisis. The IMF expects growth to slow in 2019 with it dropping to 1.8% (down 0.2 percentage points on the January 2019 forecast), with it expected to slow further to 1.7% in 2020 (unchanged on their January forecast). This reflects mounting economic risks for the next couple of years.

[66] IMF (2019). 'Global Financial Stability Report: Vulnerabilities in a Maturing Credit Cycle', April 2019.

Figure 3.25: Annual rate of real GDP growth for selected advanced economies



Source: IMF (2019), 'World Economic Outlook: Growth Slowdown, Precarious Recovery' April 2019.

Looking at the advanced economies in greater detail, the **US** economy grew by 3.1% year on year in Q1 2019. This follows a year on year expansion of 2.2% in Q4 2018[67]. Looking forward the IMF expects the US to grow 2.3% in 2019 overall and 1.9% in 2019. Compared with the IMF's January 2019 forecasts, these latest IMF forecasts are downwardly revised (by 0.2 percentage points) for 2019 but upwards marginally (by 0.1 percentage points) for 2020. Looking at the US economy in detail the IMF forecasts growth "to decline to 2.3 percent in 2019 and soften further to 1.9 percent in 2020 with the unwinding of fiscal stimulus. The downward revision to 2019 growth reflects the impact of the government shutdown and somewhat lower fiscal spending than previously anticipated, while the modest upward revision for 2020 reflects a more accommodative stance of monetary policy than in the October forecast. Despite the downward revision, the projected pace of expansion for 2019 is above the US economy's estimated potential growth rate. Strong domestic demand growth will support higher imports and contribute to some widening of the current account deficit"[68]. Still, having risen gradually to stand at a target range of 2.25-2.5% the downside risk of further interest rates rises which could negatively affect consumer spending and business investment has declined since the autumn 2018 LEO. The Federal Reserve has thus held rates constant since December 2018 with it indicating that it will pause its programme of gradual monetary policy normalisation.

Meanwhile, the **Eurozone's** economy continues to grow. In Q1 2019, GDP in the Zone increased 0.4% on a quarter-by-quarter basis. This was up from 0.2% in Q4 2018 and compared to a year earlier the Zone's GDP was 1.2% higher. The IMF forecasts the Eurozone to grow by 1.3% in 2019 before picking up to 1.5% in 2020. The IMF notes that "growth in the euro area is set to moderate from 1.8 percent in 2018 to 1.3

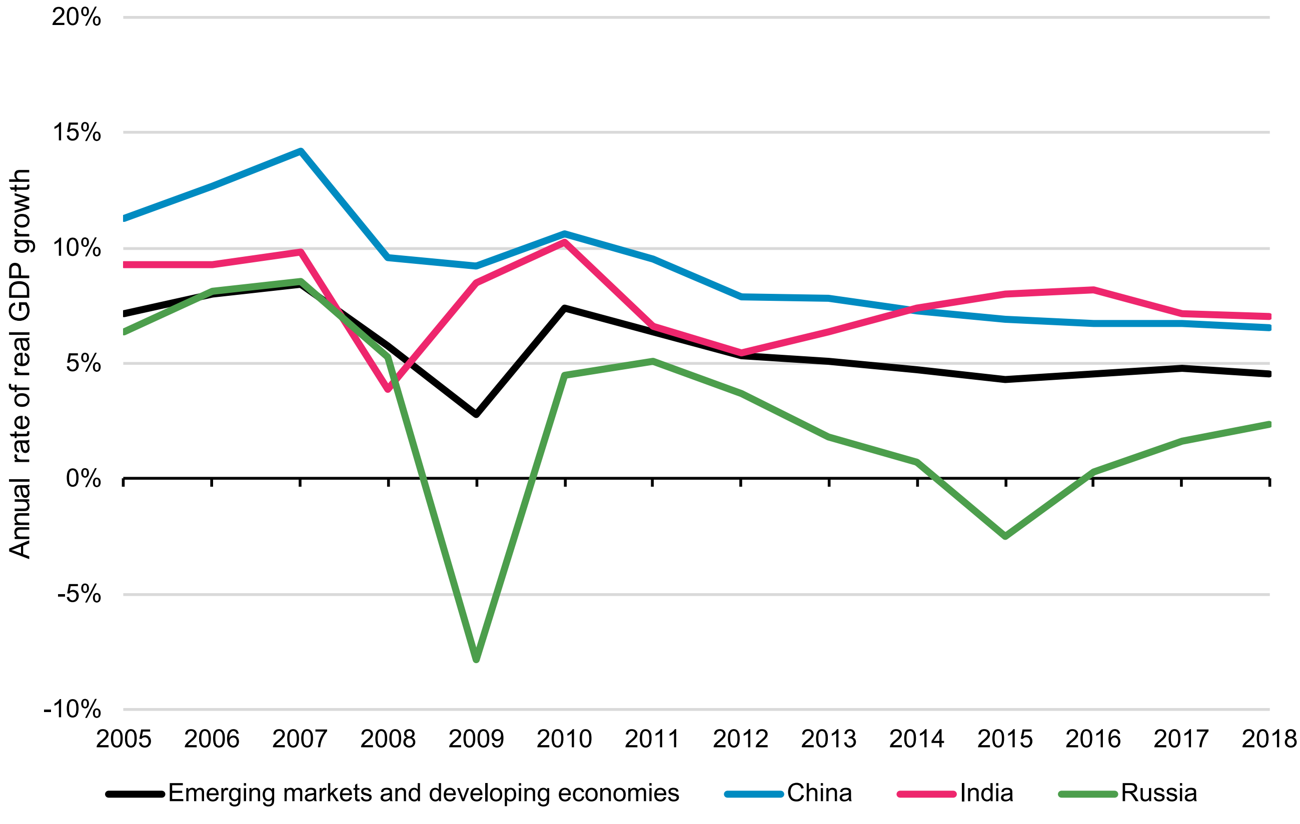
[67] BEA (2019). 'Gross Domestic Product, 1st quarter 2019 (second estimate); Corporate Profits, 1st quarter 2019 (preliminary estimate)', 30 May 2019.
[68] IMF (2019), 'World Economic Outlook: Growth Slowdown, Precarious Recovery' April 2019.

percent in 2019 (0.6 percentage points lower than projected in October) and 1.5 percent in 2020. Although growth is expected to recover in the first half of 2019 as some of the temporary factors that held activity back dissipate, carryover from the weakness in the second half of 2018 is expected to hold the 2019 growth rate down. Growth rates have been marked down for many economies, notably Germany (due to soft private consumption, weak industrial production following the introduction of revised auto emission standards, and subdued foreign demand); Italy (due to weak domestic demand, as sovereign yields remain elevated); and France (due to the negative impact of street protests)"[69].

In **Japan**, the economy unexpectedly grew in the first quarter of 2019 defying the expectations of most analysts of a contraction. The latest estimate showed that GDP rose by an annualised 2.1% in Q1 2019. Looking forward, the IMF notes that "Japan's economy is set to grow by 1.0 percent in 2019 (0.1 percentage points higher than in the October [World Economic Outlook]). This revision mainly reflects additional fiscal support this year, including measures to mitigate the effects of the planned consumption tax rate increase in October 2019. Growth is projected to moderate to 0.5 percent in 2020 (0.2 percentage points higher than in the October 2018 [World Economic Outlook], reflecting the effects of the aforementioned mitigating measures)"[70].

Emerging market economies
Growth in the emerging market economies is expected to remain steady over the coming few years. The IMF expects growth to be 4.4% in 2019 rising to 4.8% in 2020[71].

Figure 3.26: Annual rate of real GDP growth for selected emerging market economies



Source: IMF (2019), '[World Economic Outlook: Growth Slowdown, Precarious Recovery](#)' April 2019.

[69] Ibid.
[70] Ibid.
[71] Ibid.

Of the major emerging markets, **China's** economy grew by 6.4% year-on-year in Q1 2019, unchanged on the growth rate seen in Q4 2018. The outlook for China however continues to remain uncertain due to the ongoing trade dispute with the US. The IMF expects growth to slow to 6.3% in both 2019 and 2020 (a downgrade of 0.1 percentage points on their January forecast), with this slowdown reflecting "weaker underlying growth in 2018, especially in the second half, and the impact of lingering trade tensions with the United States"[72]. This is generally in line with the forecasts by the Asian Development Bank (ADB) that expects growth of 6.3% in 2019 and 6.1% in 2020[73]. The ADB attributed the slowdown in part due to the ongoing trade dispute with the US and "restrictions on shadow banking".

Meanwhile, **India's** economy is estimated by the IMF to have grown by 7.1% in 2018, although growth slowed in the first three months of 2019 to an annualised rate of 5.8% down from the 6.6% growth seen in the last three months of 2018. Looking forward the IMF expects India's annual rate of economic growth "to pick up to 7.3 percent in 2019 and 7.5 percent in 2020, supported by the continued recovery of investment and robust consumption amid a more expansionary stance of monetary policy and some expected impetus from fiscal policy. Nevertheless, reflecting the recent revision to the national account statistics that indicated somewhat softer underlying momentum, growth forecasts have been revised downward compared with the October 2018 [World Economic Outlook] by 0.1 percentage point for 2019 and 0.2 percentage points for 2020, respectively"[74]. The ADB also expects faster growth too – 7.2% in 2019 and 7.3% in 2020, with them noting that "domestic demand is expected to remain the main driver of growth"[75].

In **Russia**, the economy grew by 0.5% year-on-year in Q1 2019 compared to 2.7% in Q4 2018. The IMF nevertheless expects growth to continue with forecasts of 1.6% in 2019 and 1.7% in 2020 with Russian growth "weighed down by the modest outlook for oil prices and structural headwinds"[76].

3.4 Risks to the economy

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

The rejection of the Brexit withdrawal agreement by the UK Parliament is polarising debate around either leaving the EU without any agreement or remaining in the EU. This is increasing both the downside and upside risks, and so increasing the range of uncertainty. If some form of withdrawal agreement is reached with the EU there would be further negotiations and a transition period where there would also be significant uncertainty around the UK's relationship with the EU. The uncertainty around the outcome of the process is negatively affecting the UK and London's economic growth due to its impact on business and consumer confidence. In the longer term if the UK exits the EU most economists expect that this will have a dampening effect on long-term growth compared with a baseline of EU membership, as it would increase barriers to trade.

Another risk to the economic outlook is in the rate of increase in UK interest rates. The Bank of England has an ambition to 'normalise' rates away from the current ultra-low level. While inflation has been close to target this year, the Bank expects an ongoing tightening of monetary policy over the forecast period, as its view is that the economy is acting at or near capacity. 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

[72] Ibid.
[73] Asian Development Bank (2019). 'Asian Development Outlook 2018: Strengthening Disaster Resilience', April 2019.
[74] IMF (2019), 'World Economic Outlook: Growth Slowdown, Precarious Recovery' April 2019.
[75] Asian Development Bank (2019). 'Asian Development Outlook 2018: Strengthening Disaster Resilience', April 2019.
[76] IMF (2019), 'World Economic Outlook: Growth Slowdown, Precarious Recovery' April 2019.

encourage investment and consumption which could support the economy in the short term. Over the longer term the costs of bringing inflation under control might be higher.

Linked to this, due to the recent relatively high rate of inflation, earnings have until recently not kept pace with inflation. Although real earnings have continued to rise again if this went into reverse this could have knock-on effects on consumer spending for instance. However, the rate of inflation is relatively moderate – standing at 2.1% in April – meaning the pressure on real earnings growth could lessen.

There is also a risk around fiscal policy in the UK. Over the short, medium, and long term there are reasons to increase spending to ease the pressures on a range of public services, and support the aging population. Indeed, in the 2018 Budget the UK Government announced the end of austerity. While the OBR[77] estimates that the Government is on track to meet its fiscal targets it is not clear how the pressures might be funded. This is despite the OBR assuming a smooth Brexit. The UK public finances might deteriorate from unfunded commitments, or lower than expected growth of tax receipts. If this were to happen it runs the risk that the UK's debt rating could be downgraded further by international ratings agencies, which could lead to higher borrowing costs and have a knock-on effect on public spending and, consequently, economic growth.

In addition to these UK-level risks, another risk relates to the strength of global economic growth. As noted in section 3.3, there was a decent rate of global growth in 2018 and the IMF is expecting slightly slower growth in 2019 before returning to its 2018 rate. This can potentially support economic growth in the UK and London through higher demand for exports and positive market sentiment. However, there are a number of downside risks discussed below. If they materialised, this could lead to the global economy expanding at a disappointing rate, which in turn could adversely affect the UK economy.

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

Financial vulnerabilities appearing in some economies such as China also remain a concern. While the direct impact of a Chinese financial crisis on London may be limited, London's role in the global financial system means that the capital's economy could still be negatively affected indirectly. A number of other systemically important countries, including the US and UK, have large sovereign debts, where a loss of confidence might also trigger a crisis.

A further trade-related downside risk is the increasing inward-looking, protectionist policies coming from the US in particular. One consequence is a trade war with China. The possible effects are a noticeable slowing of global growth, and a marked reduction in global trade flows.

Finally, there is a risk associated with geopolitical uncertainty. Any conflicts or sanctions have the potential to dampen or reverse country or regional growth, which in turn could have wider effects depending on how globally interconnected the relevant countries or regions are. For instance, in the news at the moment are the detrimental economic and political effects for Iran of US sanctions.

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[77] OBR (2019), 'Economic and fiscal outlook', March 2019.

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

3.5 Conclusion

This chapter described the recent performance of the London, UK and world economies. It thus noted that the global economy remains relatively strong and could promote growth in global trade flows. In turn this could benefit economies that are particularly outward looking, like the UK's and London's economies. However, there are downward risks to the global outlook, with threats of financial vulnerabilities in some economies and increasing protectionist policies especially by the US.

Meanwhile, for the UK, economic growth in 2018 was mixed which partly reflects a general slowdown in the services sector and although the first quarter of 2019 saw reasonable growth the service sector remained sluggish. Despite a reasonable start to 2019 various economic forecasts continue to expect slow growth for 2019 and into 2020. Prospects of further increases in interest rates by the Bank of England remain uncertain whilst the outcome of Brexit remains unknown. If interest rates did rise this could dampen economic growth by raising the opportunity cost of spending and borrowing, however the process of raising interest rates is, despite the ongoing uncertainty, expected to be gradual and therefore monetary policy should remain supportive to economic growth.

That said the future paths of the London and UK economies have become more uncertain due to Brexit. The extension of the withdrawal process increases uncertainty and so is damaging because it makes decision making harder. At the same time the debate has become more polarised on Brexit with the different positions likely to have quite different economic ramifications if implemented.

The picture for London is generally positive. Although more mixed than in recent years, the balance of indicators largely point to the London economy continuing to expand. For example, the labour market continues to perform strongly, and consumer confidence remains marginally positive. However, the PMI measure of business activity has pointed to a decline in activity although this improved slightly in May. Still on balance these indicators point to further growth in the short and medium term, though probably at a subdued pace. For instance, while GVA growth in London has started to pick up, it remains slower than the average seen since the financial crisis. This outlook for London is by no means certain, however, with the main risks relating to the impact and ongoing uncertainty 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 10 June 2019 on the first three of these indicators is summarised[78], drawing on forecasts from outside (independent) organisations[79]. Both annual growth rates and 'standardised' absolute levels are reported. All the data is in real terms (constant prices). The source for the historic data on GVA and workforce jobs presented in the following tables and charts is GLA Economics modelling, which in turns relies on ONS data. The source of historic data for Household Income and Expenditure is a mixture of Experian Economics (EE) for growth rates and GLA Economics modelling using EE data for absolute levels data.

Additionally, both the consensus[80] and GLA Economics' own forecasts provide predictions of employment and output growth in six broad sectors:

- Manufacturing
- Construction
- Transportation and storage
- Distribution[81], accommodation and food service activities
- Finance and business services[82]
- Other (public & private) services[83].

It should be noted, that since our spring 2012 forecast GLA Economics has been using the new Standard Industrial Classification (SIC 2007)[84].

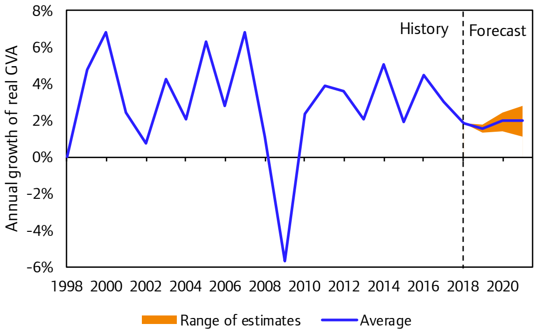
[78] The consensus forecast for GVA and employment is based on the latest available forecast from CE, CEBR, EE and OE, while the consensus forecast for household expenditure is based on the latest available forecast from CE, EE and OE only.
[79] Most forecasters do not yet provide forecasts of household income.
[80] 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.
[81] Distribution is made from the summation of Wholesale and Retail.
[82] 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.
[83] This is made from the summation of Public admin and defence, Education, Health, Arts, entertainment and recreation and Other services.
[84] For more information see Appendix A of: GLA Economics (2012). 'London's Economic Outlook: Spring 2012', June 2012.

Output

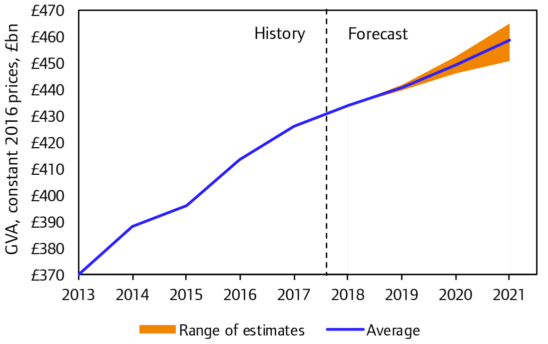
(London GVA, constant prices (base year 2016), £ billion)

The consensus (mean average view) is for real output growth to increase from 1.6% in 2019 to 2.0% in 2020 and 2021.

Annual growth



Level (constant year 2016, £ billion)



Annual growth (%)					Level (constant year 2016, £ billion)			
	2019	**2020**	**2021**			**2019**	**2020**	**2021**
Average	1.6	2.0	2.0		Average	440.8	449.4	458.5
Lowest	1.3	1.4	1.1		Lowest	439.7	445.8	450.7
Highest	1.8	2.4	2.8		Highest	441.7	452.3	464.9

History: Annual growth (%)

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018[85]
4.7	6.8	2.4	0.8	4.3	2.1	6.3	2.8	6.8	1.1	-5.7	2.3	3.9	3.6	2.1	5.0	1.9	4.5	3.0	1.8

History: Level (constant year 2016, £ billion)

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
240.3	251.7	268.7	275.2	277.4	289.2	295.2	313.9	322.6	344.6	348.6	328.8	336.5	349.7	362.3	369.8	388.5	395.9	413.7	426.2	433.7

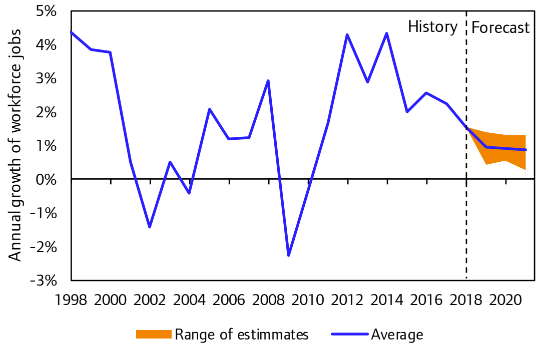
[85] 2018 figures for London GVA are consensus of external forecasters.

Employment

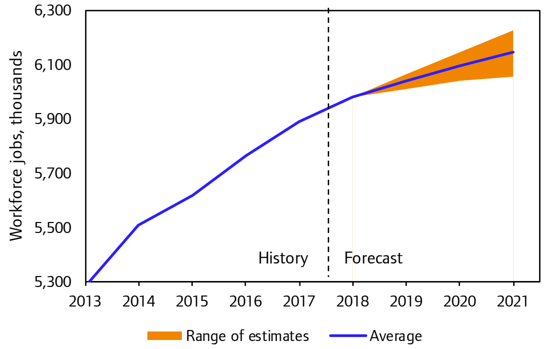
(London workforce jobs)

The consensus forecasts a weak growth in the number of workforce jobs in the medium-term: 1.0% this current year, 0.9% in 2020, and 0.8% in 2021.

Annual growth



Level (constant year 2016, £ billion)



Annual growth (%)					Level (millions of persons)			
	2019	2020	2021			2019	2020	2021
Average	1.0	0.9	0.8		Average	6.04	6.10	6.15
Lowest	0.4	0.5	0.3		Lowest	6.01	6.04	6.05
Highest	1.4	1.3	1.3		Highest	6.07	6.15	6.23

History: Annual growth (%)

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
4.4	3.8	3.8	0.5	-1.4	0.5	-0.4	2.0	1.2	1.2	2.9	-2.3	-0.4	1.7	4.3	2.9	4.3	2.0	2.6	2.2	1.6

History: Level (millions of persons)

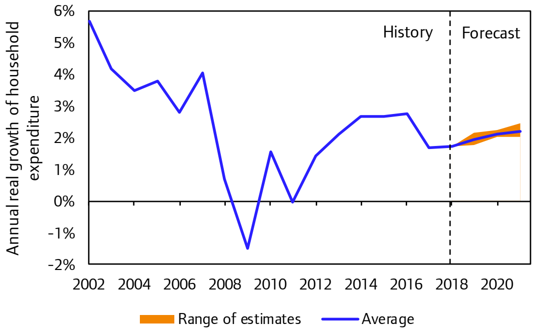
1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
4.14	4.32	4.49	4.66	4.68	4.62	4.64	4.62	4.72	4.77	4.83	4.97	4.86	4.84	4.92	5.13	5.28	5.51	5.62	5.76	5.89	5.98

Household expenditure

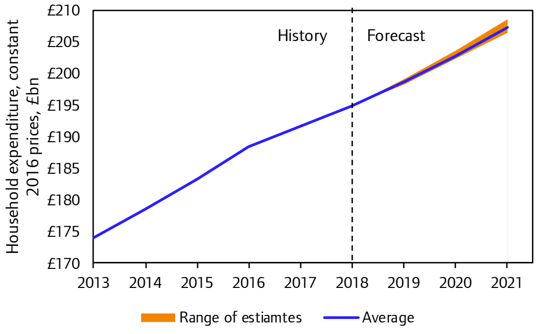
(London household spending, constant year 2016, £ billion)

The consensus view is for moderate household expenditure growth of 2.0% in 2019, 2.1% in 2020, and 2.2% in 2021.

Annual growth



Level (constant year 2016, £ billion)



Annual growth (%)					Level (constant year 2016 £ billion)			
	2019	**2020**	**2021**			**2019**	**2020**	**2021**
Average	2.0	2.1	2.2		Average	198.7	202.8	207.3
Lowest	1.8	2.0	2.0		Lowest	198.3	202.3	206.4
Highest	2.1	2.2	2.4		Highest	199.0	203.5	208.5

History: Annual growth (%)

2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
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	1.7	1.7

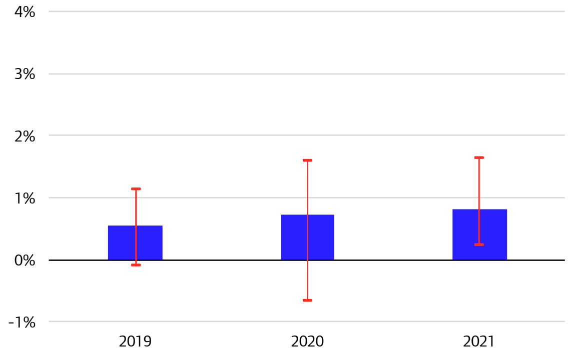
History: Level (constant year 2016, £ billion)

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
123.8	131.9	139.3	145.2	150.2	155.9	160.3	166.8	167.9	165.5	168.0	168.0	170.4	174.0	178.6	183.3	188.4	191.5	194.9

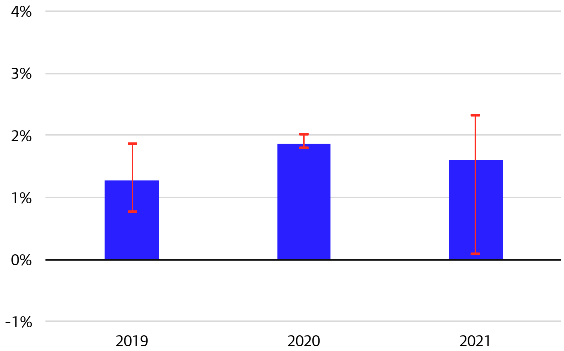
Output growth by sector (annual change)

In terms of output, the positive but subdued outlook for the whole economy can be observed at the breakdown by sectors as well, with all sectors forecast to grow over the period 2019-2021.

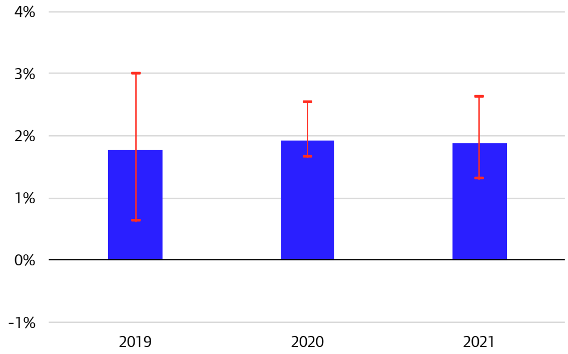
Manufacturing



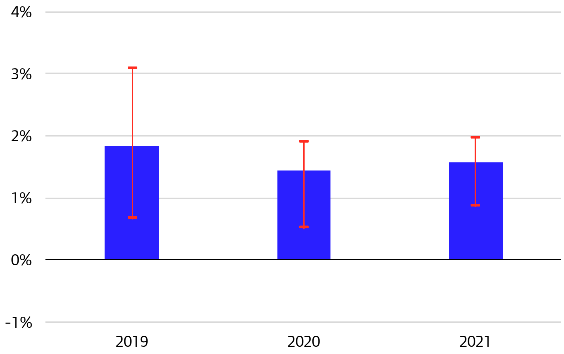
Construction



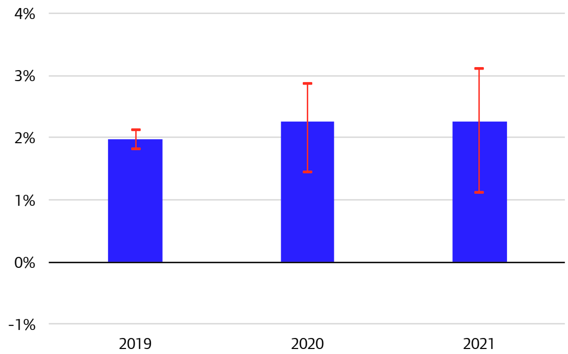
Distribution, accommodation and food service activities



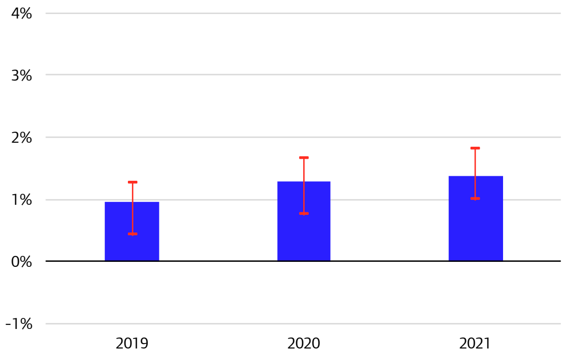
Transportation and storage



Finance and business



Other (public & private) services

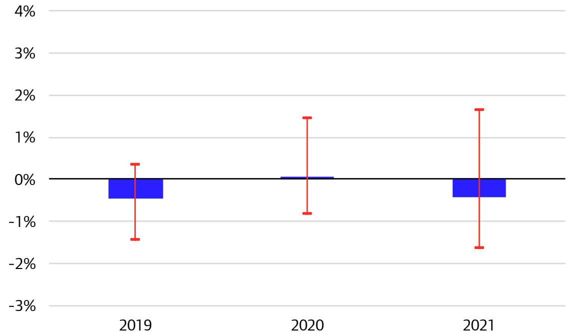


		2019	2020	2021			2019	2020	2021
Manufacturing	*Average*	0.6	0.7	0.8	**Construction**	*Average*	1.3	1.9	1.6
	Lowest	-0.1	-0.7	0.2		*Lowest*	0.8	1.8	0.1
	Highest	1.1	1.6	1.6		*Highest*	1.8	2.0	2.3
Distribution, accommodation and food service activities	*Average*	1.8	1.9	1.9	**Transportation and storage**	*Average*	1.8	1.4	1.6
	Lowest	0.6	1.7	1.3		*Lowest*	0.7	0.5	0.9
	Highest	3.0	2.5	2.6		*Highest*	3.1	1.9	2.0
Finance and business	*Average*	2.0	2.3	2.3	**Other (public & private) services**	*Average*	1.0	1.3	1.4
	Lowest	1.8	1.4	1.1		*Lowest*	0.4	0.7	1.0
	Highest	2.1	2.9	3.1		*Highest*	1.3	1.7	1.8

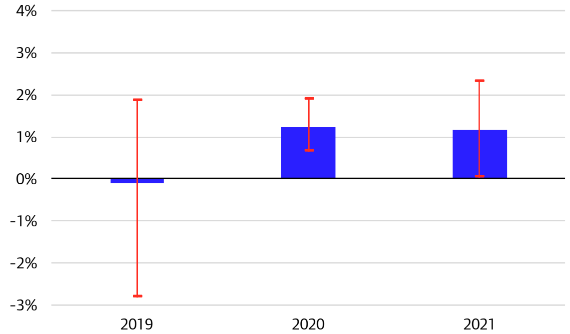
Employment growth by sector (annual change)

Most sectors are forecast to see weak increases in employment over the next couple of years. The exception is Manufacturing which is predicted to see a reduction in the number of workforce jobs in 2019 and 2021, and Construction which is predicted to see a small reduction of workforce jobs in the current year 2019.

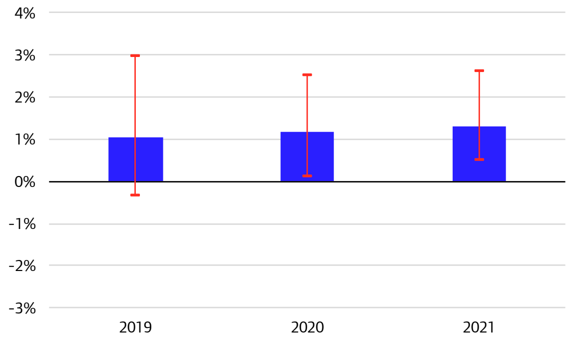
Manufacturing



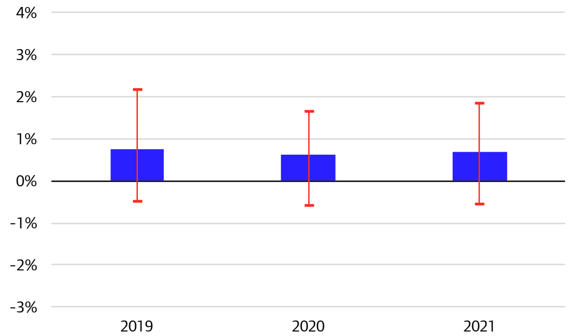
Construction



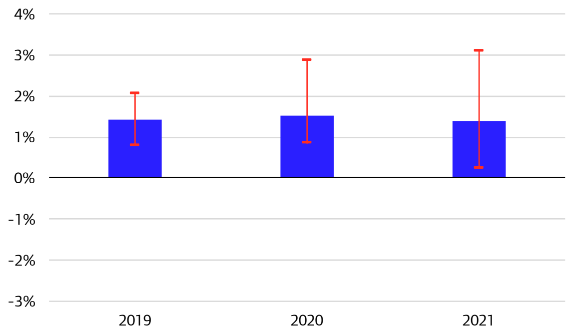
Distribution, accommodation and food service activities



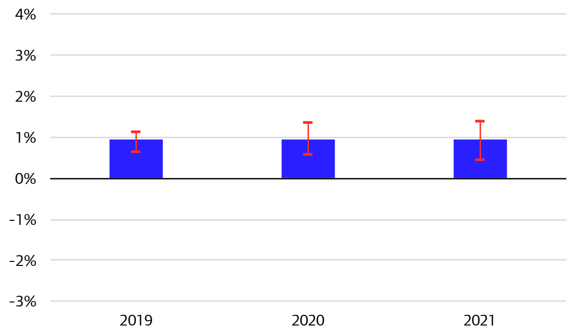
Transportation and storage



Finance and business



Other (public & private) services



		2019	2020	2021			2019	2020	2021
Manufacturing	*Average*	-0.5	0.0	-0.4	**Construction**	*Average*	-0.1	1.2	1.2
	Lowest	-1.4	-0.8	-1.6		*Lowest*	-2.8	0.7	0.1
	Highest	0.3	1.4	1.6		*Highest*	1.8	1.9	2.3
Distribution, accommodation and food service activities	*Average*	1.0	1.2	1.3	**Transportation and storage**	*Average*	0.8	0.6	0.7
	Lowest	-0.3	0.1	0.5		*Lowest*	-0.5	-0.6	-0.6
	Highest	3.0	2.5	2.6		*Highest*	2.2	1.6	1.9
Finance and business	*Average*	1.4	1.5	1.4	**Other (public & private) services**	*Average*	0.9	1.0	0.9
	Lowest	0.8	0.8	0.2		*Lowest*	0.6	0.6	0.4
	Highest	2.1	2.9	3.1		*Highest*	1.1	1.4	1.4

5. The GLA Economics forecast

5.1 The background

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

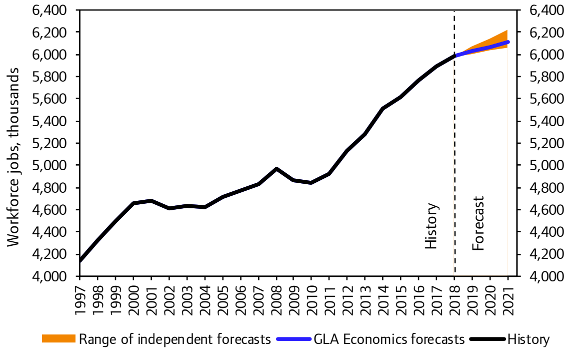
5.2 Results

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 2019 and 2021 though at weak rates.

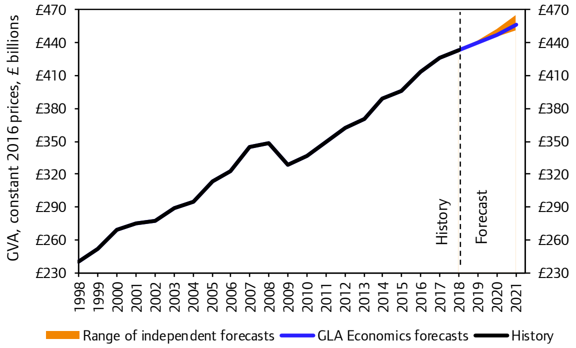
Household income and spending are also expected to grow below the historic trend.

Figure 5.1: Trend and forecast employment and output

Employment



Output



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

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

	2013	2014	2015	2016	2017	2018	2019	2020	2021
GVA	2.1	5.0	1.9	4.5	3.0	1.8	1.5	1.6	2.2
Workforce jobs	2.9	4.3	2.0	2.6	2.2	1.6	0.8	0.7	0.8
Household spending	2.1	2.7	2.7	2.8	1.7	1.7	1.1	1.2	2.4
Household income	3.6	2.6	6.2	0.4	0.7	1.8	1.0	1.7	2.3

Table 5.2: Forecast and historical levels
(constant year 2016, £ billion except jobs)

	2013	2014	2015	2016	2017	2018	2019	2020	2021
GVA	369.8	388.5	395.9	413.7	426.2	433.7	440.1	447.0	456.9
Workforce jobs (millions)	5.28	5.51	5.62	5.77	5.89	5.98	6.03	6.07	6.12
Household spending	174.0	178.6	183.3	188.4	191.5	194.9	197.1	199.4	204.1
Household income	216.1	221.8	235.5	236.3	237.9	242.1	244.6	248.8	254.5

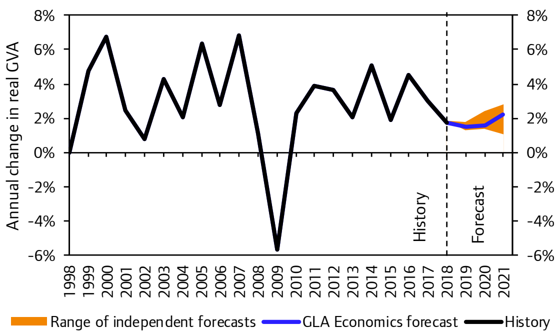
Output

(London GVA, constant year 2016, £ billion)

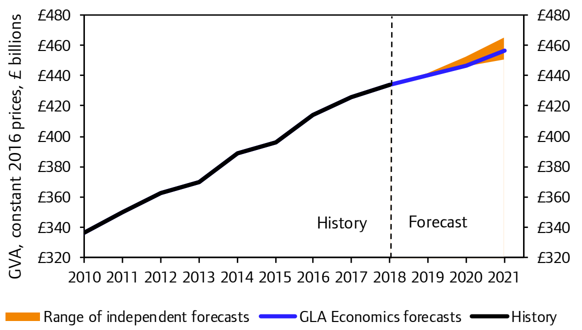
London's real GVA is forecast to grow between 2019 and 2021 at 1.5%, 1.6%, and 2.2%, respectively.

The GLA Economics' forecast is lower for the years 2019 and 2020 than the consensus average forecasts but slightly higher in 2021.

Annual growth (%)



Level (constant year 2016, £ billion)



Growth (annual %)						Level (constant year 2016, £ billion)				
	2018	2019	2020	2021			2018	2019	2020	2021
GLA	1.8	1.5	1.6	2.2		GLA	433.7	440.1	447.0	456.9
Consensus		1.6	2.0	2.0		Consensus		440.8	449.4	458.5

History: Annual growth (%)

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
4.7	6.8	2.4	0.8	4.3	2.1	6.3	2.8	6.8	1.1	-5.7	2.3	3.9	3.6	2.1	5.0	1.9	4.5	3.0	1.8

History: Level (constant year 2016, £ billion)

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
240.3	251.6	268.7	275.2	277.4	289.2	295.2	313.9	322.6	344.6	348.6	328.8	336.5	349.7	362.3	369.8	388.5	395.9	413.7	426.2	433.7

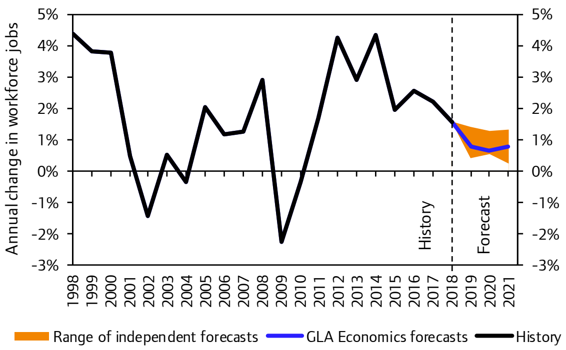
Employment

(London workforce jobs)

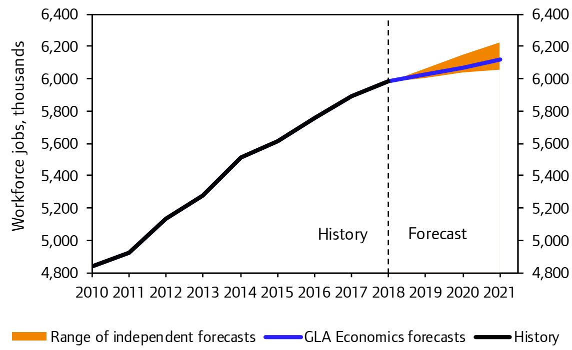
London's employment is forecast to rise moderately over the forecast 2019 - 2021. The rates of growth are predicted at 0.8% in 2019, 0.7% in 2020, and 0.8% in 2021.

GLA Economics' forecasts for employment growth in London are slightly lower than the consensus average forecasts for the years 2019 and 2020 and the same for 2021.

Annual growth (%)



Level (million of workforce jobs)



Growth (annual %)						Level (millions of workforce jobs)				
	2018	2019	2020	2021			2018	2019	2020	2021
GLA	1.6	0.8	0.7	0.8		GLA	5.98	6.03	6.07	6.12
Consensus		1.0	0.9	0.8		Consensus		6.04	6.10	6.15

History: Annual growth (%)

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
3.8	3.8	0.5	-1.4	0.5	-0.4	2.0	1.2	1.2	2.9	-2.3	-0.4	1.7	4.3	2.9	4.3	2.0	2.6	2.2	1.6

History: Level (millions)

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
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	5.89	5.98

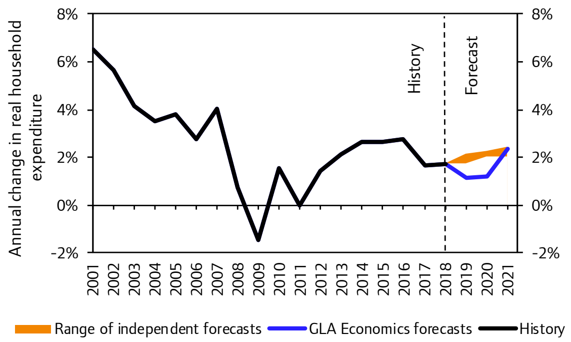
Household expenditure

(London household spending, constant year 2016, £ billion)

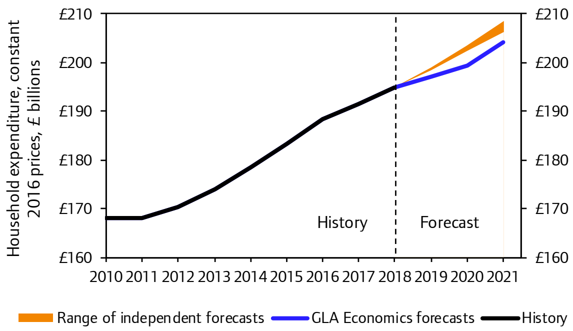
Growth in London's household spending is forecast to be below the historic rates of growth over the forecast period, 1.1% in 2019, 1.2% in 2020, and 2.4% in 2021.

GLA Economics' household spending growth forecast is lower than the consensus average for the years 2019 and 2020, and slightly higher in 2021.

Annual growth (%)



Level (constant year 2016, £ billion)



Growth (annual %)						Level (constant year 2016, £ billion)				
	2018	2019	2020	2021			2018	2019	2020	2021
GLA	1.7	1.1	1.2	2.4		GLA	194.9	197.1	199.4	204.1
Consensus		2.0	2.1	2.2		Consensus		198.7	202.8	207.3

History: Annual growth (%)

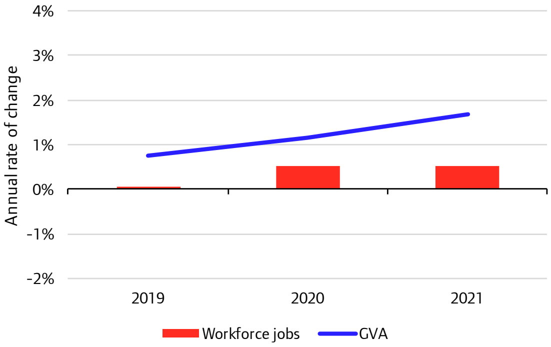
2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
6.5	5.7	4.2	3.5	3.8	2.8	4.0	0.7	-1.5	1.6	0.0	1.4	2.1	2.7	2.7	2.8	1.7	1.7

History: Level (constant year 2016, £ billion)

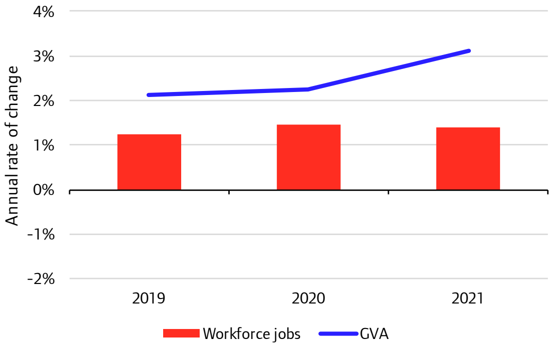
2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
131.9	139.3	145.2	150.2	155.9	160.3	166.8	167.9	165.5	168.0	168.0	170.4	174.0	178.6	183.3	188.4	191.5	194.9

Output and employment growth by sector (% annual changes)

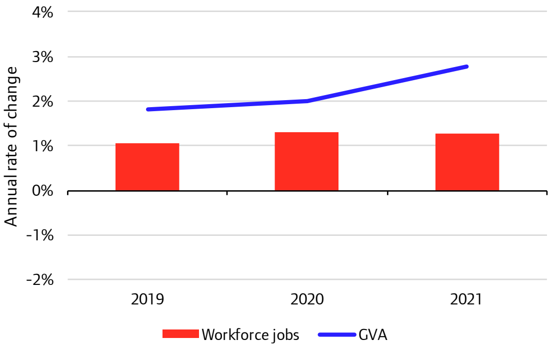
Financial services



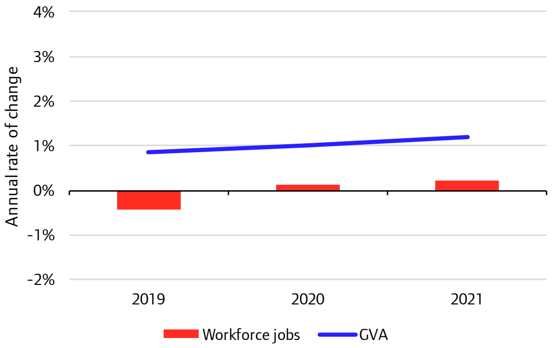
Business services



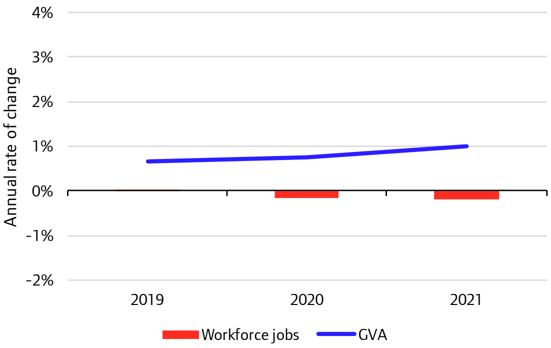
Finance and business (combined)



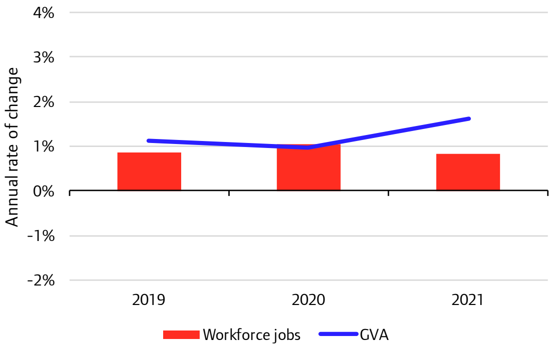
Distribution, accommodation and food service activities



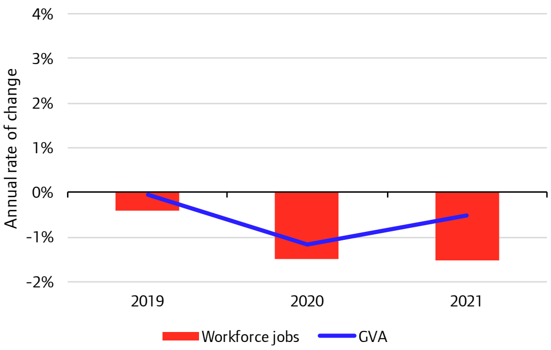
Transportation and storage



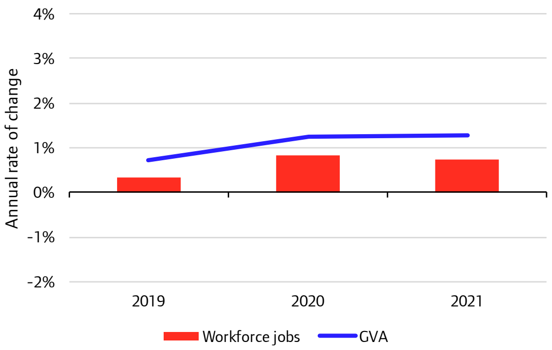
Other (public & private) services



Manufacturing



Construction



Output and employment growth by sector (% annual change)

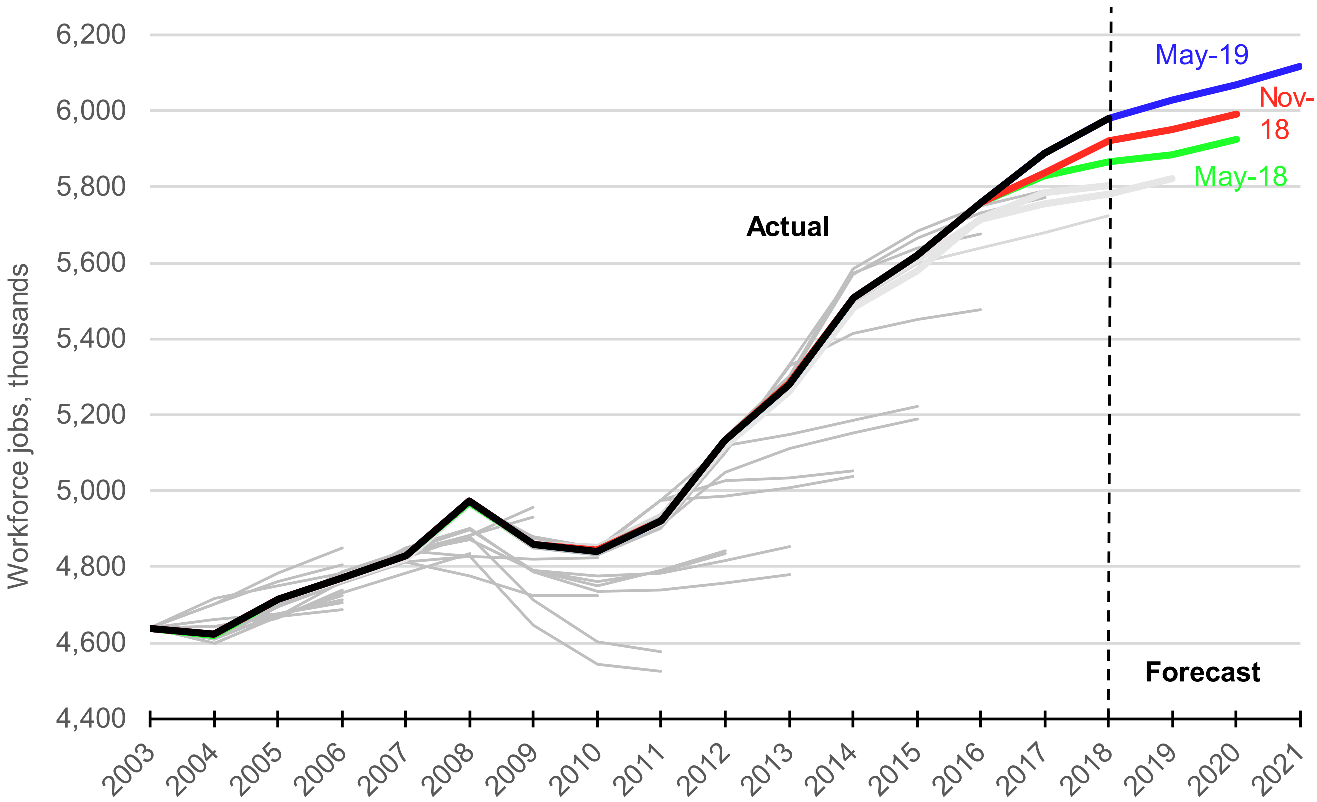
	2019	2020	2021
Financial services			
Output	0.7	1.2	1.7
Employment	0.1	0.5	0.5
Business services			
Output	2.1	2.3	3.1
Employment	1.2	1.5	1.4
Financial and business services combined			
Output	1.8	2.0	2.8
Employment	1.0	1.3	1.3
Distribution, accommodation and food service activities			
Output	0.9	1.0	1.2
Employment	-0.4	0.1	0.2
Transportation and storage			
Output	0.7	0.7	1.0
Employment	0.0	-0.2	-0.2
Other (public & private) services			
Output	1.1	1.0	1.6
Employment	0.9	1.0	0.8
Manufacturing			
Output	-0.1	-1.2	-0.5
Employment	-0.4	-1.5	-1.5
Construction			
Output	0.7	1.2	1.3
Employment	0.3	0.8	0.7
(Memo: non-manufacturing)			
Output	1.5	1.6	2.3
Employment	0.8	0.7	0.8

5.3 Comparison with previous forecasts

This section compares the current forecast with previous forecasts in this series. Since the base years for the forecasts change and the base data is continuously revised, the forecasts have been rebased into a common base year for the comparisons in Figures 5.2 and 5.3.

For the whole forecast period (2019-2021), the most recent GLA Economics forecast for the level of London's workforce jobs is higher than the November 2018 forecast. In terms of the annual growth rate, the most recent forecast is higher for this year and remains the same for 2020 compared to the previous GLA Economics estimates.

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[86]: Comparisons with previous published forecasts
(London workforce jobs, % annual growth)

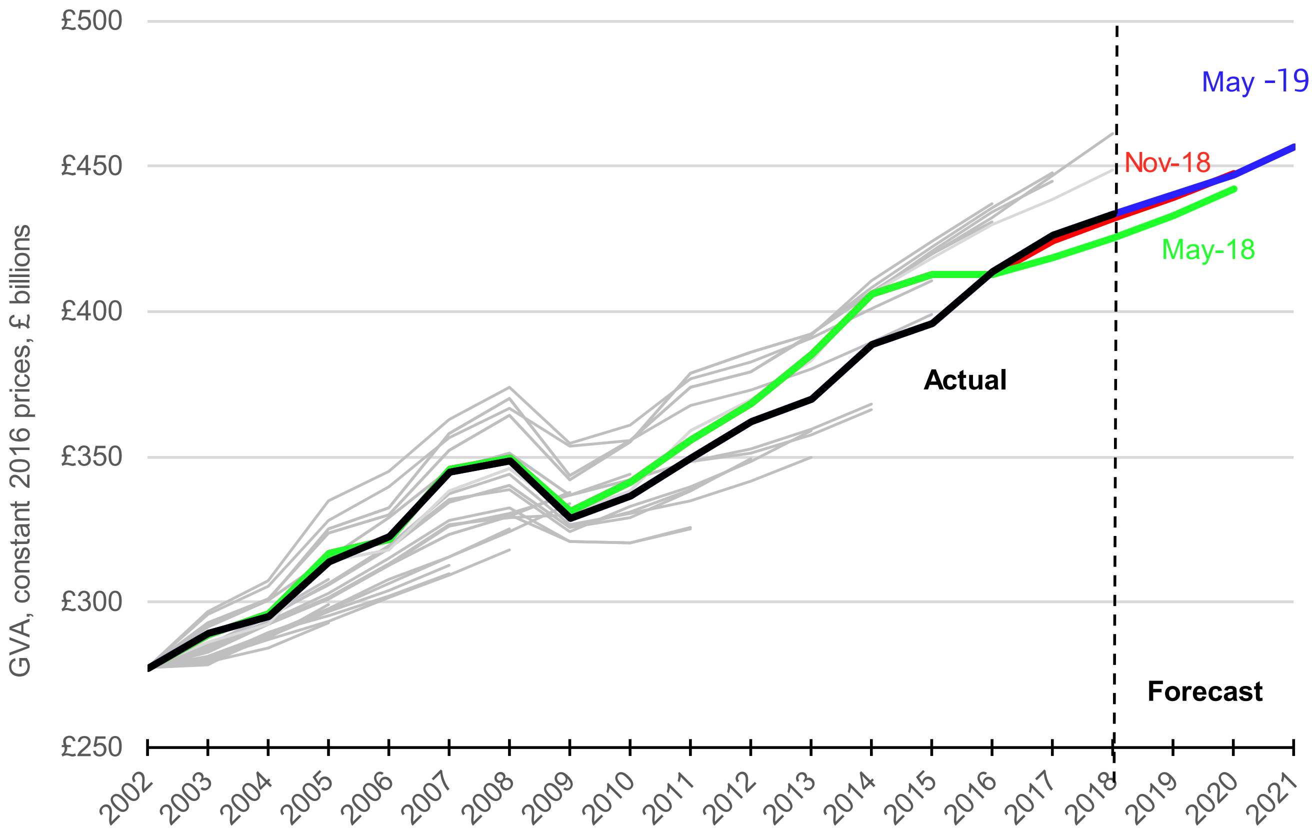
Forecast	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
May 2019	**2.0%**	**1.2%**	**1.2%**	**2.9%**	**-2.3%**	**-0.4%**	**1.7%**	**4.3%**	**2.9%**	**4.3%**	**2.0%**	**2.6%**	**2.2%**	**1.6%**	**0.8%**	**0.7%**	**0.8%**
Nov 2018														1.5%	0.5%	0.7%	
May 2018														0.6%	0.3%	0.7%	
Nov 2017													1.4%	0.3%	0.5%		
Jun 2017													0.7%	0.5%	0.7%		
Nov 2016												2.5%	1.2%	0.3%			
May 2016												0.7%	0.7%	0.7%			
Nov 2015											1.7%	1.2%	0.7%				
May 2015											1.7%	1.2%	0.7%				
Nov 2014										4.5%	1.2%	0.7%					
May 2014										1.6%	0.7%	0.5%					
Nov 2013									1.3%	0.8%	0.7%						
Jul 2013									0.6%	0.7%	0.7%						
Nov 2012								1.0%	0.2%	0.4%							
Jun 2012								0.2%	0.4%	0.6%							
Nov 2011							0.1%	0.4%	0.4%								
May 2011							0.1%	0.7%	0.8%								
Oct 2010						-0.6%	0.6%	1.0%									
Jun 2010						-0.8%	0.8%	1.1%									
Oct 2009					-3.4%	-2.3%	-0.6%										
Apr 2009					-3.8%	-2.2%	-0.4%										
Oct 2008				-0.7%	-1.1%	0.0%											
May 2008				-0.3%	-0.1%	0.1%											
Oct 2007			1.2%	0.9%	1.0%												
Apr 2007			1.2%	1.4%	1.5%												
Oct 2006		1.3%	1.1%	1.1%													
Apr 2006		0.8%	0.8%	1.1%													
Oct 2005	0.6%	0.4%	0.8%														
Apr 2005	0.3%	0.7%	1.1%														
Oct 2004	1.2%	0.9%															
Mar 2004	0.7%	0.7%															
Nov 2003	0.6%																
Jul 2003	0.9%																
Jan 2003	1.8%																

Source: Various London's Economic Outlooks

[86] This table only reports forecasts for 2005 onwards unlike Figure 5.2.

The most recent forecast for London's GVA level is slightly higher than the November 2018 forecast for the current year 2019 while it remains the same for the next year 2020. However, in terms of annual growth rates the latest forecast revises down the previous estimates for the years 2019 and 2020.

Figure 5.3: Output – latest forecast compared with previous forecasts
(constant year 2016, £ 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[87]: Comparisons with previous published forecasts
(London GVA, % annual growth)

Forecast	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
May 2019	**6.3%**	**2.8%**	**6.8%**	**1.1%**	**-5.7%**	**2.3%**	**3.9%**	**3.6%**	**2.1%**	**5.0%**	**1.9%**	**4.5%**	**3.0%**	**1.8%**	**1.5%**	**1.6%**	**2.2%**
Nov 2018														1.9%	1.6%	1.9%	
May 2018														1.6%	1.9%	2.2%	
Nov 2017													2.1%	1.8%	2.6%		
Jun 2017													2.3%	2.4%	2.9%		
Nov 2016												2.8%	2.0%	2.3%			
May 2016												2.9%	3.4%	3.3%			
Nov 2015											3.4%	3.2%	2.7%				
May 2015											3.6%	3.2%	2.5%				
Nov 2014										4.8%	3.3%	3.1%					
May 2014										3.8%	3.2%	2.6%					
Nov 2013									2.2%	2.5%	2.5%						
Jul 2013									1.9%	2.4%	2.5%						
Nov 2012								0.9%	1.8%	2.4%							
Jun 2012								1.2%	1.9%	2.5%							
Nov 2011							1.4%	2.0%	2.4%								
May 2011							2.0%	2.6%	2.9%								
Oct 2010						1.6%	2.4%	2.9%									
Jun 2010						1.0%	2.8%	3.3%									
Oct 2009					-3.5%	-0.2%	1.5%										
Apr 2009					-2.7%	-0.2%	1.7%										
Oct 2008				0.8%	0.2%	1.9%											
May 2008				1.3%	1.8%	2.2%											
Oct 2007			3.3%	2.0%	2.6%												
Apr 2007			2.6%	2.8%	3.0%												
Oct 2006		3.1%	3.0%	3.0%													
Apr 2006		2.7%	2.6%	2.8%													
Oct 2005	2.0%	2.3%	2.6%														
Apr 2005	2.6%	2.5%	2.7%														
Oct 2004	3.1%	2.7%															
Mar 2004	2.9%	3.0%															
Nov 2003	3.0%																
Jul 2003	4.1%																
Jan 2003	4.0%																

Source: Various London's Economic Outlooks

[87] This table only reports forecasts for 2005 onwards unlike Figure 5.3.

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 real regional GVA are available up to 2017 from the ONS[88]. 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.

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.

[88] ONS Regional GVA (balanced approach)

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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