

March 2019

UK Economic Outlook

Special features on:

The outlook for consumer spending and online retail

Regional growth trends and prospects



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Highlights and key messages for business and public policy

Key projections

	2019	2020
Real GDP growth	1.1%	1.6%
Consumer spending growth	1.4%	1.7%
Fixed investment growth	-1.0%	2.1%
Inflation (CPI)	1.8%	2.0%

Source: PwC main scenario projections

Recent UK developments and prospects

- In our main scenario, we project UK growth to dip to 1.1% in 2019 before picking up to around 1.6% in 2020. Slow growth this year reflects the drag on business investment from ongoing economic and political uncertainty relating to the outcome of the Brexit process. Our main scenario assumes an orderly exit from the EU with a transition period, with business investment and GDP growth picking up later in 2019 and in 2020 as a result. But short-term risks are weighted to the downside, due to the possibility of a more disorderly Brexit.
- Consumer spending has driven the economy since the referendum and has itself been supported by recent increases in real income growth. But the housing market has cooled, further rises in household borrowing may be hard to sustain and uncertainties regarding Brexit could combine to see consumer spending growth slow to around 1.4% this year, from 1.9% in 2018, before picking up slightly in 2020.

- Service sector growth should remain modest but positive in 2019, but manufacturing growth slowed in 2018 and is likely to contract in 2019 amid Brexit uncertainty. Construction sector output has been sluggish in the past 18 months owing to the weakness of commercial property investment in particular and looks set to remain relatively weak in the short term.
- In our main scenario, we assume that the Bank of England raises interest rates by a quarter of a percent to 1% in the second half of 2019. But the precise timing of this will be dependent on developments in Brexit and the economic data and the pace of any subsequent rate increases are likely to remain limited and gradual.

Despite stronger income growth, real household expenditure growth could slow in 2019

- Given the current strength of the labour market, we project real household disposable income growth to pick up gradually in 2019 and 2020, reaching 2% in the latter year. However, temporary uncertainty around the outcome of the Brexit process means that real household spending growth could slow this year, resulting in a slightly higher savings rate.

- Looking further out, we expect households to spend a larger share of their budgets on housing and utilities, with the proportion reaching more than 30% by 2030, up from 27% in 2018. The share of spending on financial services and personal care will also tend to increase over time, while the share spent on necessities such as food and clothing will fall.
- Online sales are likely to become a more important part of consumer spending in the long term. The proportion of sales conducted online doubled in each of the food, furnishing and clothing categories between 2010 and 2018. Assuming no structural change that accelerates the rate of growth from current levels, the online share of total retail spending could rise between 2018 and 2030 from 5% to 8% for food, from 10% to 22% for furnishings and from 18% to 32% for clothing.

London likely to grow only slightly faster than rest of the UK in 2019-20

- London has consistently outperformed other UK regions for most of the past three decades in terms of economic growth. This is in marked contrast to the 1970s and early 1980s when London's average growth rate was lower than the UK average due to people moving out of the capital.
- Much of London's historical outperformance is linked to the boom in financial and business services following the financial deregulation of the mid-1980s, as well as its relatively low manufacturing share and its ability to attract skilled international migrants.
- More recently, there have been signs from housing and labour markets that London's relative performance was less strong in 2018. We expect this to continue in 2019 and 2020, with London growing only slightly faster than the UK average rate in those years.

1. Summary

Recent developments

Economic growth slowed from early 2017 as higher inflation generated by a weaker pound squeezed consumers. The economy strengthened in the second and third quarters of 2018, helped by a recovery in consumer spending supported by warm weather, rising earnings growth and slowing inflation. However, softer data in the fourth quarter highlighted an underlying weakness in investment, which can be attributed to growing anxiety among businesses about the outcome of the Brexit process, as well as the effect of a slowing global economy.

The jobs market has generally remained strong, with the employment rate at record levels and unemployment down to its lowest rate since 1975. In recent months this has finally started to feed through into increased wage growth, which is one reason why the Bank of England raised interest rates in August 2018.

Future prospects

As shown in Table 1.1, our main scenario is for UK GDP growth to slow to around 1.1% on average in 2019 before picking up somewhat to 1.6% in 2020. Our views on growth and inflation are broadly similar to the latest consensus and OBR forecasts (see Table 1.1), and indeed the latest Bank of England forecasts.

Consumer spending growth held up well in 2018, but is expected to moderate to around 1.4% in 2019 in our main scenario as stronger real wage growth is offset by concerns about the implications of Brexit, slower projected jobs growth, the prospect of a gradual rise in interest rates and subdued house price growth.

Table 1.1: Summary of UK economic growth and inflation prospects

Indicator (% change on previous year)	OBR forecasts (March 2019)		Independent forecasts (February 2019)		PwC main scenario (March 2019)	
	2019	2020	2019	2020	2019	2020
GDP	1.2	1.4	1.4	1.6	1.1	1.6
Consumer spending	1.1	1.5	1.2	1.5	1.4	1.7
Inflation (CPI)	2.1	1.9	1.8	2.0	1.8	2.0

Source: Office for Budget Responsibility (March 2019), HM Treasury survey of independent forecasters (average value of new forecasts made in February 2019 survey) and latest PwC main scenario.

Brexit-related uncertainty will also continue to hold back business investment in the UK in the short term, although we assume in our main scenario that this eases later in 2019 on the assumption of an orderly Brexit with a transition period. Total fixed investment in the economy was flat in 2018 and is expected to fall by 1% in real terms in 2019, followed by moderate growth of around 2% in 2020 in our main scenario.

The October 2018 Budget provided a significant boost to government spending in the medium term, particularly on the NHS, and also some short-term tax cuts that will support growth in 2019.

The global economy has weakened notably over the past six months, with growth in China and the Eurozone areas of particular concern. It is possible that some of this weakness is temporary – for example, the German economy was brought almost to a standstill by a one-off decline in exports because of new car emissions standards – but there are also risks of a continued marked slowdown in global growth extending into 2020, with adverse effects on both UK exports and, through confidence effects, business investment.

There are always uncertainties surrounding any growth projections, as illustrated by the alternative scenarios in Figure 1.1. There are still considerable downside risks relating in particular to the outcome of the Brexit process and the global outlook, but there are also upside possibilities if these problems can be contained and global growth regains some momentum. In our main scenario, we expect the UK to continue with moderate but steady growth in 2019-20, but businesses need to monitor and make contingency plans for potential alternative scenarios related to Brexit and other factors such as global growth.

Consumer price inflation fell back below the Bank of England's 2% target rate in January as the effect of more recent falls in global oil prices fed through to UK consumer prices. Given benign current levels of inflation and continued uncertainties around Brexit and the global economy, we expect the Monetary Policy Committee to remain cautious about the pace of future interest rate rises, but in our main scenario we assume a further quarter-point rate rise to 1% in the second half of 2019 and one further such increase at some point in 2020.

The outlook for consumer spending and online retail

Assuming an orderly Brexit, we project real household disposable income growth to accelerate mildly in 2019 and 2020 to reach 2% in the latter year. This will reflect further upward pressure on wages due to the tight labour market. Despite higher real income growth, we expect real household expenditure growth to slow in 2019, as shown in Table 1.1, but it should be able to pick up later in 2019 and in 2020 assuming an orderly Brexit is achieved. The acceleration in income growth and the slowdown in spending growth could result in the household savings ratio bucking its long-term trend and rising slightly in 2020.

As discussed in detail in Section 3 of this report, our latest consumer spending model projections suggest that the household budget share on housing and utilities could rise to just over 30% by 2030 (see Table 1.2), up from around 27% in 2018, as supply shortages will keep house prices and rents rising in real terms and as mortgage rates pick up in the medium term. Spending on miscellaneous services, such as insurance, is also projected to rise relatively quickly, but the proportion accounted for by more basic goods, such as food and clothes is projected to fall. The share of the transport sector could also decline.

Growth in online sales has been rapid in recent years and is now approaching 20% of total retail sales. The proportion of sales conducted online doubled in each of the food, furnishing and clothing categories between 2010 and 2018. Assuming no structural change that accelerates the rate of growth from current levels (or other concerns that trigger a significant slowdown or decline), the online share of total retail spending could rise between 2018 and 2030 from 5% to 8% for food, from 10% to 22% for furnishings and from 18% to 32% for clothing (see Figure 1.2).

Figure 1.1 – Alternative UK GDP growth scenarios

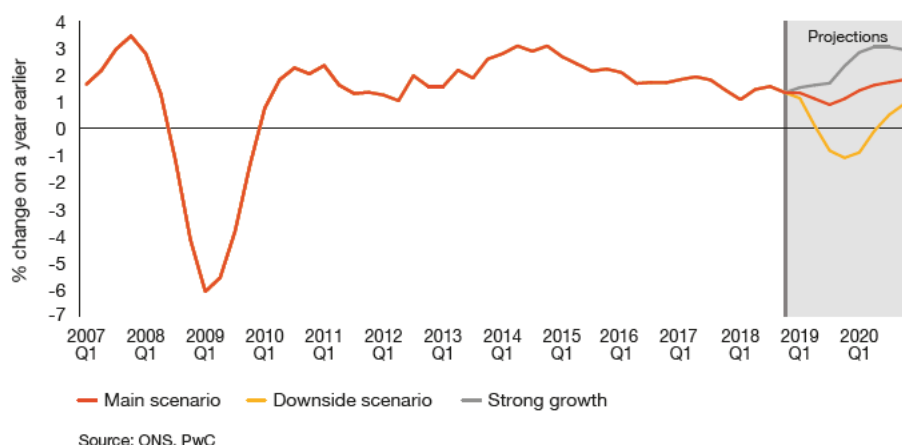
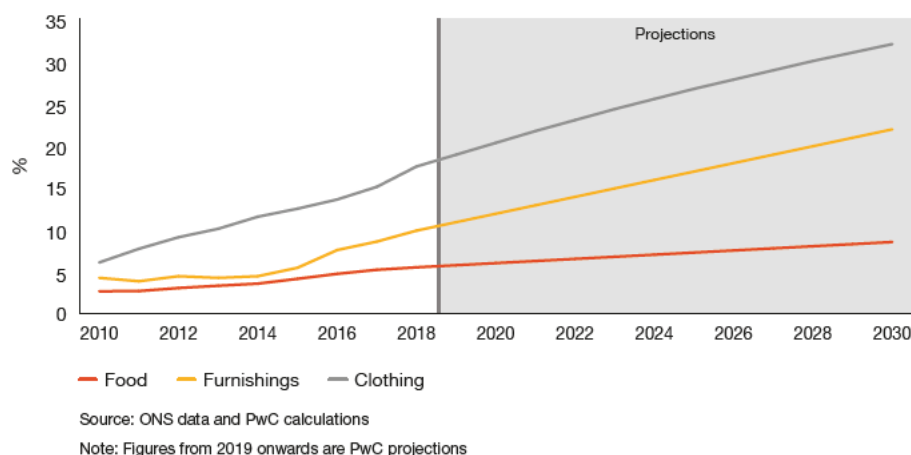


Table 1.2: Household budget share projections to 2030 and implied average annual real growth rates by household spending category in our main scenario

	Shares of total spending			Implied average real growth rates	
	2018e	2025p	2030p	2018-25p	2026-30p
Housing and utilities	26.6%	28.5%	30.5%	2.2%	2.6%
Transport	13.3%	12.6%	11.9%	1.0%	0.5%
Miscellaneous services	13.0%	13.9%	14.4%	2.3%	1.9%
Recreation and culture	9.8%	10.0%	10.0%	1.8%	1.4%
Hotels and restaurants	9.1%	9.1%	9.1%	1.5%	1.5%
Food	8.2%	6.9%	5.9%	-0.4%	-1.0%
Clothing and footwear	5.5%	4.7%	4.2%	-0.1%	-0.4%
Furnishings	5.5%	5.4%	5.3%	1.5%	1.0%
Alcohol and tobacco	3.4%	3.0%	2.8%	0.4%	0.2%
Health	2.0%	2.0%	2.1%	1.7%	2.0%
Communications	1.9%	1.9%	1.9%	1.8%	1.5%
Education	1.8%	1.8%	1.8%	1.5%	1.4%
Total spending	100%	100%	100%	1.7%	1.8%

Source: PwC analysis of ONS data for 2017-18 and PwC projections for 2019-20 – all growth rates are expressed in real terms

Figure 1.2 – Proportion of total sales made online by sector



Regional growth trends and prospects

In the 1970s and early 1980s the fastest growing areas of the UK were the South West and the East Midlands, while heavy industrial areas in the West Midlands and Northern regions lagged behind. London also recorded below average growth over this period as its population was shrinking until the 1980s.

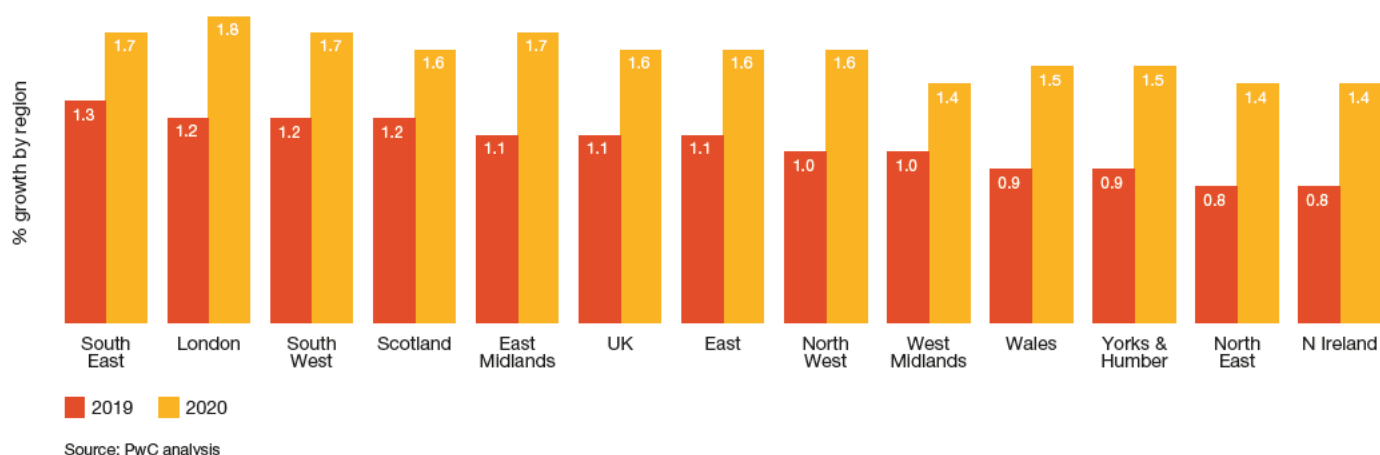
Since the mid-1980s, however, London has posted significantly faster growth than any other UK region. Much of London's outperformance is linked to the boom in financial and business services following the financial deregulation of the mid-1980s, as well as its relatively low manufacturing share. Outside London, however, there has been less of a consistent growth ranking of regions, with considerable variations by decade and no clear-cut North-South growth divide.

Population trends have played an important role in explaining overall economic growth variations by region since the 1970s, with strong net migration over the past two decades masking an underlying decline in output per person growth in most regions relative to earlier decades. London, in particular, has benefited from strong inflows of migrants in recent decades.

More recently, there have been signs from housing and labour markets that London's performance relative to other regions has been less strong. We expect this to continue in 2019-20, with London growing only slightly faster than the UK average rate in those years (see Figure 1.3).

Brexit-related uncertainty is likely to dampen growth in all regions in 2019, but there could be some acceleration in growth across the UK in 2020 if an orderly Brexit can be achieved.

Figure 1.3 – PwC main scenario for output growth by region in 2019 and 2020



2. UK economic prospects¹

Key points

- In our main scenario, we project UK growth to dip to 1.1% in 2019 before picking up to around 1.6% in 2020, assuming an orderly Brexit. But risks are weighted to the downside in the short term due to the possibility of a more disorderly Brexit.
- Consumer spending was boosted during the warm summer months in 2018 and has been supported by recent rises in real incomes. But the housing market has cooled and further rises in household borrowing may be hard to sustain, so we project only moderate consumer spending growth of around 1.4% this year.
- Business investment has been weighed down by uncertainties related to Brexit, falling at an accelerating rate through the course of 2018. It could recover later in 2019 and in 2020, but only if the UK can achieve an orderly Brexit.
- We expect UK growth to be more balanced across regions in 2019-20, with London no longer growing significantly faster than the UK average as has been the norm for most of the past three decades.
- As consumer price inflation remains moderate in 2019-20, real wages are expected to continue to grow, but at rates below those seen before the global financial crisis as productivity growth remains relatively subdued.
- The Bank of England is expected to continue with very gradual interest rates rises over the next few years assuming an orderly Brexit. But the next rate increase seems unlikely to come until after the situation on Brexit clarifies, and a 'no deal' scenario could see renewed monetary and fiscal policy relaxation to support the economy in the short term.

Introduction

In this section of the report we describe recent developments in the UK economy and review future prospects. The discussion covers:

- 2.1 Recent developments in the UK economy
- 2.2 Economic growth prospects: national, sectoral and regional
- 2.3 Outlook for inflation and real earnings growth
- 2.4 Monetary and fiscal policy
- 2.5 Summary and conclusions



In our main scenario, we project UK growth to dip to 1.1% in 2019 before picking up to around 1.6% in 2020, assuming an orderly Brexit.

John Hawksworth
Chief Economist, PwC

¹ This section was written by John Hawksworth with additional inputs by Megan Wulff.

2.1 – Recent developments in the UK economy

UK economic growth slowed to 1.4% in 2018 as Brexit-related uncertainty dampened business confidence and investment, although this was offset in part by continued consumer spending growth as inflation fell back and real incomes picked up (see Figure 2.1). UK growth was relatively strong in the warm summer months, but decelerated markedly in the final quarter of the year as uncertainty over Brexit rose.

Manufacturing sector output is still below pre-financial crisis peak levels, and suffered a renewed decline in output in the second half of 2018 (see Figure 2.2). This partly reflects the marked slowdown in key Eurozone markets during the course of 2018, which accelerated towards the end of the year, as well as the drag on activity from Brexit-related uncertainty.

The construction sector has been volatile over time, but had generally been growing relatively strongly in 2014-16 before declining in 2017 and again in late 2018. Commercial construction activity has been particularly weak over the past year, perhaps reflecting the impact of Brexit-related uncertainty, and housing activity has also moderated in London in particular.

The dominant influence on UK growth comes from the services sector, which now accounts for almost 80% of UK GDP (compared to only around 10% for manufacturing and around 6% for construction). Services sector output has grown relatively steadily ever since the recession bottomed out in mid-2009, although there have been some fluctuations in the pace of growth more recently.

Figure 2.1 – Trends in GDP, consumer spending and business investment growth

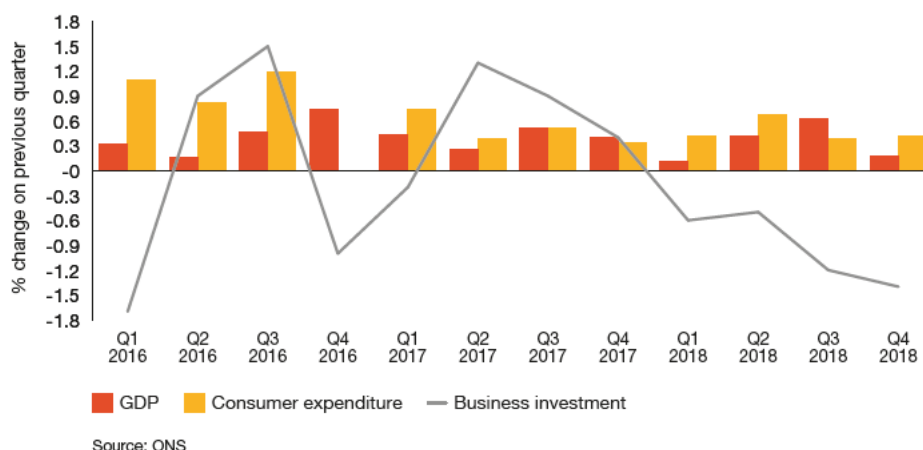
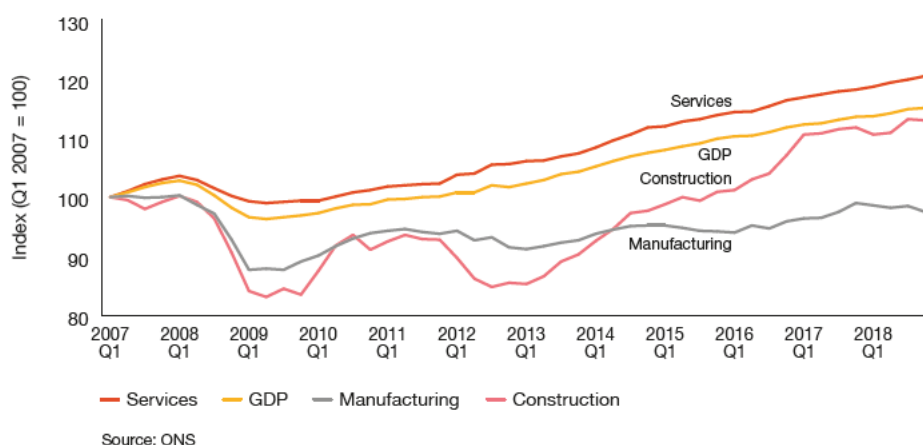


Figure 2.2 – Sectoral output and GDP trends



After a relatively strong summer in 2018, services growth slowed late in 2018, most notably in the latest monthly data for December. But retail sales, which make up one important component of services, were stronger in January.

Monthly GDP also picked up in January after dipping sharply in December, although the underlying trend remained one of sluggish growth of 0.2% in the three months to January.

Although official data are more comprehensive, business surveys can provide a more timely indication of short term economic trends. In particular, it is worth keeping an eye on the Markit/CIPS purchasing managers' indices (PMIs) for services and manufacturing, as shown in Figure 2.3. Despite some volatility, the manufacturing PMI had been relatively strong in the second half of 2017, but has moderated during the course of 2018 and weakened further in January and February 2019. The services PMI has been even weaker in recent months, with activity flat-lining in January as Brexit-related uncertainty increased, although it increased slightly in February. Overall, the PMI indices for the first two months of 2019 point to only very modest GDP growth of around 0.1% in the first quarter of 2019, based on past relationships between these survey results and GDP growth.

A key factor influencing UK economic trends since the Brexit vote in June 2016 has been the relative weakness of the pound, as shown in Figure 2.4. Sterling regained some ground against the US dollar between mid-2017 and April 2018, but has fallen back since then and remains weak against the euro. A weak currency has made UK exports relatively cheaper for overseas customers, promoting the sale of British goods and services and making the UK a more affordable destination for international tourists. But depreciation also raised the prices of imports and this pushed up inflation in 2017 in particular, so squeezing consumer spending power. These earlier effects of a weak pound seem to have worked their way through the economy now, but there are concerns that a 'no deal' Brexit could spark a further fall in sterling. Conversely, the pound could strengthen somewhat if an orderly Brexit could be achieved.

Figure 2.3 – Purchasing Managers' Indices of business activity

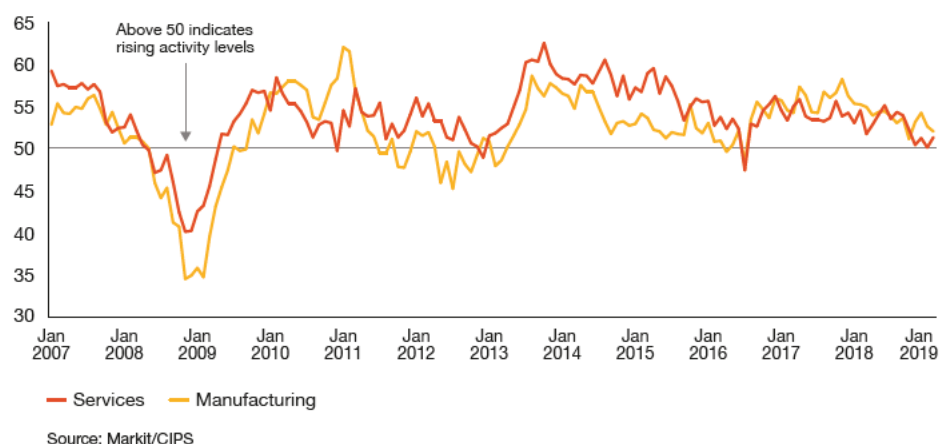


Figure 2.4 – US dollar and euro exchange rates against the pound

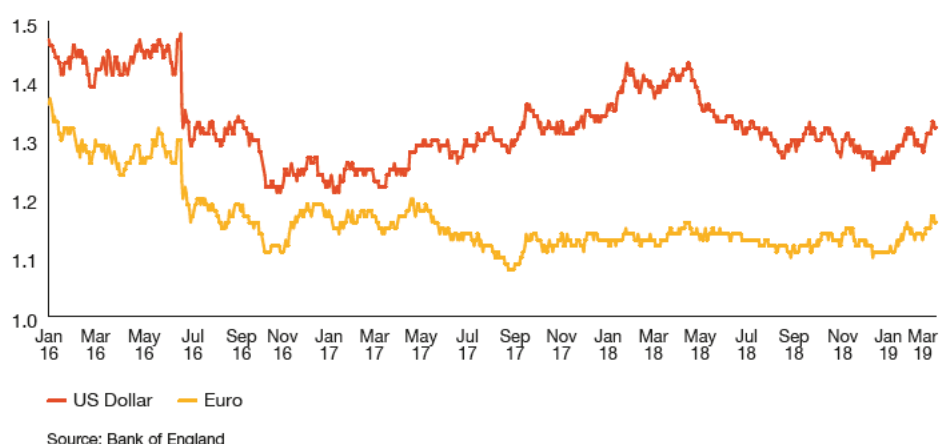
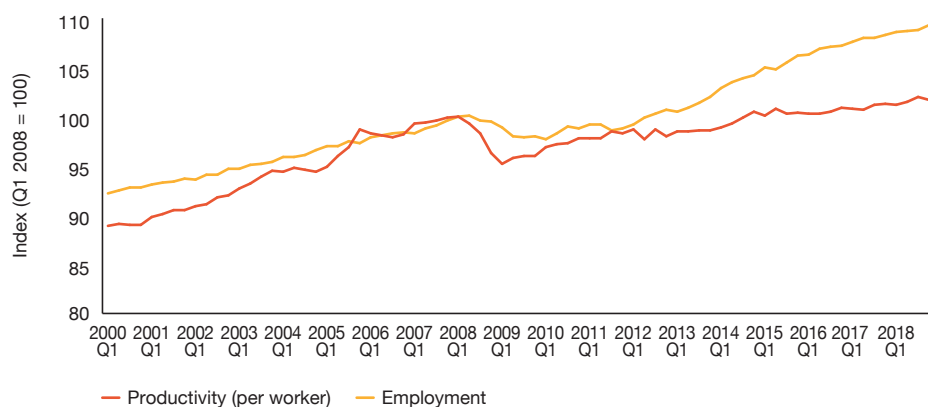


Figure 2.5 – Trends in productivity and employment



Source: ONS

UK creates record number of jobs, but productivity growth remains subdued

UK productivity growth, measured using output per worker, has been relatively weak since the global financial crisis, as illustrated in Figure 2.5. The positive side of this has been strong jobs growth, particularly since 2012.

Recent trends have continued to follow this general pattern, with jobs growth strengthening in the final quarter of 2018, while productivity growth remained relatively subdued (at least in terms of output per worker). The ideal combination of strong jobs growth and robust productivity and real earnings growth, as seen before the financial crisis, remains elusive.

Why has productivity growth been so weak since the global financial crisis?

Many possible explanations have been put forward for weak productivity growth over the past decade, including measurement error (in particular, not capturing the full benefit of digital innovations like smartphones). Soon after the 2008-9 recession, some put it down to labour hoarding by firms or credit constraints by banks, but both these explanations are less convincing now after almost ten years of recovery since mid-2009. Reduced competition in some sectors might be a possible explanation, but against that some other sectors have seen their markets disrupted by technology-savvy new entrants, which would usually be associated with increased innovation and productivity growth. Another possible explanation is that low productivity firms could have been kept alive by low interest rates, impeding the reallocation of capital and labour to higher productivity activities.

The most convincing explanation from our perspective is that business investment, while picking up since the 2008-9 recession, has not done so to the extent seen in most past recovery cycles. Many businesses have been reluctant to invest in new labour-saving automation technologies that are relatively risky when compared to the alternative of using more low-cost labour, including migrant workers from the EU. Uncertainty around Brexit has been a further dampener on business investment over the past two and a half years, which has been relatively subdued at a time when global economic conditions and low interest rates might have been expected to lead to a stronger performance.

Looking 10-20 years ahead, emerging technologies like robotics and artificial intelligence could hold the potential for faster productivity growth², with a net impact on UK employment that we think could be broadly neutral in the long run as we discussed in detail in the July 2018 edition of this report³. But, at least for the next few years, productivity growth may remain relatively subdued, with any recovery being at the expense of slower jobs growth.

² See, for example, our report on the potential impact of AI on the UK economy here, which suggests gains of up to 10% of GDP by 2030: <https://www.pwc.co.uk/services/economics-policy/insights/the-impact-of-artificial-intelligence-on-the-uk-economy.html>

³ Available here: <https://www.pwc.co.uk/economic-services/ukey/ukey-july18-net-impact-ai-uk-jobs.pdf>

2.2 – Economic growth prospects: national, sectoral and regional

Our main scenario is for real GDP growth of around 1.1% in 2019 and 1.6% in 2020, somewhat below the UK's estimated longer term trend growth rate of just under 2%. Further details of this main scenario projection are set out in Table 2.1.

We assume in this main scenario that the UK will avoid a 'no deal Brexit', where it falls out of the EU without any transitional arrangement, which would be highly disruptive. But clearly this is a key downside risk as discussed further below.

Slower year-on-year growth in 2018 was driven primarily by a decline in business investment and this seems likely to remain weak in early 2019 as Brexit-related uncertainty has intensified. But we assume in our main scenario that business investment will see some upturn later in 2019 and into 2020 on the assumption that a reasonably orderly Brexit can be achieved.

Consumer spending held up much better in 2018, helped by a moderation of inflation, higher earnings growth and continued strong jobs growth. As discussed in more detail in Section 3 below, we expect some moderation of consumer spending growth in 2019 followed by a gradual pick-up in 2020, again assuming a reasonably orderly Brexit. Income tax cuts announced in the October 2018 Budget will also provide some further support for household spending power from this April.

Table 2.1: Main scenario projections for UK growth and inflation

% real annual growth unless otherwise stated	2017	2018	2019	2020
GDP	1.8	1.4	1.1	1.6
Consumer spending	2.2	1.9	1.4	1.7
Government consumption	-0.2	0.2	2.1	2.0
Fixed investment	3.5	0.0	-1.0	2.1
Domestic demand	1.4	1.5	1.3	1.8
Net exports (% of GDP)	0.5	-0.2	-0.2	-0.2
CPI inflation (%: annual average)	2.7	2.5	1.8	2.0

Source: Latest ONS estimates for 2017-18, PwC main scenario for 2019-20

The October Budget also announced a significant rise in government consumption spending in 2019/20, particularly on the NHS, which will provide some support for the economy in that year and beyond. Higher public spending could also feed through into somewhat higher inflation and interest rates in the medium term, which would tend to dampen the impact on economic growth, but this is likely to be a lagged response that would not have a significant effect until after 2020.

Overall, UK domestic demand growth is expected to average around 1.3% in 2019, down slightly from last year, before picking up to 1.8% in 2020. This would, however, still be some way below average domestic demand growth of around 2.7% p.a. in 2013-16. Net exports are projected to have a slightly negative impact on growth over this period as the global economy slows.

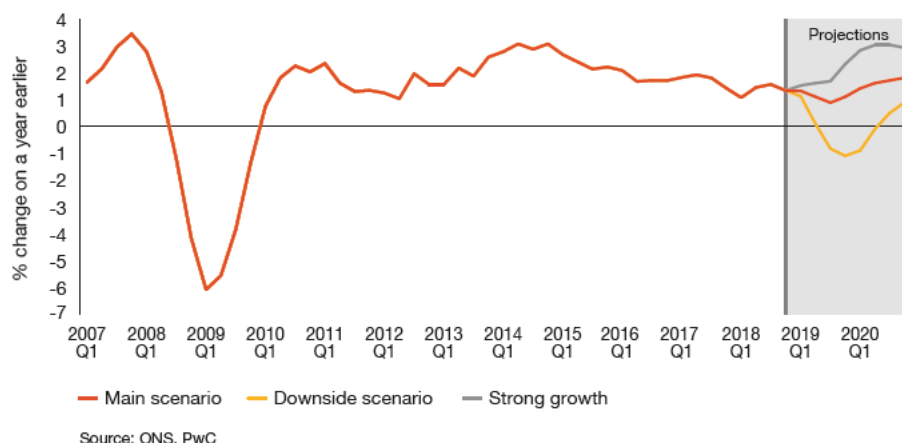
Overall our main scenario for UK GDP growth in 2019 has been revised down from 1.6% to 1.1% since our last report in November, reflecting growing evidence of a negative drag on business investment in particular from Brexit-related uncertainty, as well as a less favourable global economic environment. However we do expect a modest recovery of UK growth to around 1.6% in 2020 assuming a relatively orderly Brexit.

Alternative growth scenarios – businesses need to make contingency plans

To reflect the uncertainties associated with any such projections, particularly in light of Brexit, we have also considered two alternative UK growth scenarios, as shown in Figure 2.6.

- Our **‘strong growth’ scenario** projects that the economy will expand by around 2.8% in 2020, an increase from 1.6% in our main scenario. This is a relatively optimistic scenario, which assumes not just a smooth Brexit transition but also good early progress in subsequent UK-EU trade negotiations. It also assumes that global economic growth revives later in 2019 and into 2020, so boosting UK exports.
- Our **‘downside scenario’**, by contrast, would see UK growth stall in the first quarter of 2019 as the global outlook worsens and then fall into negative territory later this year if there is a disorderly Brexit. The associated uncertainty would be likely to reduce investment, jobs and growth, although the potential effects could vary considerably across sectors and individual companies depending on their particular circumstances. We do assume here that some kind of mitigating measures would be put in place to avoid more severe disruption in the case of a ‘no-deal Brexit’. This is therefore not an absolute worst-case scenario (e.g. we assume that ways would be found to avoid serious delays at major ports and that there would be some monetary and fiscal loosening to try to support the economy through this difficult period, as well as mitigation of risks through the recently activated Bank of England/ECB currency swap facility and other measures to ensure continuity and stability in financial markets and cross-border payments systems).

Figure 2.6 – Alternative UK GDP growth scenarios



We do not believe that either of these two alternative scenarios is the most likely outcome, but they are certainly possible. At present, risks to growth are weighted to the downside given the political and economic uncertainties around Brexit as well as concerns about a slowing global economy. Businesses would therefore be well advised to make appropriate contingency plans for such less favourable outcomes, but without losing sight of the more positive possibilities for the UK economy should these downside risks not materialise.

More generally, companies should consider making detailed contingency plans for the potential impact of alternative Brexit scenarios⁴ on all aspects of their businesses, covering the kind of questions listed in Table 2.2.

4 For more material on the potential impact of Brexit on your business, please see our EU Referendum hub here: <http://www.pwc.co.uk/the-eu-referendum.html>

Table 2.2: Key issues and questions for businesses preparing for Brexit

Issues	Implications	Questions
Trade	The EU is the UK's largest export partner, accounting for around 44% of total UK exports. Leaving the EU is likely to make trade with the EU more difficult, but the extent of this will depend on the type of deal, if any, agreed with the EU.	<ul style="list-style-type: none"> • How much do you rely on EU countries for revenue growth? • Have you reviewed your supply chain to identify the potential impact of tariffs and additional customs procedures on your sales, procurement and logistics? • Have you identified which third party contracts would require renegotiation in different Brexit scenarios (EEA/FTA/WTO)? • Have you ensured your banks can continue to provide financial support for your operations in different Brexit scenarios? • What risk assessments and contingency plans have you made for alternative Brexit scenarios?
Tax	The UK would gain more control over VAT and some other taxes. However, Brexit could also open the door to new tax initiatives within the EU that the UK might currently have sought to block.	<ul style="list-style-type: none"> • Have you thought about the impact of potential changes to the UK and EU tax regimes after Brexit? • Have you upgraded your systems to deal with a significant volume of tax changes?
Regulation	The UK is subject to EU regulation. Brexit could mean less red tape in some areas. But it could also mean that UK businesses need to adapt to a different set of regulations, which could be costly.	<ul style="list-style-type: none"> • Have you quantified the potential regulatory impact of Brexit to keep your stakeholders up-to-date? • How flexible is your IT infrastructure to deal with potential changes to Data Protection laws? • Is your compliance function ready to deal with any new reporting requirements arising from Brexit?
Sectoral effects	The UK is the leading European financial services hub, which is a sector that is likely to be significantly affected by Brexit. Other sectors which rely on the EU single market could also feel a strong impact.	<ul style="list-style-type: none"> • Have you briefed potential investors on the impact of Brexit for your sector and organisation? • How up-to-date are your contingency plans in place to deal with different Brexit scenarios, including no deal variants? • Are you aware of the impact of potential volatility in financial markets on your capital raising plans?
Foreign direct investment (FDI)	FDI from the EU makes up around 45% of the total stock of FDI in the UK. Brexit could put some of this investment at risk.	<ul style="list-style-type: none"> • How much do you rely on FDI for growth? • How does Brexit affect your location decisions? • How are your competitors responding to the risk of Brexit? Are they relocating any key functions?
Labour market	The UK may change its migration policies. Currently EU citizens can live and work in the UK without restrictions. Businesses will need to adjust to any change in this regime or in work preferences for EU nationals.	<ul style="list-style-type: none"> • How reliant is your value chain on EU labour? • Have you communicated with your UK-based employees who are nationals of other EU countries? What advice should you give them? • Have you considered the additional cost of hiring EU labour after Brexit? • Could changes in access to EU labour increase the case for automation?
Uncertainty	Uncertainty has increased since the referendum and this seems likely to continue through the Brexit negotiation (including extension) period.	<ul style="list-style-type: none"> • How well prepared are you to manage future volatility in the exchange rate (and other asset prices) related to Brexit? • Is your organisation ready for a downside scenario where there is a prolonged period of uncertainty and/or a 'no deal Brexit'?

Source: PwC

Most industry sectors projected to see relatively modest growth in 2019-20

The sector dashboard in Table 2.3 shows latest ONS estimates of growth rates for 2018 along with our projected main scenario growth rates for 2019 and 2020 for five of the largest sectors within the UK economy. The table also includes a summary of the key trends and issues affecting each sector.

The distribution, hotels and restaurants sector recorded relatively strong output growth of 2.7% in 2018, helped by strong summer sales, but we expect this to moderate to around 1.4-1.5% in 2019-20.

Manufacturing recorded relatively strong growth in 2017, but this slowed markedly to just 0.9% on average in 2018 and, given the recent downward trend, we project modestly negative growth in 2019. But there could be a gradual recovery in 2020 assuming an orderly Brexit as in our main scenario.

Construction, as ever, has been volatile, with growth having dropped dramatically to just 0.7% in 2018 according to our latest estimates. We expect some recovery in 2019, though this is partly just due to a statistical bounce-back from the lows seen in early 2018, rather than strong underlying growth in the sector.

This is also a sector where confidence is critical, and which is therefore particularly exposed to any loss of confidence related to a less-favourable Brexit outcome.

Business services and finance growth should remain relatively steady at around 1.5-2% per annum in 2019-20, although there are significant downside risks if Brexit negotiations go less smoothly than we assume in our main scenario. UK financial services companies could be particularly badly affected by any loss of access to EU markets, particularly if this happens in a disorderly fashion, although there is also positive longer term potential for the sector beyond Brexit⁵.

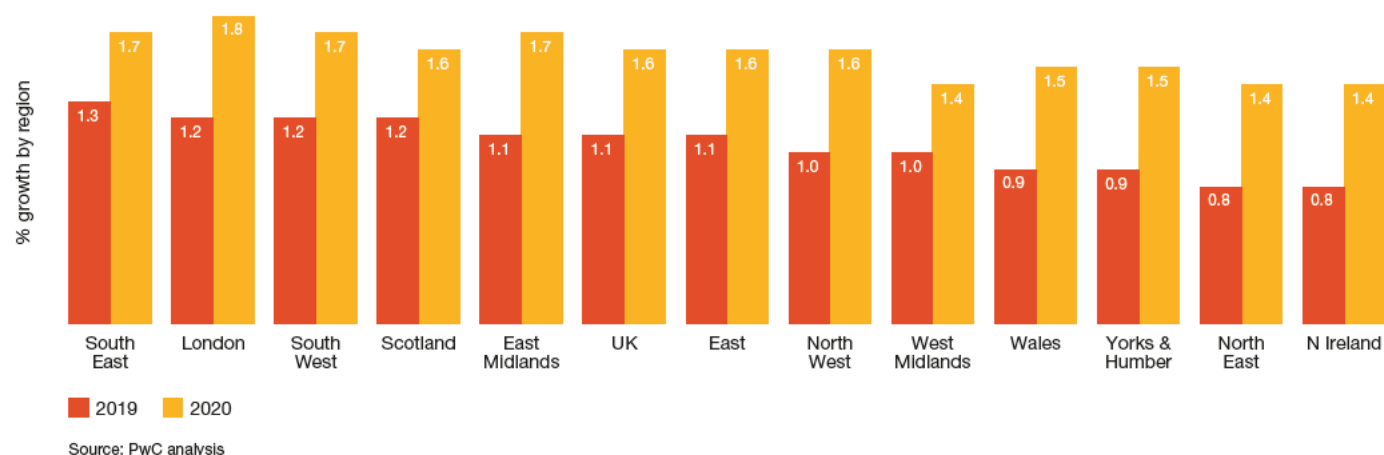
Table 2.3: UK sector dashboard

Issues	Growth			Key issues/trends
	2018	2019	2020	
Manufacturing (10%)	0.9%	-0.4%	1.4%	<ul style="list-style-type: none"> Manufacturing PMI has moderated in recent months Exporters gained in 2017 and early 2018 from a weaker pound and a stronger global economy, though there are concerns about a global slowdown in 2019-20 as well as risks relating to Brexit
Construction (6%)	0.7%	1.1%	1.5%	<ul style="list-style-type: none"> Construction PMI has been relatively weak in recent months, although remaining volatile The construction sector fell back sharply in late 2018 after a strong summer, but output rebounded in January The government has boosted infrastructure investment to try to offset weakness in commercial construction due to Brexit-related uncertainty
Distribution, hotels & restaurants (13%)	2.7%	1.4%	1.5%	<ul style="list-style-type: none"> A weaker pound since 2016 has boosted tourism, both from overseas and domestically, leading to increased expenditure in the hospitality sector, though this effect is now fading Total consumer spending held up relatively well in 2018 as earnings growth rose and unemployment stayed low, but the housing market has weakened
Business services and finance (34%)	1.8%	1.6%	2.1%	<ul style="list-style-type: none"> The financial sector remains particularly concerned about the possible implications of Brexit, especially if this is disorderly The Bank of England has increased the counter-cyclical capital buffer to constrain consumer debt levels, which may impact lending by retail banks Business services, however, continued to see relatively strong growth during 2018
Government and other services (22%)	0.1%	1.2%	1.6%	<ul style="list-style-type: none"> Public services continue to face tight budgets, but austerity was eased in the Budget and NHS spending is planned to increase significantly
Total GDP	1.4%	1.1%	1.6%	

Sources: ONS for 2018 estimates, PwC for 2019 and 2020 main scenario projections and key issues.
These are five of the largest sectors but they do not cover the whole economy - their GVA shares only sum to around 85% rather than 100%

⁵ For more on the future of UK financial services after Brexit, see our report with TheCityUK here <https://www.pwc.co.uk/industries/financial-services/insights/vision-for-transformed-world-leading-industry.html>

Figure 2.7 – PwC main scenario for output growth by region in 2019 and 2020



Regional prospects: all parts of the UK likely to see modest growth in 2019 but with some pick-up in 2020 if there is a reasonably orderly Brexit

In contrast to previous years and indeed decades where London has generally had the strongest growth rate of any UK region (see Section 4 for details), our latest projections suggest London's growth rate may be only just above the UK average in 2019 (see Figure 2.7). This is partly due to the greater exposure of some London activities (e.g. the City) to adverse effects from Brexit-related uncertainty, as well as growing constraints on the capital in terms of housing affordability and transport capacity.

Most other English regions, as well as Scotland, are projected to expand at close to the UK average of just over 1% in 2019, although the North East and Northern Ireland are predicted to lag behind with growth of only around 0.8% this year before recovering slightly next year.

It is important to note that, since regional output data are published on a less timely basis than national data, the margins of error around these regional output projections are even larger than for national growth projections. Therefore, they can only be taken as illustrative of broad directional trends.

We should also bear in mind that economic growth is only one of several indicators that should be considered in assessing performance of regions and cities across the UK, as discussed in more detail in our latest Good Growth for Cities report published in November 2018⁶.

2.3 – Outlook for inflation and real earnings growth

Inflation as measured by the consumer price index (CPI⁷) picked up from just 0.7% on average in 2016 to around 3% in late 2017 due in large part to the feed-through from a weaker pound into import prices. This also reflected the rise in global oil prices from their low point of around \$30 per barrel in early 2016 to over \$80 a barrel at their peak last year. However, CPI inflation then fell back markedly to just 1.8% in the year to January 2019 as the effect of past import price rises fell out of the 12-month inflation calculation and as the effect of more recent falls in global oil prices fed through to UK consumer prices.

We expect CPI inflation to remain slightly below target in the short term, before returning to close to its 2% target rate in 2020 (see Figure 2.8). But there could be considerable turbulence along the way. Annual average rates of inflation in our main scenario stand at 1.8% this year and 2% in 2020.

⁶ Available here: <https://www.pwc.co.uk/goodgrowth>

⁷ The ONS switched from CPI to CPIH as its primary inflation indicator in March 2017, despite some continuing methodological concerns about the reliability of the way that CPIH captures owner occupied housing costs through estimates of equivalent market rents rather than actual outlays on mortgage payments. For the moment, we have stuck to CPI as our key inflation indicator, but we may consider switching to CPIH in the future if this becomes more widely used (in particular if it becomes the MPC's target measure of inflation). In the long run, however, we would not expect significant differences between average inflation on these two measures (based on long-term historical averages).

Alternative inflation scenarios

There is always considerable uncertainty over inflation projections as they are particularly sensitive to movements in exchange rates and global commodity prices, both of which are very hard to predict with any confidence. As such, we also present two alternative scenarios for UK inflation in Figure 2.8:

- In our **'high inflation' scenario** we project UK inflation to rise back above 3% in 2020 as a result of renewed falls in the pound and/or strong growth in global commodity prices if other economies grow more strongly and/or global oil supply is constrained by producers.
- In our **'low inflation' scenario**, by contrast, the UK and global economies weaken by more than expected in our main scenario leading global commodity prices to fall back sharply over the next year. In this case, UK inflation could fall back to below 1% over the next year.

As with our GDP growth scenarios, neither of these two alternative variants is as likely as our main scenario. But given recent volatility and uncertainty, businesses should plan for a broad range of outcomes. It is worth noting here that a 'no deal Brexit' scenario could push up UK inflation in the short term by weakening the pound, but might lead to lower inflation in the medium term if it dampens economic growth.

Real earnings projected to pick up gradually

As Figure 2.9 shows, real earnings growth was squeezed from 2009-14 but then regained some ground in 2015-16 as low global commodity prices pushed UK inflation down to close to zero. The real earnings squeeze resumed in 2017 as wage inflation failed to pick up in response to higher consumer price inflation, but over the past year positive real earnings growth has resumed.

Falling inflation means that real earnings (excluding bonuses, which tend to be erratic) have now started to grow again at a reasonably strong pace and we expect this upward trend to continue in 2019-20 (see Figure 2.9). It is difficult for real earnings to grow significantly on a longer term basis, however, unless productivity growth also picks up for a sustained period.

Figure 2.8 – Alternative UK inflation (CPI) scenarios

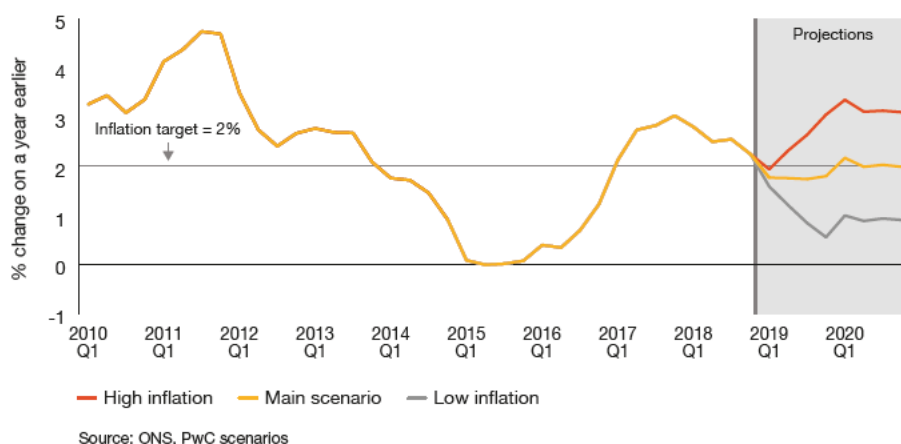
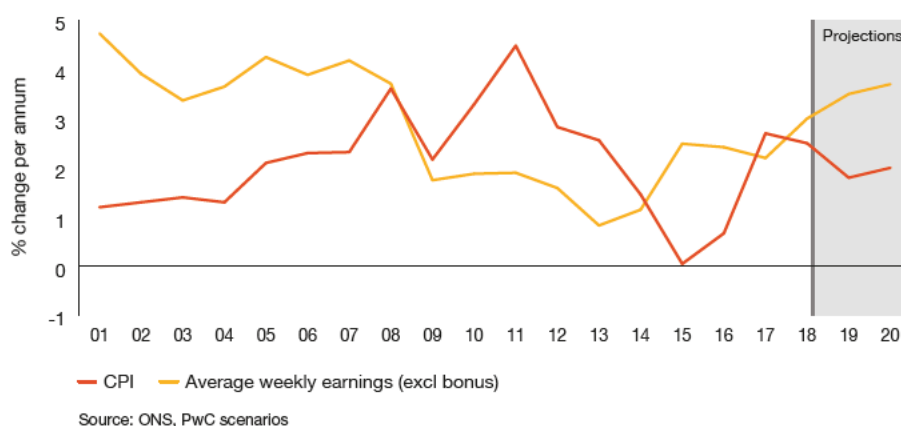


Figure 2.9 – CPI inflation vs average earnings growth



2.4 – Monetary and fiscal policy

The Monetary Policy Committee (MPC) raised interest rates from 0.5% to 0.75% in August 2018 in response to strengthening growth in mid-2018 and signs that wages had started to grow at a faster rate again. They also signalled the intention to raise interest rates very gradually over the next few years, but the timing of this will depend on how the economic data evolve and, at present, a further rate rise seems unlikely until we get clarity on Brexit.

In the medium term, we project further small and gradual rate rises in our main scenario assuming an orderly Brexit, but interest rates will remain very low by historical standards for the foreseeable future. UK base rates may end up at around 2-3% in the medium term, as opposed to the 5% pre-crisis norm.

If there is a 'no deal' Brexit, however, then the MPC might loosen monetary policy again in the short term to support the economy through a difficult period (although the longer term impact of such a scenario on interest rates is less clear, since it depends on the relative scale of impacts on both demand and supply capacity).

In his October 2018 Budget, the Chancellor benefited from a significant and persistent improvement in official public finance projections by the OBR. This reflected what the OBR judged to be a structural increase in the tax-to-GDP ratio as well as a lower sustainable unemployment rate of around 4% going forward.

The Chancellor used almost all of the fiscal windfall at the time of the Budget to fund the increase in NHS spending over the next five years announced by the Prime Minister in June 2018. There were no major changes to tax and spending policy in the 2019 Spring Statement, although the OBR further revised down its medium term public borrowing projections, which could leave room for extra public spending in later years.

The latest OBR projections assume an orderly Brexit, but note the downside risks to this. A disorderly 'no deal' Brexit could lead the Chancellor to spend more and/or cut taxes further in the short term to cushion the impact on the economy in 2019-20, but could require renewed austerity in the longer term given the damage that a disorderly Brexit would potentially do to the public finances.

2.5 – Summary and conclusions

UK economic growth has slowed recently as Brexit-related uncertainty has led to a decline in business investment. But consumer spending has held up better so far, helped by rising real earnings growth and a continued strong jobs market at least until the end of 2018.

Our main scenario is for UK GDP growth to remain modest but positive at around 1.1% in 2019, but then pick up somewhat to around 1.6% in 2020 as business investment revives. This assumes an orderly Brexit with a transition period lasting at least until the end of 2020. It also takes into account the boost to short-term growth from the tax and spending measures announced in the October 2018 Budget.

Most industry sectors are projected to see relatively modest growth in 2019, though short-term trends remain volatile and highly dependent on how the Brexit negotiations evolve. Manufacturing and other export-intensive sectors also face downside risks from any further deceleration in global growth in 2019-20.

In our main scenario we assume a single one-quarter-point interest rate rise later in 2019 and one further such increase in 2020, although the exact timing of future rate changes remains uncertain.

Given the delicate state of the Brexit negotiations, there are particularly large uncertainties around economic projections at present. A disorderly 'no deal' Brexit could lead to a significantly less favourable outcome for growth, despite some offset from likely mitigating actions by the government, the Bank of England and others. Organisations should stress test their business and investment plans against alternative economic and political scenarios and review the potential wider implications of different Brexit outcomes for all aspects of their operations.

3. The outlook for consumer spending and online retail¹

Key points

- Consumer spending growth is estimated to have slowed for a second consecutive year in 2018, but is still expected to have grown at an average of 2.2% a year faster than inflation since 2012. This spending has aided the economy's recovery from the financial crisis and supported it during the more recent period of Brexit-related uncertainty.
- Factors driving continued consumer spending growth include rising employment levels, accelerating real wage growth, a prolonged period of very low interest rates and consumers' willingness to reduce their savings rate.
- Assuming an orderly Brexit, we project real household disposable income growth to accelerate mildly in 2019 and 2020, reaching 2% in the latter year. This will reflect further upward pressure on wages thanks to the tight labour market.
- Despite higher income growth, we expect real household expenditure growth to slow in 2019 as a result of temporary uncertainty around the outcome of the Brexit process. Growth should then be able to pick up later in 2019 and into 2020 assuming an orderly Brexit is achieved. Given the acceleration in income growth and the slowdown in spending growth, the household saving ratio is likely to begin to rise again gradually in 2019 and reach 2% in 2020.
- Housing and utilities will continue to represent the largest share of total household spending in the long run, with the proportion rising to more than 30% by 2030.

Spending on discretionary services will also increase in proportional terms over this period, while the share spent on more basic goods, such as food, clothing and alcohol, will continue to decline.

- The disruption to consumer spending patterns caused by growth in online shopping will continue. The online share of total retail spending could rise between 2018 and 2030 from 5% to 8% for food, from 10% to 22% for furnishings and from 18% to 32% for clothing.

Introduction

Consumer spending accounts for more than two-thirds of UK GDP and is therefore the most important driver of economic growth. And it has been strong consumer spending growth that has powered the recovery of the economy since 2012. But how sustainable is this spending in 2019 and 2020? Looking further ahead, which areas of consumer expenditure might grow the fastest over the next decade?

To answer these questions, we have looked at past trends and future prospects for the two main determinants of household spending growth:

- **Real household disposable income (RHDl) growth**, which is turn is driven by trends in real employment, state benefits and pensions and other private income such as share dividends; and
- **Changes in the household savings ratio**, which are particularly influenced by the relative indebtedness of households and wealth effects (e.g. from changes in house prices).

We also consider the outlook for growth in online retail and consider what proportion of several of the main consumer spending categories could be generated by online sales in the coming years.

The discussion is structured as follows:

- Section 3.1 provides an overview of recent trends in each of the key determinants of RHDl growth;
- Section 3.2 looks at potential future trends in household disposable income growth;
- Section 3.3 examines past trends and future prospects for the household savings ratio;
- Section 3.4 brings these analyses together to set out our main scenario for future consumer spending growth and assess risks around this as captured in alternative scenarios;
- Section 3.5 considers how consumer spending growth might vary by expenditure category over the period to 2030;
- Section 3.6 focuses on growth in online retail and projects the proportion of sales that may be accounted for by online shopping in the future; and
- Section 3.7 summarises key findings from the research.

¹ This section was written by Mike Jakeman.

3.1 – Recent trends in household disposable income

The ONS defines household disposable income as the sum of earnings, state transfers (e.g. benefits) minus direct taxes (such as income tax and national insurance) and other net income accruing to households (e.g. from interest, dividends and rents).

Table 3.1 shows how the most important elements of household disposable income have changed over the six years to Q3 2018. During this period the economy recovered on a more sustained basis from the global financial crisis. By the final quarters of this period, the unemployment rate was down to multi-decade lows of around 4% and nominal wage growth had begun to accelerate in response. Real growth rates in the final column of the table have been calculated by deflating the nominal growth rates using the household expenditure deflator (which averaged 1.7% a year in the six years to Q3 2018).

The most notable feature of this analysis is that RHD growth stood at around 1.5% a year on average, while household expenditure grew 0.7 percentage points faster, at 2.2% a year. The difference between income and expenditure is savings; and when expenditure grows faster than income this difference diminishes, manifested in a lower ratio of savings to income. Accordingly, the household saving ratio (adjusted to exclude changes in pension entitlements) fell from around 5% of household disposable income in Q3 2012 to 1.5% in Q3 2018.

Table 3.1: Key drivers of real household disposable income (RHD)

	£ billion		Average growth rates per year		
	2012 Q3	2018 Q3	Nominal	Deflator	Real
Wages and salaries	175	218	3.6%	1.7%	1.8%
Household share of gross operating profits	63	81	4.4%	1.7%	2.6%
Pre-tax earnings	238	299	3.8%	1.7%	2.0%
Income tax paid	-47	-61	4.2%	1.7%	2.4%
National insurance contribution by workers	-32	-40	3.5%	1.7%	1.7%
Post-tax earnings	159	198	3.8%	1.7%	2%
Social security benefits	81	90	1.9%	1.7%	0.0%
Post-tax earnings and benefits	240	289	3.2%	1.7%	1.4%
Net property income received (interest, dividends, rent etc.)	40	53	4.6%	1.7%	2.8%
Net current transfers	13	15	1.7%	1.7%	-0.1%
Household disposable income	293	356	3.3%	1.7%	1.5%
Adjustment for change in pensions entitlements	15	11	-5.3%	1.7%	-7.1%
Available household resources	308	367	3.0%	1.7%	1.2%
Memo: Household expenditure	277	352	4.0%	1.7%	2.2%

Source: PwC analysis of ONS data

Note: Totals may not round exactly to the sum of the sub-categories owing to rounding

Table 3.1 shows that wages and salaries grew by 1.8% a year in real terms over the period, supported by a fall in the unemployment rate from 7.9% to 4.1% in this time. However, this was outstripped by the profits earned by self-employed workers and business owners, which rose at an annual average rate of 2.6% during the six years.

Within this period there was a pronounced shift towards self-employment and small business creation in 2012-14, when self-employment grew by 10% and regular employment by 5%. This divergence was encouraged by the greater ability of small firms to compete through the internet and mobile technology, the rise of the 'gig economy', generally lower national insurance rates paid by the self-employed and a broader push to boost entrepreneurship by successive governments. By contrast, between 2015 and 2018, regular employment has grown by 5%, while self-employment has been flat, perhaps because an underlying preference for regular employment remained and this reasserted itself as the labour market tightened and wages increased. These shifting trends have resulted in slightly slower growth in national insurance contributions relative to wage growth and slightly faster growth in income tax payments.

Table 3.1 also shows areas that have dampened growth in RHDl over the period:

- **Social security benefits:** this category has shown no growth at all in real terms since 2012. Although total state pension expenditure has grown relatively strongly at a real annual average rate of 2.3% during 2012-18, there has been a freeze on working-age benefits in nominal terms².
- **Net current transfers:** this income category includes transfers to and from UK households in the form of financial gifts (e.g. to and from overseas family members) and some insurance claims, but excludes government transfers. The data in this category are volatile with no apparent trend. Transfers are also a comparatively small component of household income (around 4%), so the effect on overall growth is small.

The final row in Table 3.1 shows that total real household resources grew by 1.2% a year after taking into account the change in pension fund entitlements (referred to as 'net equity' in pension funds in the national accounts). However, such changes in pension values are unlikely to be perceived by most households as income that can be spent, so we prefer to remove this from our analysis and instead focus on an 'adjusted household saving ratio' defined as the difference between household disposable income and household expenditure, expressed as a percentage of disposable income. This is lower than the standard ONS definition based on household resources rather than disposable income, but provides a more realistic indication of the difference between household income and spending.

² Department for Work & Pensions Expenditure Caseload forecasts (2018).

3.2 – Future trends in household disposable income

How will household disposable incomes fare in the future? There are many uncertainties here, but Table 3.2 sets out what, assuming a reasonably orderly Brexit, we consider to be a plausible main scenario for real growth to 2020 for each of the main elements of household disposable income growth. In particular we assume that:

- **Total income from wages and salaries** will grow at a reasonable real rate of 3% in 2019 and 2.9% in 2020, owing to a tight labour market that will put upward pressure on remuneration and slower inflation that will be roughly in line with the Bank of England's 2% year-on-year target (as discussed further in Section 2 above).
- **Income of households from gross operating profits** will struggle to match the growth in salaries, as the demand for workers from companies will continue to draw potential employees away from self-employment.
- **Income tax receipts** will grow broadly in line with wages and salaries.
- **Social security benefits** will rise by just 0.3% in 2019 and 0.2% in 2020 owing to the government's continued welfare cap for working age benefits. In the medium and long term we expect the average rate of benefits growth to be a little stronger, driven by the expanding number of people accessing the state pension (offset in part by planned rises in the state pension age). But even then growth is likely to be relatively modest in real terms as welfare reform programmes continue.

Table 3.2: Main scenario projections of RHDl growth

	2017	2018e	2019p	2020p
Wages and salaries	1.8%	2.2%	3.0%	2.9%
Household share of gross operating profits	-0.9%	2.3%	3.1%	2.3%
Pre-tax earnings	1.0%	2.3%	3.0%	2.7%
Income tax paid	2.9%	2.4%	3.7%	2.4%
National insurance contribution by workers	1.2%	2.7%	3.6%	3.0%
Post-tax earnings	0.5%	2.1%	2.7%	2.8%
Social security benefits	0.0%	-0.6%	0.3%	0.2%
Post-tax earnings and benefits	0.3%	1.3%	2.0%	2.0%
Net property income received (interest, dividends, rent etc.)	-3.9%	3.1%	0.7%	2.0%
Net current transfers	24.7%	5.6%	3.5%	1.6%
Household disposable income	0.5%	1.7%	1.8%	2.0%

Source: PwC analysis of ONS data for 2017-18 and PwC projections for 2019-20 – all growth rates are expressed in real terms

- **Net property income** growth will be particularly sluggish in 2019 as the housing market loses momentum. Faster growth is possible thereafter, but this will be constrained by the Bank of England gradually increasing its policy rate, which will result in more expensive mortgage repayments.

Based on these assumptions, we project that RHDl growth will accelerate slightly to 1.8% in 2019 and 2% in 2020, up from 1.7% in 2018 and just 0.5% in 2017.

This mostly reflects the continued strong labour market in our main scenario. In the long term we expect RHDl growth to settle between around 1.5% and 2% a year, weaker than in the period before the global financial crisis, but also significantly stronger than in the years immediately afterwards.

3.3 – Household saving ratio: trends and projections

The official household savings ratio is defined by the ONS as the difference between available household resources (household disposable income plus an adjustment for the change in pension entitlements as measured by net equity in pension funds) and household expenditure, expressed as a proportion of household resources.

As noted above, we prefer to focus on an adjusted savings ratio that excludes changes in net equity in pension funds. Figure 3.1 shows how this adjusted ratio compares to the standard ONS headline measure.

Both saving ratios show broadly similar trends over time, but at much lower levels for the adjusted savings rate. The latter fell from around 5% at the turn of the millennium to as low as -0.2% before the onset of the financial crisis. This period saw consistent economic growth and easy credit conditions, which allowed house prices and household debt levels to rise.

Following the shock of the post-crisis recession, household confidence and borrowing slumped and the adjusted savings ratio jumped to more than 6% on average in 2009. Since the end of the recession, however, the ratio has fallen back again as confidence and consumer borrowing have revived, although it has been volatile from quarter to quarter. The latest adjusted savings ratio for Q3 2018 is estimated to be around 1.4%, which is still some way above pre-crisis lows, but also well below post-crisis highs.

So what might be the future direction of the household savings ratio?

Figure 3.1 – Historical trends in headline and adjusted UK household savings ratios

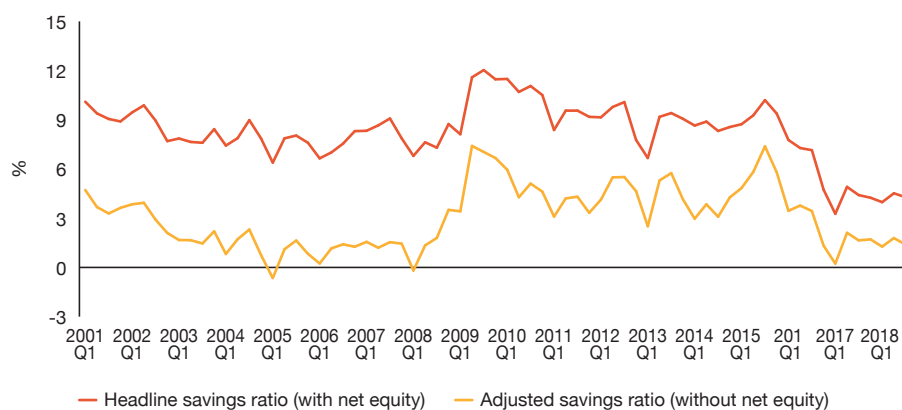


Table 3.3: Projections of the adjusted household savings ratio in alternative PwC scenarios (% of household disposable income)

	2017	2018e	2019p	2020p
Lower savings ratio	1.4%	1.1%	0.6%	0.6%
Main scenario	1.4%	1.3%	1.7%	2.0%
Higher savings ratio	1.4%	1.5%	2.8%	3.5%

Source: PwC analysis based on ONS data for 2017-2018 Q3

Projecting forward the savings ratio is subject to considerable uncertainties, reflecting the fact that it is determined by the difference between two much larger numbers: gross disposable income and consumer spending. To address this issue we generated two additional scenarios in addition to our main scenario projections. In our main scenario, a combination of faster nominal wage growth, slightly lower inflation, a softer housing market and some Brexit-related consumer caution push up the savings rate to around 2% by 2020, from an estimated 1.3% in 2018.

3.4 – Alternative scenarios for consumer spending growth to 2030

We now combine our household disposable income projections from Table 3.2 with our alternative savings ratio scenarios from Table 3.3 to derive scenarios for real consumer spending growth to 2020. We also make illustrative further assumptions on longer growth in spending to 2030. Specifically, as set out in Tables 3.4-3.6:

- Our **main scenario** projects real household consumer spending growth to slow down from 1.9% in 2018 to 1.4% in 2019, followed by a mild acceleration to 1.7% in 2020. The main factor behind the moderation in growth in 2019 is weakening consumer confidence in the first half of the year owing to broader worries about how Brexit will affect the economy. So far, household spending growth has been remarkably resilient to political turmoil, but we believe that this has become sufficiently acute in early 2019 to trigger more cautious expenditure. Data from our 2019 Retail Outlook report supports this argument, with the proportion of consumers reporting that Brexit will affecting their spending rising to 40%, from 27% in 2018³. Yet on the assumption that an orderly withdrawal from the EU is achieved, spending growth ought to be stronger in the second half of the year and in 2020. We note that RHD growth is likely to accelerate in 2018-19, and that this contributes to a slightly higher savings rate. In the longer term, consumer spending growth is likely to return to around 1.8% a year in the 2020s. This is consistent with our estimate for longer term economic growth.

Table 3.4: Main scenario projections of growth in real household expenditure (% per year)

	2017	2018e	2019p	2020p	Average 2021-30p
Real household expenditure	2.1%	1.9%	1.4%	1.7%	1.8%
Real household disposable income	0.5%	1.7%	1.8%	2.0%	
Adjusted savings ratio	1.4%	1.3%	1.7%	2.0%	

Sources: ONS for 2017-2018 Q3. PwC estimates and projections for later periods. The figures for 2021-30 are illustrative assumptions for consumer spending only based on alternative views of long-term trends in GDP growth

Table 3.5: Optimistic scenario projections of growth in real household expenditure (% per year)

	2017	2018e	2019p	2020p	Average 2021-30p
Real household expenditure	2.1%	2.1%	2.4%	2.4%	2.3%
Real household disposable income	0.5%	1.7%	2.0%	2.3%	
Adjusted savings ratio	1.4%	1.1%	0.6%	0.6%	

Sources: ONS for 2017-2018 Q3. PwC estimates and projections for later periods. The figures for 2021-30 are illustrative assumptions for consumer spending only based on alternative views of long-term trends in GDP growth

Table 3.6: Pessimistic scenario projections of growth in real household expenditure (% per year)

	2017	2018e	2019p	2020p	Average 2021-30p
Real household expenditure	2.1%	1.6%	0.2%	0.6%	1.3%
Real household disposable income	0.5%	1.7%	1.6%	1.3%	
Adjusted savings ratio	1.4%	1.5%	2.8%	3.5%	

Sources: ONS for 2017-2018 Q3. PwC estimates and projections for later periods. The figures for 2021-30 are illustrative assumptions for consumer spending only based on alternative views of long-term trends in GDP growth

- Our **optimistic scenario** assumes that households enjoy the benefit of faster wage growth and that Brexit-related developments do not alter their spending decisions. This acceleration of the existing trend lowers the adjusted savings rate to an annual average of 0.6% in 2019-20, which would be a record low in the modern era. In the long term, we assume that RHD growth is faster than the main scenario due to higher UK productivity growth and so supports average real household expenditure growth of around 2.5% a year in the 2020s.
- Our **pessimistic scenario** assumes that the saving ratio rises to 2.8% in 2019 and then increases further in 2020 while disposable income growth is unimpressive. This type of scenario could be associated with UK consumers being less confident owing to a deteriorating global economy and an unsatisfactory conclusion to the Brexit negotiations, together with weak UK productivity growth in the long term, beyond 2021.

3.5 – Projected consumer spending growth by category

Aside from a sentiment-related blip in 2019, total consumer spending is projected to grow reasonably steadily in our main scenario, but from a business perspective it is important to understand which sectors are likely to see the most impressive growth rates. To make these projections, we have updated our in-house longer term consumer spending model, results from which were last published in March 2018.

This econometric model uses factors such as real income levels, relative price levels, demographics and income distribution to project how future consumer spending growth could vary across the main spending categories.

We project these forward to 2020 on an annual basis and then provide some more illustrative, long-term projections to 2025 and 2030. In these projections, as summarised in Figure 3.2 and Table 3.7, we have assumed that:

- total UK household expenditure grows at the rates set out in the main scenario in Table 3.4;
- income inequality remains at the latest level set by the ONS; and
- population shares by age group evolve according to the latest ONS forecasts, which imply a steady rise in the proportion of people above the age of 65.

Figure 3.2: Historical data and main scenario projections for household spending budget shares to 2030

1985 rank		% Share	2018 rank		% Share	2030 rank		% Share
1	Housing & utilities	27.5%	1	Housing & utilities	26.6%	1	Housing & utilities	30.5%
2	Transport	12.4%	2	Transport	13.3%	2	Miscellaneous services	14.4%
3	Food	12.0%	3	Miscellaneous services	13.0%	3	Transport	11.9%
4	Miscellaneous services	9.3%	4	Recreation and culture	9.8%	4	Recreation and culture	10.0%
5	Hotels and restaurants	8.7%	5	Hotels and restaurants	9.1%	5	Hotels and restaurants	9.1%
6	Recreation and culture	7.8%	6	Food	8.2%	6	Food	5.9%
7	Clothing and footwear	5.9%	7	Clothing and footwear	5.5%	7	Furnishing	5.3%
8	Alcohol and tobacco	5.4%	8	Furnishing	5.5%	8	Clothing and footwear	4.2%
9	Furnishing	5.2%	9	Alcohol and tobacco	3.4%	9	Alcohol and tobacco	2.8%
10	Health	3.5%	10	Health	2.0%	10	Health	2.1%
11	Communication	1.6%	11	Communication	1.9%	11	Communication	1.9%
12	Education	0.8%	12	Education	1.8%	12	Education	1.8%

Source: ONS for historical data, PwC for main scenario projections

Table 3.7: Household budget share projections to 2030 and implied average annual real growth rates by household spending category in our main scenario

	Shares of total spending			Implied average real growth rates	
	2018e	2025p	2030p	2018-25p	2026-30p
Housing and utilities	26.6%	28.5%	30.5%	2.2%	2.6%
Transport	13.3%	12.6%	11.9%	1.0%	0.5%
Miscellaneous services	13.0%	13.9%	14.4%	2.3%	1.9%
Recreation and culture	9.8%	10.0%	10.0%	1.8%	1.4%
Hotels and restaurants	9.1%	9.1%	9.1%	1.5%	1.5%
Food	8.2%	6.9%	5.9%	-0.4%	-1.0%
Clothing and footwear	5.5%	4.7%	4.2%	-0.1%	-0.4%
Furnishings	5.5%	5.4%	5.3%	1.5%	1.0%
Alcohol and tobacco	3.4%	3.0%	2.8%	0.4%	0.2%
Health	2.0%	2.0%	2.1%	1.7%	2.0%
Communications	1.9%	1.9%	1.9%	1.8%	1.5%
Education	1.8%	1.8%	1.8%	1.5%	1.4%
Total spending	100%	100%	100%	1.7%	1.8%

Source: PwC analysis of ONS data for 2017-18 and PwC projections for 2019-20 – all growth rates are expressed in real terms

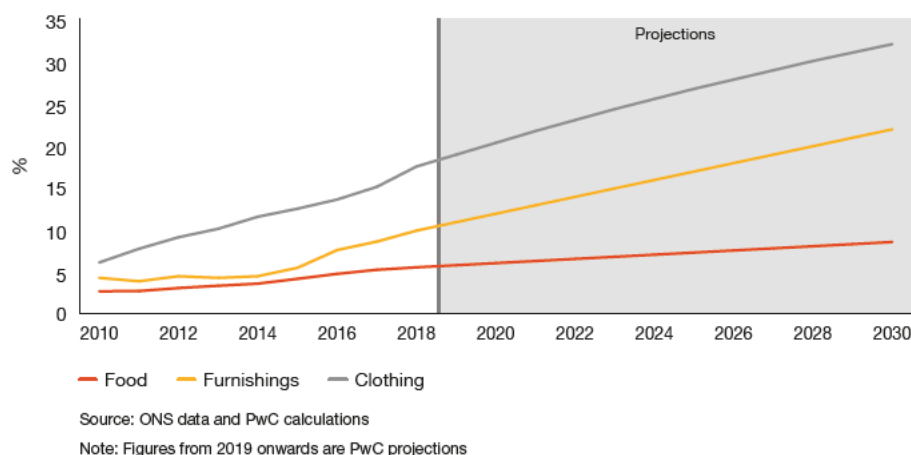
The miscellaneous services category, which includes financial services (such as credit cards and insurance) and personal care, is expected to become the second largest expenditure category in the period between 2018 and 2025, displacing transport. We expect its share to continue to rise in the years to 2030, so that it accounts for around 14% of total spending by that year. This is intuitive as we expect the Bank of England to raise interest rates gradually in the medium term in our main scenario, and insurance premiums, including tax, may also tend to increase.

Reflecting the UK's status as a high-income economy, the two leisure categories—recreation and culture and hotels and restaurants—are also relatively income-elastic, and so tend to increase their share of total spending as RDHI grows over time. In contrast, necessities such as food and clothing will tend to see their spending shares decline in the long run, continuing the historic trends shown in Figure 3.2. These are also industries where prices have fallen owing to the development of highly efficient and sophisticated supply chains. Particularly in the case of food, however, there could be some volatility around this declining trend owing to fluctuations in harvest size and exchange rates.

Figure 3.2 shows that, by 2030, we estimate that households will need to allocate over 30% of their spending to housing and utilities, compared with around 27% at present. This reflects our expectation, based on past research, that supply shortages will keep house prices and rents rising relatively rapidly in real terms. Indeed, the average real growth rate of housing and utilities spending in both 2019-25 and 2026-30 is expected to be the fastest of all categories in Table 3.7.

The transport sector is also expected to see a fall in its budgetary share in the long term, although it may still see some modest growth in real terms. The decline reflects both an ageing population and a fall in the proportion of younger adults with driving licences, coupled with the growth of internet shopping (see Section 3.6), food delivery companies and disruptive entrants into the transport sector (such as Uber) which are expected to impact on transport spend per person.

Figure 3.3 – Proportion of total retail sales made online by segment



3.6 – Potential growth in online consumer spending

Consumer spending has grown steadily in the recovery period since the financial crisis, but there has been considerable disruption in terms of where consumers are spending. Online sales accounted for more than 20% of total retail sales for the first time ever in November 2018, thanks to Black Friday promotions. Even without one-off events, the share accounted for by online is growing steadily.

How far could this trend go? To consider this question, we mapped ONS data on the proportion of total sales that were made online for three of our consumer spending categories that make up a significant proportion of retail sales — food, clothing and furnishings — onto our projections of how these categories would perform in the years to 2030.

For food and furnishing we assumed that online sales would continue to grow at the same annual average pace as in recent years. This therefore assumes no structural changes in the online retail segments that accelerates the rate of growth (such as the introduction of retailers' apps for mobile phones several years ago) or major cyber security or other concerns that could trigger a renewed preference for shopping in-person. For clothing, we believe the online market is more mature and therefore we have factored in a gradual moderation in growth in the 2020s.

Of the three categories, online sales accounted for the lowest proportion of total food sales in 2018 and growth has been slowest in this category (see Figure 3.3). Consequently, we see the proportion of online food sales rising relatively modestly, from around 5.5% in 2018 to around 8.5% by 2030. Although home delivery charges for online food shopping have fallen, the short shelf-life of fresh food products and preferences for picking their own groceries remain deterrents to online food shopping for consumers that will be challenging to overcome.

In the furnishings category, the shift to online shopping has been more marked, with such sales accounting for just under 10% of the total in 2018. Our projections suggest that this could rise to around 22% by 2030.

Bricks-and-mortar clothes retailers have seen the greatest disruption from online sales: around 18% of clothes were bought online in 2018, compared with 6% in 2010. If the current rates of growth continue, we project that online clothing sales could be almost one-third of total sales by 2030, at 32%.

These trends are already having an effect on business strategy. In conjunction with the Local Data Company, PwC tracks shop openings and closures in the top 500 high streets in England, Scotland and Wales⁵. In the first half of 2018, the most recent period for which data is available, a net 1,123 stores closed, up from 222 in the year-earlier period. The category that suffered the largest absolute fall in shops was clothes retailing, an outcome the analysis linked to the rise in online sales of fashion. (Higher business rates since 2017 may also have been a factor here.)

Interestingly, over the past five years, the number of new store openings across the retail sector has fallen by half while the number of closures has been relatively static, suggesting that firms have become much more cautious about investing in bricks-and-mortar retail, given the expanding role of online sales.

⁵ For details of this analysis see: <https://www.pwc.co.uk/industries/retail-consumer/insights/store-openings-and-closures-report-h1-2018.html>

3.7 – Summary and conclusions

Over the past six years, household spending has tended to outpace consumer price inflation and support the UK's recovery from the global financial crisis, helped by continued low interest rates, strong employment growth and a willingness of households to borrow more. However, growth in consumer spending has also slowed since 2016 because of the effects of a weaker pound and rising inflation on real wage growth. These effects are beginning to fade, but we expect more subdued growth in house prices and uncertainties about the Brexit process to mean that household spending growth slows for another year in 2019.

At the same time, assuming a reasonably orderly Brexit, the labour market is likely to continue to tighten, with firms having to pay ever higher wages to attract new employees. This means that RDHI growth should accelerate in 2019 and again in 2020. Slower growth in spending and faster growth in income means that the adjusted saving ratio—which had been in long-term decline—could receive at least a temporary boost in these years.

In our main scenario, we therefore project that real consumer spending will slow from around 1.9% in 2018 to 1.4% in 2019, before returning to its trend growth of around 1.8% on average in the 2020s. Other scenarios show long-term real consumer spending growth of between around 1.3% and 2.3% a year over the period to 2030.

We expect that housing and utilities will absorb a larger and larger share of household spending, rising above the 30% threshold by 2030, from less than 27% in 2018. We also expect to see financial services and personal care account for a greater proportion of spending in the same period, while more basic categories, such as food, clothing and alcohol will see their shares decline.

Social and industrial changes are likely to drive particular disruption in the transport category. Where transport was once accounting for a rising share of spending in the 30 years to 2018, this trend is projected to reverse in the years to 2030.

Online sales are likely to become an even more important part of consumer spending in the long term. The proportion of sales conducted online doubled in each of the food, furnishing and clothing categories between 2010 and 2018. Assuming no structural change that accelerates the rate of growth from recent levels (or major cyber security or other concerns that trigger a significant slowdown or decline), we estimate that the online proportion of retail spending in each of these segments could rise between 2018 and 2030 from 5% to 8% for food, from 10% to 22% for furnishings and from 18% to 32% for clothing.

4. Regional growth trends and prospects¹

Key points

- London has consistently outperformed other UK regions for most of the past three decades in terms of economic growth. This is in marked contrast to the 1970s and early 1980s when London's average growth rate was slower than the UK average due to people moving out of the capital.
- Outside London, Southern English regions and the East Midlands grew relatively rapidly in the 1970s and 1980s, while heavy industrial areas in the West Midlands and Northern regions lagged behind.
- Since the early 1990s, however, there has been less consistent evidence of a clear North-South divide outside London. Much of London's outperformance is linked to the boom in financial and business services following the financial deregulation of the 1980s, as well as its relatively smaller exposure to the declining UK manufacturing sector.
- Population trends have played an important role in explaining overall economic growth variations by region since the 1970s, with strong net immigration over the past two decades masking an underlying decline in output per person growth in most regions relative to earlier decades.

- More recently, there have been signs from housing and labour markets that London's relative performance has been less strong. We expect this to continue in 2019-20, with London growing only slightly faster than the UK average rate in those years.
- Brexit-related uncertainty is likely to dampen growth in all regions this year, but there could be some pick-up in growth across the UK in 2020 if a reasonably orderly Brexit can be achieved.

Introduction

It is well-documented that the UK has been characterised in recent decades by an increasing economic growth divide between London and other regions of the country. But what exactly has driven the opening up of this growth divide and can we expect it to continue?

To address this question we have made use both of the latest official ONS data on real output (GVA²) growth by region from 1998 to 2017, which was published in December 2018³, and a new set of estimates of quarterly and annual regional growth dating back as far as 1972 that has been published by the Economic Statistics Centre of Excellence (ESCoE)⁴. The combination of these two data sets provides us with a longer term historical view of the UK regional real output growth than was previously available.

In this article we begin by reviewing the key trends in real GVA growth by region since the early 1970s (Section 4.1) and then consider how far variations in regional population growth may have driven these historical growth differentials (Section 4.2). We also explore what other factors might explain these regional GVA growth variations, including differences in the mix of industry sectors seen in different regions and variations in education levels (Section 4.3). We then look at regional trends in 2018 and how regional growth rates might evolve in 2019 and 2020 (Section 4.4). Section 4.5 summarises and concludes.

Data on average regional growth in GVA, population and GVA per capita for the decades since the 1970s is also available to explore further on our website at www.pwc.co.uk/ukey

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More recently, there have been signs from housing and labour markets that London's relative performance has been less strong. We expect this to continue in 2019-20, with London growing only slightly faster than the UK average rate in those years.

John Hawksorth
Chief Economist, PwC

¹ This article was written by John Hawksorth and Hoa Duong

² Gross Value Added (GVA) provides the best available measure of economic activity at regional level, broadly corresponding to Gross Domestic Product (GDP) at national level. We therefore focus on GVA here, although we recognise that there are a range of other socio-economic measures that can help assess regional and local performance as discussed, for example, in our Good Growth for Cities report here: <https://www.pwc.co.uk/industries/government-public-sector/good-growth.html>

³ For details of the latest ONS regional GVA data see: <https://www.ons.gov.uk/economy/grossvalueaddedgva/bulletins/regionalgrossvalueaddedbalanceduk/1998to2017>

⁴ Details of this new dataset were published in a November 2018 ESCoE discussion paper by G. Koop, J. Mitchell, S. McIntyre and A. Poon that is available here: <https://www.escoe.ac.uk/wp-content/uploads/2018/11/ESCoE-DP-2018-14.pdf>

4.1 – Historical trends in UK regional growth

Over the past three decades, London has seen relatively strong average real GVA growth compared to the rest of the UK, but this has not always been the case as we can see from Figure 4.1.

In fact, London was among the slowest growing regions in the 1970s, with an average annual real GVA growth rate of just 1.5%. London's growth rate picked up markedly to 2.6% on average in the 1980s, but was still not a clear leader across the UK.

In these two decades, consistently strong performers were the South West (3.6% in the 1970s and 2.8% in the 1980s) and the East Midlands (3.2% and 2.5%, respectively). Heavy industrial areas in the North of England and the West Midlands lagged behind on average in these decades, with the mid-1970s and early 1980s recessions having particularly severe adverse impacts on these regions. The impact was less visible in the East Midlands due to its greater focus on light manufacturing and its strongly growing services sector.

Figure 4.1 – London was among the slowest growing regions in the 1970s and did not stand out from the pack in the 1980s

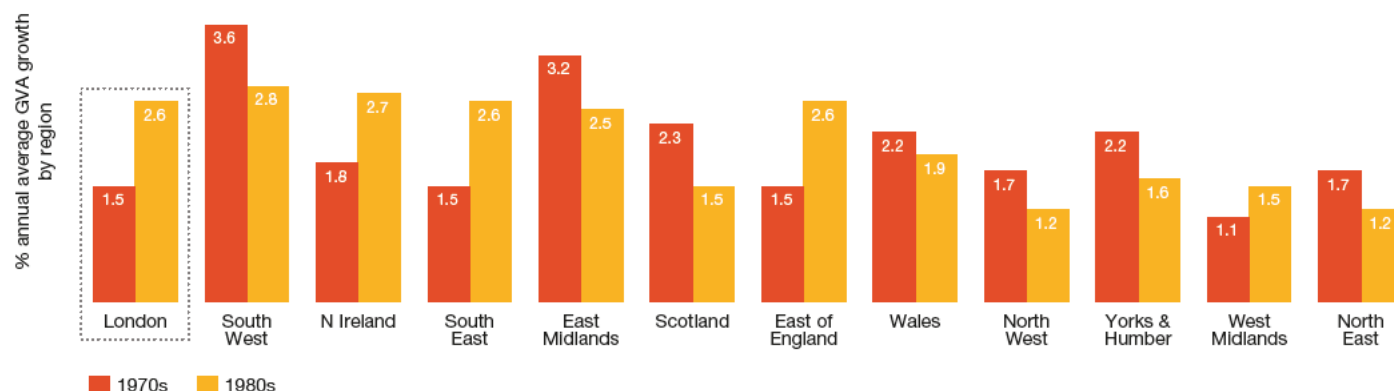
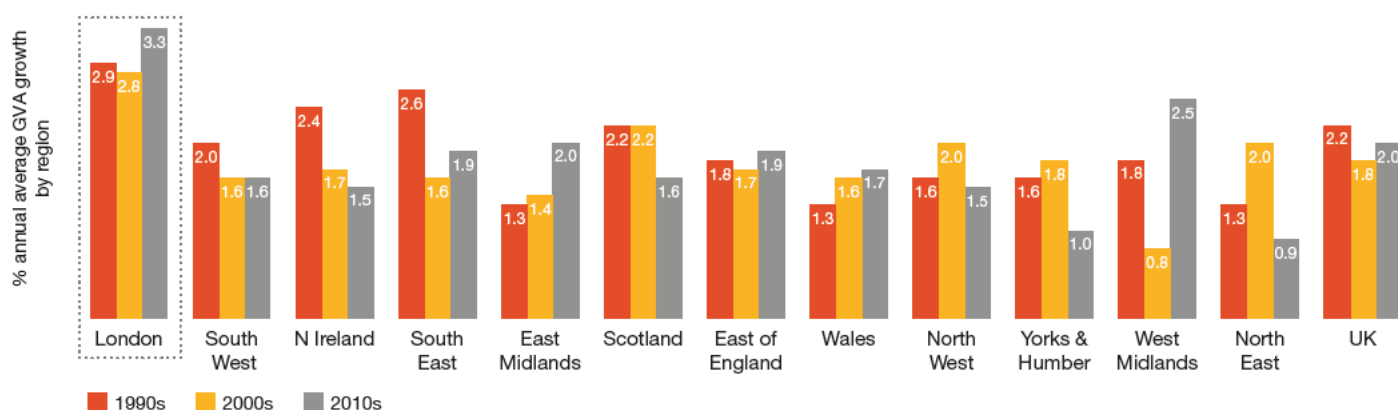


Figure 4.2 – Since the 1990s, London has consistently been the fastest growing region in the UK



Source: PwC analysis of ONS and ESCoE data

As Figure 4.2 shows, however, the picture has changed since the early 1990s. Over the past three decades, London has become by far the fastest growing region in the UK, with real GVA growth rates of around 3% on average compared to a national average of only around 2%. Other regions have had temporary strong periods, such as the South East and Northern Ireland in the 1990s, or the West Midlands since 2010 (after a weak first decade of this century), but no region outside London has grown consistently faster than the UK average in all three decades. The North of England and Wales have grown slower than the UK average overall, but even here there have been exceptions such as the North West and the North East both growing slightly above the UK average in the 2000s, while the South East (excluding London) grew slightly slower than the UK average during that decade.

In summary, the big picture of UK regional growth has been one of London underperforming in the 1970s, catching up in the 1980s and growing consistently faster than the rest of the UK in all decades since the 1990s. There have been periods where a broader North-South divide was evident, notably in the 1980s when manufacturing suffered a sharp decline relative to services, but the dominant trend since the 1990s has been of a growing growth divide between London and all other regions, rather than a more general North-South divide.

So what has caused these variations in GVA growth across the UK? We first consider how far they are linked to variations in population growth before going on to consider other factors.

4.2 – How far do population trends explain regional GVA growth variations?

Overall, the last five decades saw an upward trend in UK population growth over time at both a national and regional level (see Figure 4.3 for selected regions), particularly since net inward migration increased markedly after EU enlargement in 2004.

But regional population trends have varied over time, notably in the case of London where the population was declining through the 1970s and early 1980s. As Figure 4.4 shows, this was associated with a movement of people from the capital to surrounding regions in Southern England over that period. A range of factors lay behind these trends, including companies moving offices out of London, families preferring to live in the Home Counties and commute into London where necessary, and retirees moving to areas such as the South West for a better perceived quality of life.

London's population bottomed out in 1983 and has been growing at an accelerating rate since then. This was associated with financial deregulation (e.g. the 'Big Bang') boosting London's attractions as a global financial and business services centre from the mid-1980s, as well as strong international net migration to London in more recent decades.

Figure 4.3 – Average annual population growth by decade for the UK and selected regions

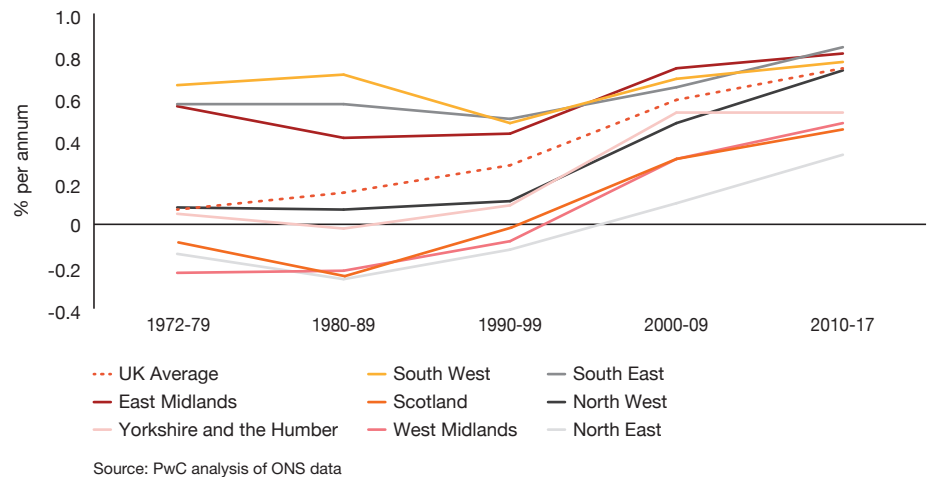
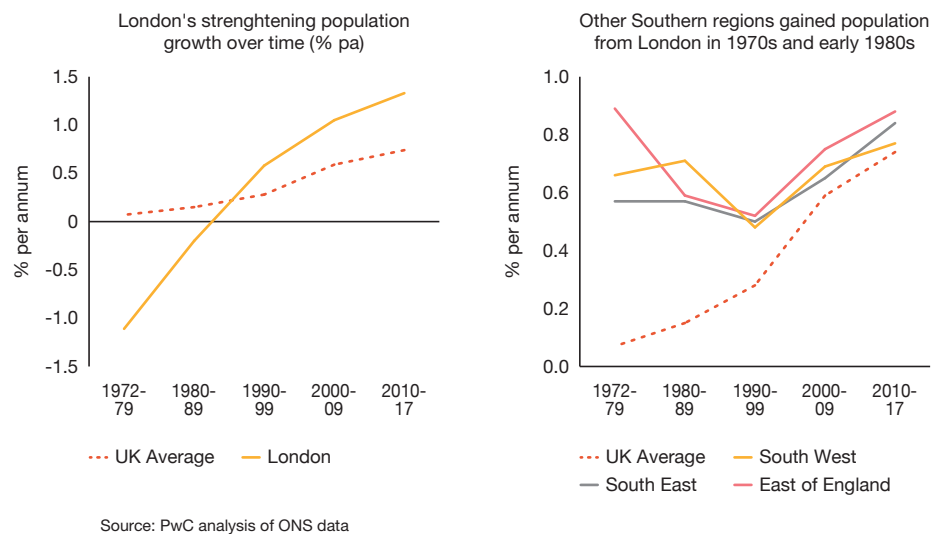
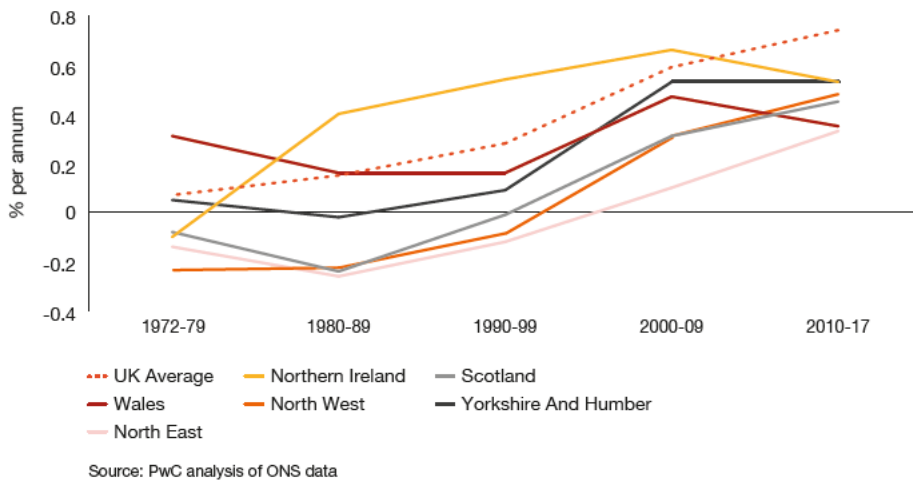


Figure 4.4 – London experienced depopulation in the 1970s and early 1980s but its population has picked up sharply since the mid-1980s



As Figure 4.5 shows, however, while migration boosted population growth after 2000 across the UK, the effect was less marked in Northern England, Northern Ireland, Wales and Scotland.

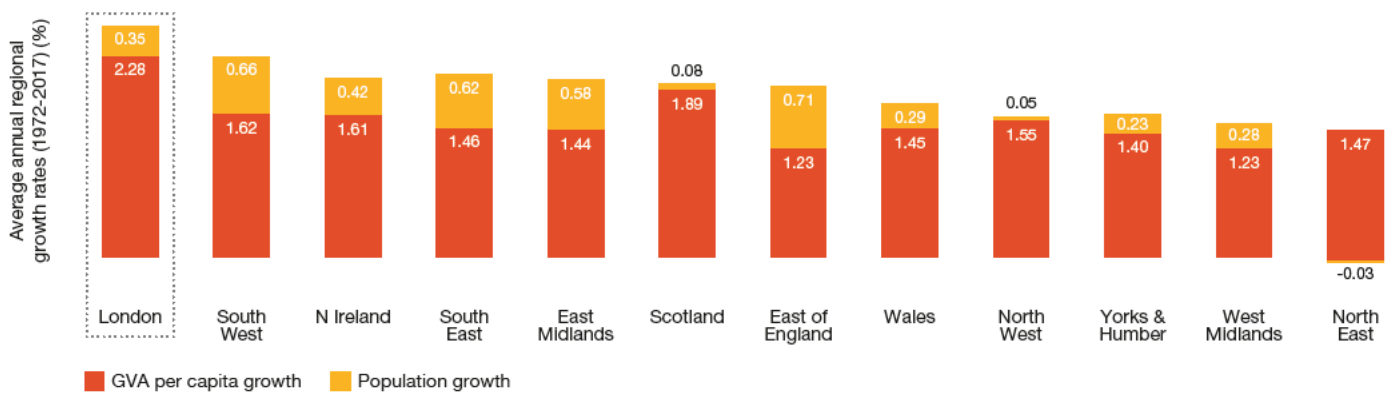
Figure 4.5 – Annual average population growth rates for UK and selected regions



We next need to consider the relationship between regional population trends and regional GVA per capita growth. Figure 4.6 shows how overall GVA growth by region split down between these two elements on average over the whole period from 1972 to 2017.

Figure 4.6 shows that population growth boosted GVA per capita growth materially in some regions, particularly in Southern England and the East Midlands. In Scotland, the North West and the North East, however, the average population effect on GVA growth was minimal over this period as a whole. Indeed, based on GVA per capita growth, Scotland would actually have been the second fastest growing region on average in 1972-2017 after London, while in terms of total GVA growth Scotland ranks only sixth of the 12 UK regions.

Figure 4.6 – Contribution of population growth to overall regional GVA growth



Focusing on London, it is notable that its underperformance in the 1970s in terms of total real GVA growth was explained primarily by its negative population growth in that decade (see Figure 4.7).

If we focus only on GVA per capita growth, then London's performance⁵ has been above the UK average in every decade since the 1970s (see Figure 4.8). But this chart also shows that GVA per capita growth peaked in the 1980s in both London and the UK and has generally been on a declining trend since then (albeit picking up somewhat in London in the current decade but remaining below the rates seen in the 1970s and 1980s).

Figure 4.7 – Population, GVA and GVA per capita growth for London

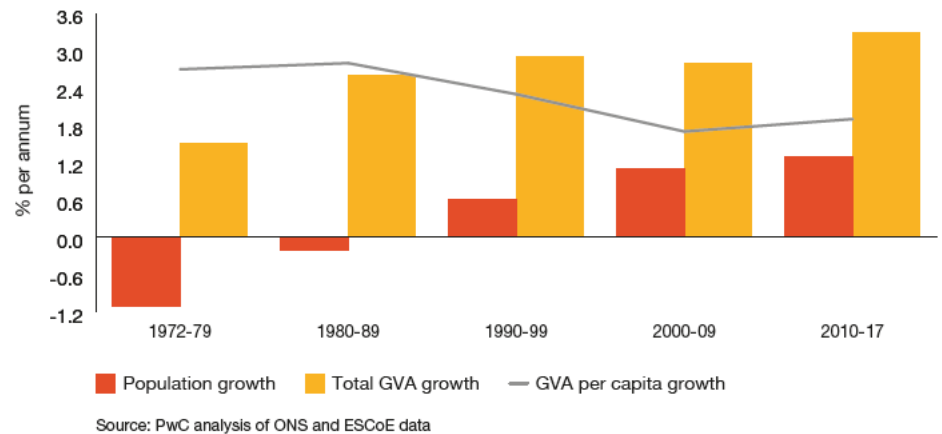
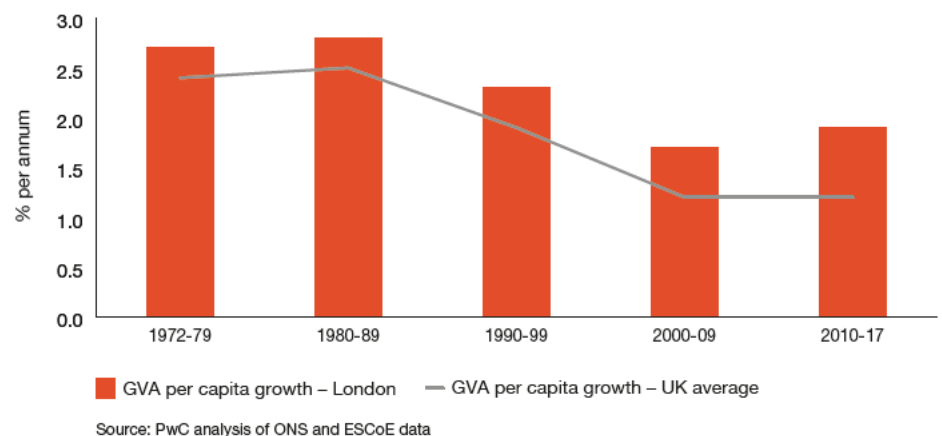


Figure 4.8 – Real GVA per capita growth trends in London and the UK



⁵ Although GVA per capita growth in London may have been affected by changes in the extent to which workers have commuted into London from surrounding regions, as opposed to living in the capital.

4.3 – Other explanations for regional GVA per capita growth variations

In mathematical terms, relative regional per capita growth rates reflect a combination of two factors:

- **industry mix:** variations in the sectoral composition of output across regions; and
- **industry-by-industry performance:** variations in the relative growth rates across regions of output in particular industry sectors.

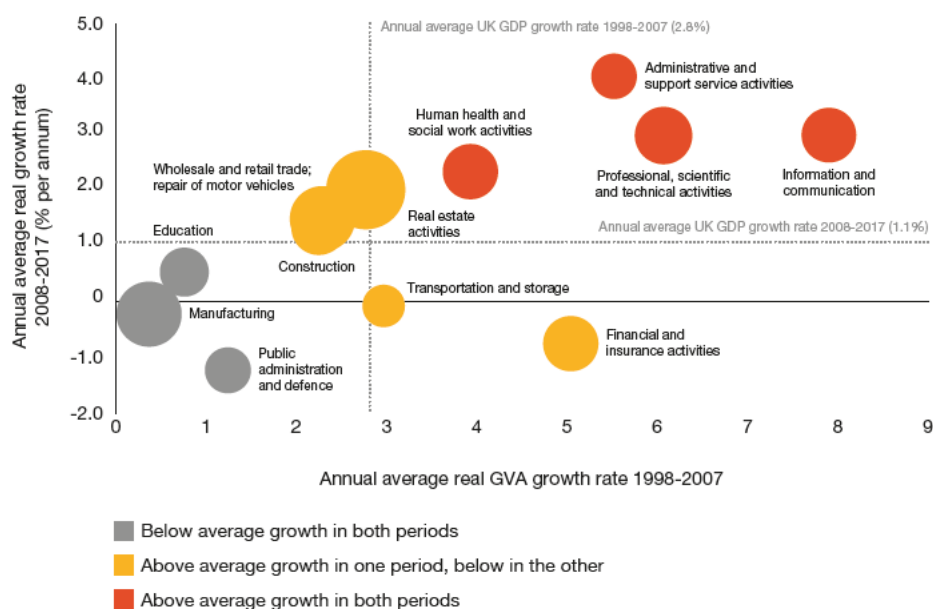
As official ONS data on regional GVA growth broken down by industry sector are only available in a consistent form from 1998 to 2017, the analysis in this sub-section focuses on this more recent period. However, we do also refer to some estimates for earlier periods from previous studies.

Variations in sectoral growth and industry mix

The industries that matter most for regional performance are those that are both relatively large and have seen average national growth rates significantly higher or lower than the economy-wide UK average. Figure 4.9 summarises relevant sector data for the period before the global financial crisis (1998-2007 on the horizontal axis) and during and after the crisis (2008-2017 on the vertical axis) for the UK as a whole. The size of the bubbles indicate the relative GVA of each sector in 2017.

As Figure 4.9 shows, manufacturing is a relatively large sector that has tended to grow more slowly than the UK average, while professional, scientific and technical activities is a relatively large and fast-growing sector. It is therefore useful to look in more detail at relative regional performance in these two sectors.

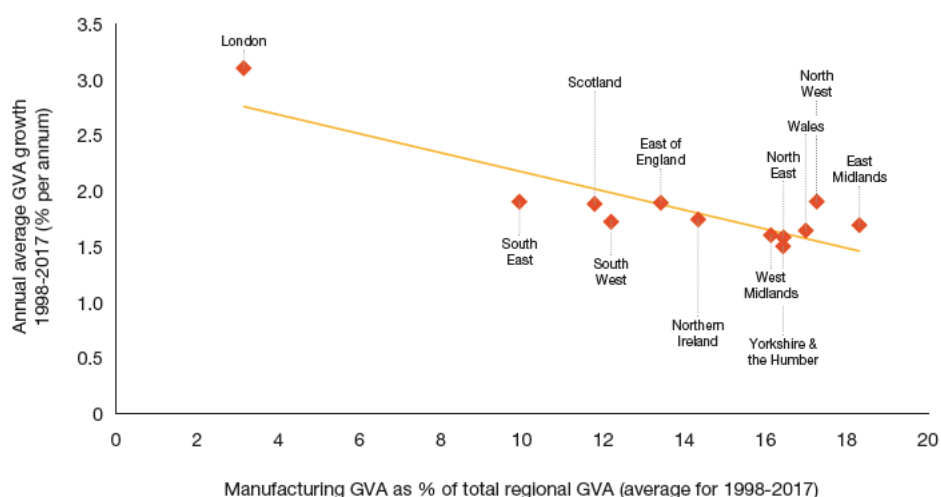
Figure 4.9 – Real UK GVA growth rate by sector



Source: PwC analysis of ONS data

Note: Size of bubbles indicates relative sectoral GVA in 2017. Mid-point of the bubbles indicates average real GVA growth rates in the two periods shown on the axes

Figure 4.10 – Share of manufacturing output negatively correlated with regional GVA growth



Source: PwC analysis of ONS data

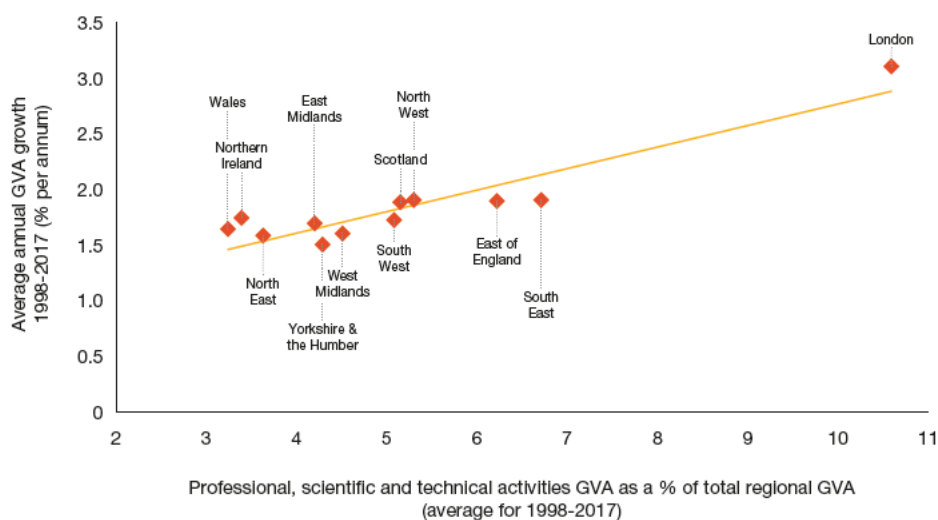
Looking first at manufacturing in the period since 1998, we can see that the average share of this sector in GVA correlates negatively with average regional GVA growth. This is most dramatically the case for London, but also holds, with some minor variations, for other UK regions. Earlier studies have shown a similar relationship also held in the 1980s and 1990s⁶.

By contrast, the share of GVA in professional, scientific and technical services is positively related to relative regional GVA growth, as shown in Figure 4.11. Again this pattern has been also been observed in a previous study of regional growth trends⁷, though for data reasons the latter focused on financial and business services more generally. We focus on a narrower sectoral definition here since financial services has been much less successful since the global crisis of 2008 (as Figure 4.9 above shows).

In other cases, industry mix has had varied impacts over time. In particular, the public sector grew relatively fast between the early 2000s and 2009, but then slowed markedly as austerity set in from 2010 onwards. This is illustrated in Figure 4.12 by the negative correlation between the share of public sector employment in total employment by region and relative regional GVA growth in 2010-17.

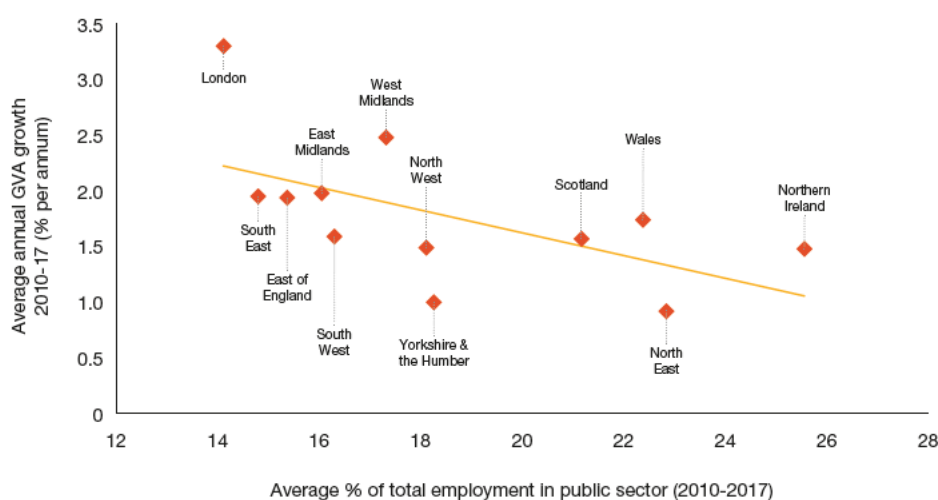
The squeeze on public spending since 2010 has been a particular drag on growth in Northern Ireland and the North East of England, together with other factors such as a relative lack of new business start-ups compared to other regions.

Figure 4.11 – Share of professional, technical and scientific services shows a positive correlation with relative regional GVA growth



Source: PwC analysis of ONS data

Figure 4.12 – Regions with relatively high public sector employment have seen slower overall GVA growth since 2010



Source: PwC analysis of ONS data

6 See, for example, B. Gardiner, R. Martin and P. Tyler, 'Spatially Unbalanced Growth in the British Economy', Central for Geographical Economic Research, University of Cambridge, Working Paper CGER No 1, June 2012, downloadable from here (as of 4 March 2019): <https://www.landecon.cam.ac.uk/pdf-files/cv/pete-tyler/cgerworkingpaperno1v5.pdf>

7 Gardiner et al. (2012), *ibid*.

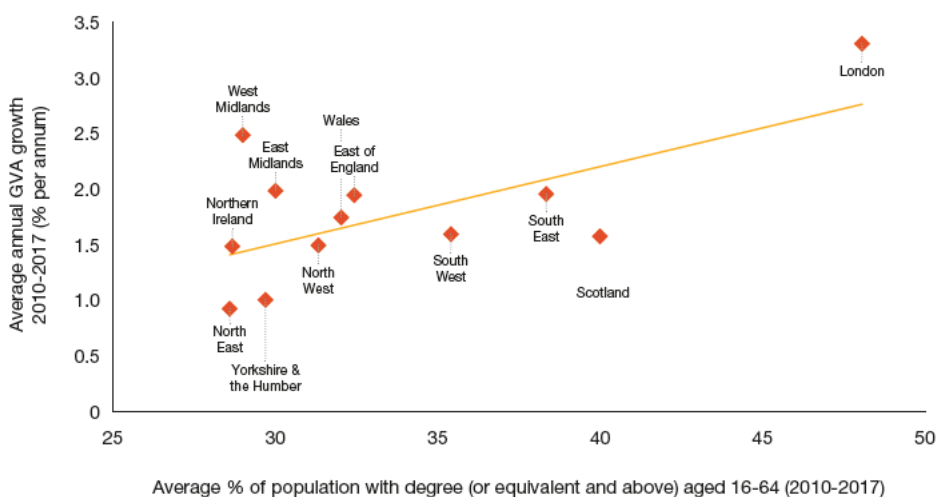
Higher education levels associated with stronger regional growth

A complex mix of factors drive relative regional growth, but some are more easily quantified than others. In particular, attracting and retaining skilled people is critical as indicated by the correlation of relative regional growth since 2010 with average education levels over this period (Figure 4.13).

London again stands out here in terms of its share of graduates, though the West Midlands is something of an outlier in terms of regional growth rates since 2010 that were higher than might have been expected just based on the proportion of graduates in the region. This seems to be explained in part by the rebound in manufacturing output in the West Midlands from the very low levels reached at the end of the 2008-9 recession, as well as diversification into business services, notably in Birmingham. There may also be some positive spill-over effects from the growth of London and the South East.

Many other factors will also be relevant here, including some that may be less favourable to London such as the affordability of housing and transport congestion⁸, and others that may reinforce its lead such as the number of world-class universities in the capital and the ability to attract world class talent to London due to its position as both a global financial centre and a leading cultural centre⁹.

Figure 4.13 – Regional growth is positively correlated with average regional education levels



Source: PwC analysis of ONS data

⁸ These factors help to explain why London is not the most successful city in our Good Growth for Cities Index, which looks at a broader set of measures of well-being than just GVA. In fact, cities in the Midlands and the North have seen the greatest improvements in index scores in recent years. Our latest report can be downloaded here: <https://www.pwc.co.uk/industries/government-public-sector/good-growth.html>

⁹ As reflected in London's consistently high ranking in our global Cities of Opportunity study, the latest edition of which is available here: <https://www.pwc.com/us/en/library/cities-of-opportunity.html>

4.4 – Recent regional trends and growth prospects for 2019-20

While London has grown relatively strongly for most of the past two decades, there have been some recent signs that other regions are starting to catch up. In the housing market, for example, although most regions (except Northern Ireland) experienced a deceleration in price growth between 2017 and 2018, London house prices have seen the weakest growth of any UK region recently, with an actual decline in the year to December 2018 (see Figure 4.14).

This reflects a number of factors, including the fact that London house prices may have become relatively overvalued after earlier rapid increases in 2010-15, as well as the impact of stamp duty changes on the top end of the market and the effect of Brexit-related uncertainty on international investors in particular.

Several other regions have also seen faster employment growth than London over the past year (see Figure 4.15). Wales experienced the highest employment growth in the year to Q4 2018, followed by Northern Ireland and the North West, while the employment rate in the South East and North East has declined.

These regional employment data can be volatile over time, in part due to restricted sample sizes at the regional level, but there are also signs here that the strongest positive labour market momentum is now being seen in regions outside London and the South East.

Figure 4.14 – London has seen the weakest house price growth over the past two years

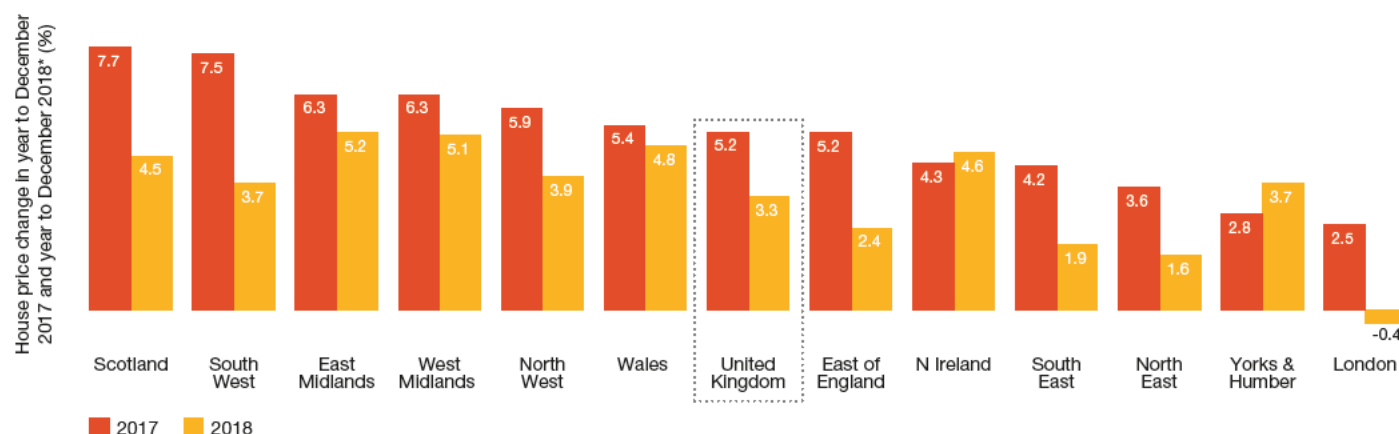
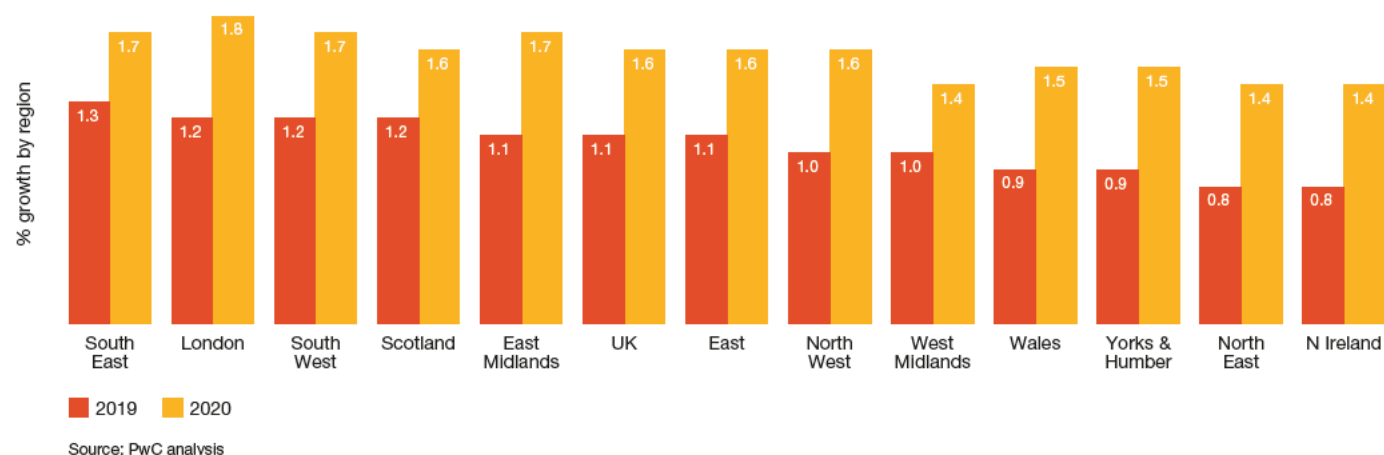


Figure 4.15 – Wales has witnessed the largest rise in its employment rate over the past year, with London close to the UK average



Figure 4.16 – PwC main scenario for output growth by region in 2019 and 2020



The latest ESCoE nowcasts of regional GVA¹⁰ still show London growing faster than any other UK region in 2018, repeating the pattern seen in the latest official ONS estimates for 2017, but these other indicators suggest that the growth gap between London and the rest of the UK may be less marked over the next couple of years.

This is reflected in our latest regional growth projections for 2019-20, which see London only slightly above the UK average as shown in Figure 4.16. As discussed in Section 2.2 above, these main scenario projections assume a reasonably orderly Brexit with a transition period lasting at least until the end of 2020.

To some extent a relative slowdown in London growth could just be a normal cyclical phenomenon. Because the economic recovery since 2010 has been significantly stronger in London than other regions (as Figure 4.2 above shows), this has left it with less spare capacity now. It has also led to constraints on growth from factors like transport congestion and lack of affordable housing that are more severe in London than elsewhere in the country (with the exception perhaps of a few other 'hot spots' like Oxford and Cambridge). These constraints can only be addressed through a major programme of new investment that will take time to have its effect.

Depending on the nature of the future UK-EU relationship on financial services, Brexit could also have an adverse effect on London given its particularly heavy reliance on this sector¹¹. However, other regions will clearly also be affected by Brexit to varying degrees depending on the nature of the future UK-EU relationship, not least as regards Northern Ireland given the importance of retaining frictionless trade with the Republic of Ireland with no hard border. At present, therefore, Brexit remains an important source of uncertainty for all UK regions, although achieving a relatively orderly Brexit should see some pick-up in growth in 2020 across the UK, as shown in Figure 4.16.

¹⁰ <https://www.escoe.ac.uk/regionalnowcasting/>

¹¹ For a detailed vision of how the UK financial and professional services sector could continue to prosper in the longer term beyond Brexit, see our joint report with TheCityUK here: <https://www.thecityuk.com/research/a-vision-for-a-transformed-world-leading-industry/>

4.5 – Summary and conclusions

London has consistently outperformed other UK regions for most of the past three decades in terms of economic growth, but this was not always the case. London had relatively slower GVA growth in the 1970s and early 1980s as people moved out of the capital to other parts of Southern England.

This only began to reverse with the financial deregulation of the mid-1980s, which boosted London's position as a global financial and business services centre and acted as a global magnet for talent that has boosted London's population and GVA growth to well above the UK average since the 1990s. At the same time, a sharp decline in manufacturing activity hit traditional industrial regions in the North, West Midlands and Wales relatively hard, particularly in the 1980s.

Since the 1990s, however, there has been less of a general North-South growth divide outside London. Relative growth rankings of different regions outside the capital have varied across decades without a clear, consistent pattern. All regions have also seen a boost to total GVA growth from increased net immigration since the early 2000s, but this has also been reflected in a general decline in real GVA per capita growth across UK regions relative to the average rates seen in earlier decades. This is also true of London.

More recently, there are some signs from the latest housing and labour market data that London's relative performance may have been less strong in 2018 and we expect this to continue in 2019-20, with London growing at only a slightly faster rate than the UK average in those years. It remains to be seen if this is a short-term cyclical phenomenon or the start of a longer term trend where London's growth is held back by problems related to transport congestion and lack of affordable housing.

All regions continue to be affected by uncertainties relating to the future UK-EU relationship after Brexit, although they could see some boost to growth later this year and into 2020 if the downside risks associated with a disorderly Brexit can be avoided.

Appendix A

Outlook for the global economy

Table A.1 presents our latest main scenario projections for a selection of economies across the world.

World economic growth accelerated in 2017 and remained reasonably strong on average in 2018. However, we expect global growth at market exchange rates to slow from 3.3% in 2018 to 3.0% in 2019 and to 2.9% in 2020. (At purchasing power parity rates, growth would slow from 3.8% in 2018 to 3.6% in 2019 and 3.5% in 2020). This moderation in growth is expected to come from weaker expansions in the US, China and the Eurozone. Elsewhere there are expected to be some bright spots, with India posting growth in excess of 7.5% a year in 2019-20 and a generally solid performance among the ASEAN economies. Russia and Brazil will also continue to strengthen after earlier deep recessions, but their pace of growth will remain only moderate due to relatively subdued global oil prices (Russia) and ongoing structural reforms (Brazil).

There was a marked acceleration in Eurozone economic activity in 2016-17, but this faded during 2018. We project Eurozone growth to be significantly slower in 2019, at only around 1.3%, although it could then pick up slightly to 1.6% in 2020 as the impact of some temporary factors (e.g. relating to German car sales) fade and monetary policy remains very accommodative. The US economy is also coming off a cyclical high, with growth expected to slow from 2.9% in 2018 to 2.4% in 2019, as higher interest rates begin to influence the real economy and the effect of fiscal stimulus fades. Nevertheless, the US will remain among the most vibrant of the advanced economies this year.

Finally, we expect the long-term cooling of the Chinese economy to continue in 2019-20. The government is set to deploy fiscal and monetary stimulus to try to reduce the impact of greater protectionism in the US, which means that growth is likely to slow only as far as 6.3% in 2019 and 6.2% in 2020, compared with 6.5% in 2018.

Table A.1: Global economic growth and inflation prospects

	Share of world GDP	Real GDP growth (%)		Inflation (%)	
	2017 at MERs	2019p	2020p	2019p	2020p
US	24.3%	2.4	1.9	1.9	1.8
China	15.0%	6.3	6.2	2.4	2.7
Japan	6.1%	1.0	0.3	1.7	1.7
UK	3.3%	1.1	1.6	1.8	2.0
France	3.2%	1.3	1.5	1.2	1.7
Germany	4.6%	1.0	1.6	1.7	2.0
Greece	0.3%	2.0	2.2	0.6	1.5
Ireland	0.4%	3.5	3.7	1.1	1.5
Italy	2.4%	0.5	0.9	1.0	1.5
Netherlands	1.0%	1.9	2.3	2.4	1.8
Spain	1.6%	2.3	1.8	1.5	1.9
Poland	0.7%	3.8	3.0	2.2	2.5
Russia	1.9%	1.5	1.8	4.5	4.8
Turkey	1.1%	-0.3	2.6	19.3	14.2
Australia	1.7%	2.8	2.7	2.5	2.5
India	3.3%	7.6	7.7	5.0	4.6
Indonesia	1.3%	5.2	5.1	3.7	4.3
South Korea	1.9%	2.8	2.8	1.9	2.0
Brazil	2.6%	2.4	2.1	4.0	3.9
Canada	2.1%	2.0	1.8	2.1	2.0
Mexico	1.4%	2.3	2.7	4.0	3.5
South Africa	0.4%	1.6	1.7	4.8	5.4
Nigeria	0.5%	2.5	2.5	11.9	13.0
Saudi Arabia	0.9%	1.9	1.9	3.1	3.0
World (PPP)	-	3.6	3.5	3.1	3.0
World (Market Exchange Rates)	100%	3.0	2.9	2.5	2.5
G7	46.0%	1.8	1.6	1.8	1.8
Eurozone	13.9%	1.3	1.6	1.4	1.8

Source: PwC main scenario projections for 2019 and 2020; IMF for GDP shares in 2017 at market exchange rates (MERs).

These projections are updated regularly in our Global Economy Watch publication, which can be found at www.pwc.com/gew

Appendix B

UK economic trends: 1979-2018

Annual averages	GDP growth	Household expenditure	Manufacturing output growth*	Inflation (CPI**)	3 month interest rate (% annual average)	Current account balance (% of GDP)	PSNB*** (% of GDP)
1979	3.7	4.8			13.7	-0.6	4.2
1980	-2.0	0.1			16.6	0.5	3.9
1981	-0.8	0.3			13.9	1.5	3.0
1982	2.0	1.2			12.2	0.6	2.3
1983	4.2	4.4			10.1	0.2	3.0
1984	2.3	2.5			10.0	-0.5	3.3
1985	4.2	5.1			12.2	-0.3	2.5
1986	3.2	6.1			10.9	-1.0	2.0
1987	5.4	5.1			9.7	-1.6	1.3
1988	5.8	7.4			10.4	-3.5	-0.6
1989	2.6	3.9		5.2	13.9	-4.1	-0.6
1990	0.7	1.0		7.0	14.8	-3.1	0.6
1991	-1.1	-0.6		7.5	11.5	-1.3	2.6
1992	0.4	0.9		4.3	9.6	-1.5	5.6
1993	2.5	2.8		2.5	5.9	-1.3	6.7
1994	3.9	3.2		2.0	5.5	-0.5	5.8
1995	2.5	2.1		2.6	6.7	-0.7	4.6
1996	2.5	3.9		2.5	6.0	-0.6	3.3
1997	3.1	4.5		1.8	6.8	-0.1	1.9
1998	3.1	4.0	0.4	1.6	7.3	-0.7	0.2
1999	3.2	4.9	0.5	1.3	5.4	-2.6	-0.8
2000	3.7	4.8	2.3	0.8	6.1	-2.4	-1.5
2001	2.5	3.6	-1.5	1.2	5.0	-2.1	-0.2
2002	2.5	3.8	-2.2	1.3	4.0	-2.2	2.0
2003	3.3	3.6	-0.5	1.4	3.7	-1.9	3.4
2004	2.4	3.2	1.8	1.3	4.6	-2.4	3.3
2005	3.1	3.1	0.0	2.1	4.7	-2.1	3.2
2006	2.5	1.8	2.1	2.3	4.8	-3.1	2.8
2007	2.4	2.7	0.6	2.3	6.0	-3.8	2.6
2008	-0.5	-0.6	-2.8	3.6	5.5	-4.6	5.4
2009	-4.2	-3.3	-9.4	2.2	1.2	-3.9	10.1
2010	1.7	0.7	4.6	3.3	0.7	-3.8	9.1
2011	1.5	-1.0	2.2	4.5	0.9	-2.4	7.1
2012	1.5	1.8	-1.5	2.8	0.8	-4.2	7.6
2013	2.1	1.9	-1.0	2.6	0.5	-5.5	5.7
2014	3.1	2.2	2.9	1.5	0.5	-5.3	5.3
2015	2.3	2.7	0.0	0.0	0.6	-5.2	4.1
2016	1.8	2.9	0.9	0.7	0.5	-5.9	2.9
2017	1.7	1.9	2.6	2.7	0.3	-3.7	1.8
2018	1.4	1.9	0.9	2.5	0.6	-4.1	1.4
Average over economic cycles****							
1979 - 1989	2.8	3.7			12.2	-0.8	2.2
1989 - 2000	2.4	2.9		3.3	8.3	-1.5	2.4
2000 - 2014	1.9	1.9	-0.2	2.2	3.3	-3.1	4.4

* After the revisions to the national accounts data, pre-1998 data is not currently available ** Pre-1997 data estimate

*** Public Sector Net Borrowing (calendar years excluding public sector banks) **** Peak-to-peak for GDP relative to trend

Sources: ONS, Bank of England

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