

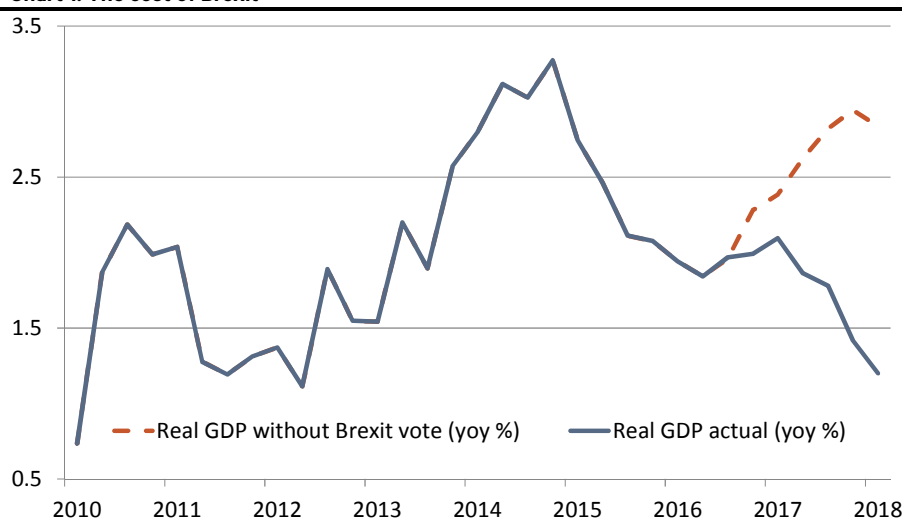
Brexit hurts already: GDP analysis and outlook

- **A wobbly start to 2018:** Real GDP growth slowed to 0.1% qoq in Q1 2018 from 0.4% in Q4 2017. Amid solid gains in employment and mostly stable soft data, the very weak Q1 reading probably overstates the underlying weakness in growth momentum at the start of the year. The Bank of England (BoE) expects future data revisions to show that the economy expanded by 0.3% qoq in Q1, a little below its potential rate of 0.4%.
- **Broad-based softness:** Consumption growth slowed to 0.2% qoq from 0.3% in Q4. Gross fixed capital formation, the broadest measure of investment, expanded by 0.9%, but within that, business investment dropped by 0.2% qoq. The impact of net-exports was broadly neutral after subtracting 0.4ppt from growth in Q4. In Q1, both exports (-0.5%) and imports (-0.6%) decreased sharply on a quarterly basis.

In this report, we analyse the UK's economic performance since the Brexit vote, and the medium-term and long-term outlook.

- **Impact of the Brexit-vote – missing out on the party:** We estimate that the UK has lost up to 2% of cumulative output (around £35bn) between Q3 2016 and Q1 2018. In 2017, the UK grew by 1.8%. Our analysis suggests that without Brexit, 2017 growth would have been around 2.7% – see Chart 1. The sizeable hit to UK growth from Brexit has occurred despite the solid global backdrop and the sizeable economic policy response in H2 2016 that followed the initial sharp drop in survey and confidence data immediately after the referendum.
- **Medium-term – fading Brexit risks can support demand growth:** Uncertainty was the major factor weighing on UK economic activity in 2017 and 2018. If the UK avoids a hard Brexit, lowering long-term uncertainty, household and business risk appetites should normalise. This would enable higher levels of investment and stronger consumption growth in 2019 and beyond. In our base case, we expect real GDP growth to pick up from 1.4% in 2018 to 1.8% in 2019.
- **Long-run – Brexit reduces long-run potential growth:** The long-run outlook largely depends on the future trading arrangement between the UK and the EU, UK domestic economic policies, and any future non-EU trade deals. For Brexit, we see four potential scenarios: 1) **hard Brexit:** 25% chance, less than 1.5% potential growth; 2) **no Brexit:** 10% chance, more than 2.1% potential growth; 3) **semi-soft Brexit:** 40% chance, 1.5-1.7% potential growth; and 4) **Soft Brexit:** 25% chance, 1.7-1.9% potential growth.

Chart 1: The cost of Brexit



Quarterly data. Source: ONS, Berenberg estimates. The counterfactual for real GDP growth without Brexit is based on a linear regression analysis where UK real GDP growth is explained by real GDP growth in the USA, EU27, Japan and BRIC (Brazil, Russia, India and China) economies

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The impact so far – missing out on the party elsewhere

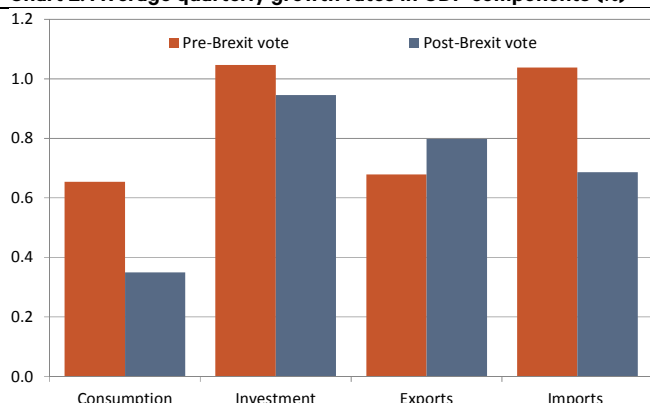
Consider the facts: until the Brexit vote, the UK had enjoyed one of the strongest upswings after the Lehman-crisis of all advanced economies. Annual real GDP growth averaged 2% between 2010 and 2016, broadly in line with the US average of 2.1% and well above the averages of the Eurozone (1.1%) and Japan (1.5%). Beginning in mid-2016, global demand started to gather significant momentum. Growth in the US and the Eurozone, the UK's major trading partners, accelerated to well above the average of previous years. But in the UK, growth remained at a subdued 1.8% rate in 2017, 0.1pt lower than 2016. In 2018, UK growth is likely to be a paltry 1.5% while growth in the US and the Eurozone remains above potential.

Although the UK economy outperformed initial consensus expectations since the Brexit vote, chances are that growth would have been much stronger if the UK had voted to stay in the EU. During the past two years, much of the advanced world has showed tentative signs of escaping the post-Lehman age of caution and growth has improved. Because of Brexit, UK growth has softened instead.

Just how much output has the UK forfeited since the Brexit vote?

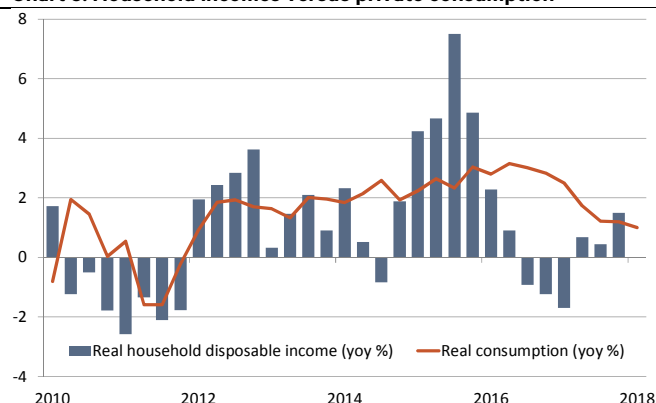
As a medium-sized open economy, the UK broadly follows the ups and downs of its major trading partners. On the cover chart, we show the estimates from our model which calculates how UK growth could have fared without the Brexit vote. We compare it to the actual turnout of the data. We estimate that the UK lost up to 2% of cumulative output (around £35bn) between Q3 2016 and Q1 2018. In 2017, the UK grew by 1.8%. Our model suggests that without the Brexit vote, growth would have been a much stronger 2.7%.

Chart 2: Average quarterly growth rates in GDP components (%)



Quarterly data. Source: ONS. The chart shows average quarterly growth rates in major components of GDP. Pre-Brexit data shows the average for the 12 quarters to Q2 2016. Post-Brexit data shows the average since Q3 2016

Chart 3: Household incomes versus private consumption



Quarterly data. Source: ONS. Real consumption includes both households and non-profit institutions

This lost output should not only be considered in the context of the solid global backdrop but against the sizeable economic policy response in H2 2016 following the sharp drop in survey and confidence data immediately after the referendum. In August 2016, the BoE cut the bank rate to 0.25% – which was subsequently reversed in November 2017 – and bought £60bn of government bonds and \$10bn of corporate bonds. Meanwhile, the Treasury slowed the pace of fiscal consolidation at the Autumn Statement 2016.

Chart 2 compares the key components of GDP before and after the Brexit vote. It clearly highlights a moderate demand side shock following the Brexit vote, with the effects playing out largely as expected: 1) slower consumption and investment growth as inflation and uncertainty weigh on demand; and 2) stronger export growth and weaker import growth from the depreciation in the exchange rate.

The real wage squeeze has weighed on real consumption growth

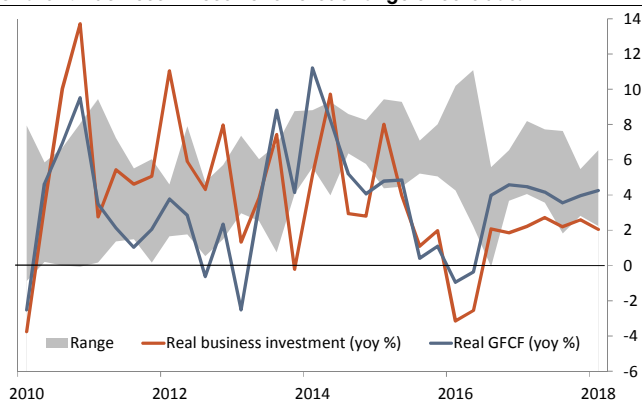
The fall in trade-weighted sterling after the Brexit vote pushed up import prices sharply last year and added around 100bp to the headline inflation rate. Despite the media excitement and some predictions that households would reduce their spending as inflation rose to nearly 3% last year, in reality the outcome has been more sanguine. Despite the decline in real incomes, households have not reduced their spending in real terms – see Chart 3. The overall impact on household confidence has been modest, too. Real consumption expanded by

1.7% last year. As inflation rose above wage growth, households smoothed their consumption by saving less and borrowing more to meet their rising real demand for goods and services. Continued healthy job gains added to aggregate household demand and partly offset the decline in real incomes. Nevertheless, real consumption growth in 2017 was materially slower than the 2.9% increase in real consumption in 2016 – roughly matching the additional ppt of inflation as a result of the fall in sterling.

Uncertainty has dragged on investment

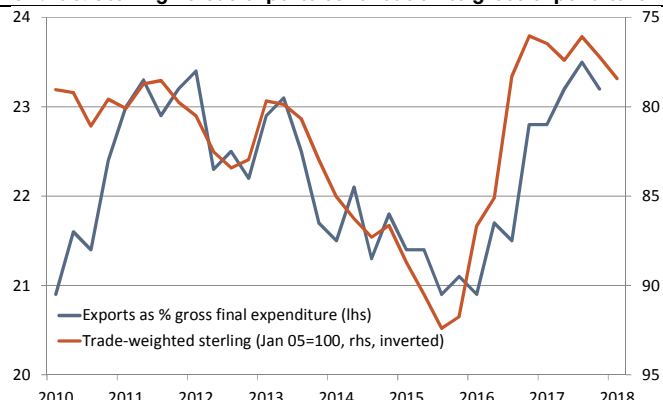
Investment growth had already slowed in the run-up to the Brexit vote as cautious firms held off on big spending decisions until the referendum result was known. Then last year, some eight years into the economic upswing, capacity constraints started to bite in the UK and other advanced economies. Meanwhile, global growth gained significant momentum. In normal times, UK firms would have ramped up investment to add new production lines, buy new plants and augment their means of production. Instead, business confidence remained subdued and Brexit uncertainty continued to weigh on investment growth. Although the big risk that firms could have cut back investment spending after the referendum did not materialise, as Chart 4 shows, investment growth rebounded by less than would have normally been expected given the strength of soft data. Although UK business investment grew by just 2.4% in 2017, up from -0.5% in 2016, it was well below the rates of the growth in the US (4.7%) and Germany (4.3%), which are at similar stages of the economic upswing to the UK.

Chart 4: Business investment versus range of soft data



Quarterly data. Source: ONS, CBI, BoE, Lloyds, Berenberg calculations. The range is based on standard deviations from mean across the soft data – rebased to improve fit. GFCF = gross fixed capital formation – the broadest measure of investment

Chart 5: Sterling versus exports contribution to gross expenditure



Quarterly data. Source: ONS, Bank of England

The fall in sterling has boosted exports and lowered imports

Between June 2016 (pre-referendum) and October 2016, trade-weighted sterling declined by 16%. While sterling has recovered modestly since then, it remains c10% below the pre-Brexit vote level. The fall in sterling has had two implications: 1) imports have become more expensive; 2) exports have become more competitive. Higher demand for UK exports and lower demand for imports has led to a modest improvement in the trade balance, and the contribution of exports to output – see Chart 5. Export growth accelerated from 2.3% in 2016 to 5.7% in 2017, the strongest growth rate since exports rebounded in 2010 following the 8.7% drop during the 2009 recession. Import growth slowed from 4.8% in 2016 to 3.2% in 2017 – slightly below the 2010-16 average growth rate of 4.2%. Net exports contributed 0.6ppt to the annual GDP growth rate last year after subtracting an average of 0.3ppt from 2010-2016.

Medium-term – fading Brexit risks can boost demand

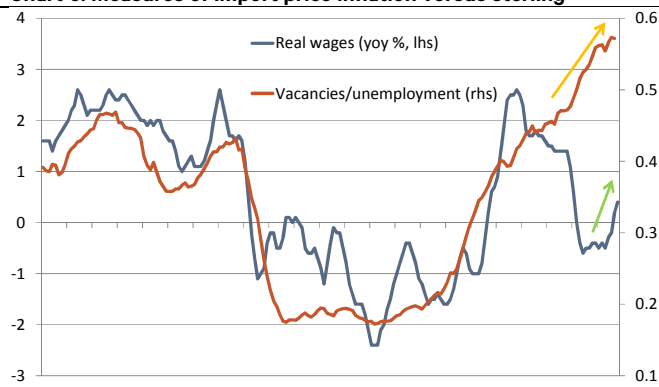
As in 2017, the UK looks set to stay close to the bottom of the G7 growth league in 2018 as Brexit uncertainty still weighs on demand and other major advanced countries grow well above their own potential rates again. Because uncertainty was the major factor weighing on economic activity in 2017 and 2018, if the UK avoids a hard Brexit by March 2019 when it is set to leave the EU – lowering long-term uncertainty – more normal risk appetites should promote stronger growth in investment and consumption in 2019.

The impact of lower uncertainty on demand is likely to be reinforced by an improvement in real wages. If the UK avoids a no-deal hard Brexit – which should prevent a further major fall

in the exchange rate – the Brexit-vote related squeeze on real wages is probably over now. Tight labour markets suggest that there is plenty of room for a strong rise in real wages over the medium term – see Chart 6.

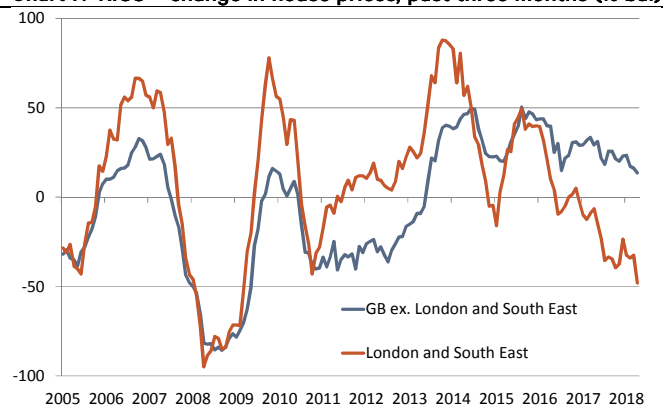
The benefit to demand from rising real wages may not be felt immediately. Real wage gains are still modest for now (co.6% yoy). Before going back to the shops in a big way, for a while households may choose to slow their demand for credit and rebuild savings to compensate for extending their balances sheets last year. As a result, consumption growth is likely to remain subdued at rates of growth around 1% in 2018 before rising towards 2% in 2019.

Chart 6: Measures of import price inflation versus sterling



Monthly data. Real wages = average weekly earnings adjusted by headline CPI.
Source: Source: ONS, Berenberg calculations

Chart 7: RICS – change in house prices, past three months (% bal)



Monthly data. The last data point is April 2018. A balance above zero indicates a rise in prices. Series are based on a simple average of RICS regional survey data. UK ex-London and the south-east includes; the north, the north-west, Yorkshire and Humberside, East Midlands, West Midlands, East Anglia, the south-west, Wales and Scotland

In our base case, we expect real GDP growth to pick-up from 1.4% in 2018 to 1.8% in 2019 – see Table 1. This is slightly above the consensus according to Bloomberg (23 May 2018) – 1.4% growth in 2018 and 1.6% growth in 2019 – see Table 2.

Apart from Brexit, we think there are four potential risks to our outlook for a modest acceleration of UK real GDP growth over the medium term.

1) A downturn in the housing market: The current, mainly London-based risks in the housing market do not yet pose a significant threat to the broader economy. Unlike in previous upswings, major parts of the UK housing market have not matched the upswing in London – see Chart 7. Without the boom, the national market is thus less vulnerable to a downturn. However, if the UK goes for a hard Brexit, the softness in confidence and demand in London could spread elsewhere. A nationwide fall in house prices could have large negative effects on household net wealth and demand – see [UK housing market: the regional divide](#), dated 18 May 2018.

2) A persistent fiscal deficit leaves the economy vulnerable to shocks: Although the fiscal deficit is falling towards a more sustainable level (2.1% in 2018), total public debt is still high at close to 90% of GDP. If the UK suddenly and unexpectedly entered recession, the weakness of the public balance sheet would mean that, as unemployment increased, the deficit would rise sharply, limiting the government’s ability to commit additional discretionary spending to enable a quick recovery.

3) The BoE could fall behind the curve: If growth and wages surprise to the upside and the BoE tightens too gradually, demand could overheat relative to the subdued (Brexit related) rate of supply growth. If the BoE falls behind the curve and has to play catch-up to tame inflation, sharp rises in interest rates could stunt demand growth and increase unemployment. The current backdrop of solid global demand adds to this risk.

4) The global cycle comes to an early end: If the current global upswing came to a premature end the cyclical components of the UK economy – investment and production – would weaken. Growth could slow significantly. The biggest threat to a continued strong global upswing is a Trump-driven, US-led trade war. This has already contributed to softness in Europe at the start of 2018. A major and protracted trade war that confirms the worst fears of businesses could push demand growth in much of the developed world below trend and cause a number of emerging market crises. This would heavily on the UK’s already subdued growth outlook.

Table 1: UK forecast summary

		2016	2017	2018	2019	1Q17	2Q17	3Q17	4Q17	1Q18	2Q18	3Q18	4Q18	1Q19	2Q19	3Q19	4Q19
GDP	% y/y	1.9	1.8	1.4	1.8	2.1	1.9	1.8	1.4	1.2	1.5	1.5	1.5	1.9	1.8	1.8	1.9
	% q/q					0.3	0.2	0.5	0.4	0.1	0.5	0.4	0.4	0.4	0.4	0.5	0.5
	%q/q ann.					1.3	1.0	1.9	1.6	0.4	2.2	1.8	1.8	1.8	1.8	2.0	1.9
Private Consumption	% y/y	2.9	1.7	1.0	1.7	2.5	1.7	1.2	1.2	1.0	0.9	1.0	1.2	1.5	1.7	1.8	1.8
	% q/q					0.4	0.3	0.3	0.3	0.2	0.2	0.4	0.4	0.4	0.5	0.5	0.5
	% y/y	0.8	0.1	1.0	0.2	-0.4	0.2	0.1	0.6	1.2	0.9	1.1	0.8	0.4	0.3	0.1	-0.2
Government Consumption	% q/q					-0.1	0.3	-0.1	0.4	0.5	0.0	0.1	0.2	0.1	-0.1	-0.1	-0.1
	% y/y	1.8	4.0	3.6	3.9	4.5	4.2	3.6	4.0	4.3	3.1	3.6	3.4	3.3	3.9	4.1	4.3
	% q/q					0.7	1.7	0.5	1.1	0.9	0.6	0.9	0.9	0.9	1.1	1.1	1.1
Final Domestic Demand ¹	% y/y	2.4	1.8	1.5	1.8	2.3	1.8	1.4	1.5	1.6	1.3	1.5	1.5	1.6	1.8	1.9	1.9
	% q/q					0.3	0.5	0.3	0.4	0.4	0.2	0.4	0.5	0.5	0.5	0.5	0.5
	% y/y	-0.8	0.6	-0.1	0.0	0.4	0.3	1.9	-0.2	0.2	-0.2	-0.3	0.0	0.0	0.0	0.0	-0.1
Net Exports ¹	% q/q					-0.3	0.3	0.2	-0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% y/y	-0.2	-0.4	0.1	0.1	-0.5	-0.4	-0.7	-0.1	-0.4	0.5	0.4	0.1	0.3	-0.1	0.0	0.1
	% q/q					0.1	-0.6	0.1	0.3	-0.2	0.3	0.0	0.0	0.0	0.0	0.1	0.0
Current Account Balance	GBP bn	-113.6	-82.9	-67.8	-58.7	-19.6	-25.6	-19.2	-18.4	-17.9	-17.3	-16.6	-16.0	-15.4	-14.9	-14.4	-14.0
	% of GDP	-5.8	-4.1	-3.2	-2.7	-3.9	-5.1	-3.7	-3.6	-3.4	-3.3	-3.1	-3.0	-2.8	-2.7	-2.6	-2.5
	% y/y	1.3	1.9	2.3	1.9	2.8	0.6	2.2	1.9	2.0	2.6	2.1	2.3	2.3	2.1	1.8	1.5
Industrial Production ²	% q/q					0.4	0.0	1.0	0.5	0.6	0.5	0.6	0.6	0.6	0.3	0.3	0.3
	%	4.9	4.4	4.2	4.2	4.6	4.3	4.3	4.3	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
	% y/y	0.6	2.7	2.5	2.3	2.2	2.8	2.8	3.0	2.7	2.5	2.5	2.4	2.3	2.3	2.2	2.2
CPI ²	% y/y	0.6	2.7	2.5	2.3	2.2	2.8	2.8	3.0	2.7	2.5	2.5	2.4	2.3	2.3	2.2	2.2
	% of GDP	-3.0	-2.7	-2.1	-1.7												
General Govt. Balance ³	% of GDP	89.3	89.0	87.7	85.9												
General Govt Debt ³	% of GDP																
BoE Bank Rate ⁴		0.50	0.50	0.75	1.25	0.25	0.25	0.25	0.50	0.50	0.50	0.50	0.75	0.75	1.00	1.00	1.25

¹ Contribution to GDP growth ² Period averages ³ Maastricht basis ⁴ End period

Table 2: Berenberg compared to consensus

GDP (% y/y)	2018	2019	Unemployment (%)	2018	2019	CPI (% y/y)	2018	2019
Berenberg	1.4	1.8	Berenberg	4.2	4.2	Berenberg	2.5	2.3
Bloomberg consensus	1.4	1.6	Bloomberg consensus	4.3	4.4	Bloomberg consensus	2.5	2.1
Difference	0.0	0.2	Difference	-0.1	-0.2	Difference	0.0	0.2
Bank of England	1.4	1.7	Bank of England	4.1	4.0	Bank of England	2.2	2.1
OBR	1.5	1.3	OBR	4.4	4.5	OBR	2.4	1.8

Source: Bloomberg consensus taken on 25 May 2018, Bank of England, Office of Budget Responsibility, Berenberg. Numbers may not add up due to rounding. The shading illustrates whether Berenberg forecasts are stronger (green) or weaker (red) than consensus

Brexit reduces long-run potential growth

The long-run economic outlook for the UK depends on three major factors: 1) the future trading arrangement between the UK and the EU – which will be the product of the ongoing Brexit negotiations; 2) any future trade deals the UK agrees and implements with major non-EU partners – agreements with the US, China and India would probably have the largest positive impact; and 3) developments in UK domestic economic policy – including the risks relating to any change from a Conservative to a Labour government led by far-left leader Jeremy Corbyn.

Although factors two and three are open to speculation, now that Brexit talks are entering the final stages, we think there are four potential outcomes (more detail on these scenarios and the likely impact on the UK's long-run economic growth are shown in Table 3), as follows.

No deal – hard Brexit (25% chance): With so many interests – and careers – at stake, the risk that talks could fail at any point remains a serious one.

No Brexit (10% chance): The only possible route to a reversal of Brexit would be through fresh elections that ended up with a Labour-led government scheduling a second referendum that reversed the result of the first.

Semi-soft Brexit (40% chance): This remains the most likely scenario. The UK stays close enough to EU rules for many goods – ie a customs “arrangement” and some services to avoid a hard border in Ireland. UK remainers could support a deal that keeps the UK partly aligned with the EU, while the Brexiteers could back such an agreement as it would offer the UK room to pursue its non-EU ambitions at least for services.

Soft Brexit (25% chance): As roughly two-thirds of MPs are pro-EU, a comprehensive deal to keep the UK in the single market and customs union for goods and many services could

theoretically be backed by a majority in parliament. However, many Conservative MPs would vote against it. May is unlikely to negotiate such a deal which could trigger the collapse of her government.

Table 3: Possible scenarios for UK post-Brexit economic relations with the EU

	EU member/No Brexit	Soft Brexit	Semi-soft Brexit	Hard Brexit
<i>Probability</i>	<i>(10%)</i>	<i>(25%)</i>	<i>(40%)</i>	<i>(25%)</i>
Free trade within the area	Yes	Yes on almost most goods and many non- financial services	Yes for most goods but very few services	No
Financial passporting within EU	Yes	No – but with some potential for equivalence agreements	No	No
Customs union with EU (no border checks)	Yes	No	No	No
Free to set external trade policy	No	Yes in all markets not covered by the customs union	Yes in all markets not covered by the customs union	Yes
Covered by EU external trade agreements	Yes	No	No	No
Free movement of people	Yes	Yes with few exceptions	Some restrictions on EU citizens entering the UK labour market	No
Votes on EU laws/regulations	Yes	No	No	No
Under ECJ jurisdiction ¹	Yes	Yes indirectly	Yes indirectly	No
Contribution to EU budget	Yes	Yes	Some	No
Long-term trend growth (% pa)	>2.0%	1.7-1.9%	1.5-1.7%	<1.5%

¹ As the European Court of Justice (ECJ) adjudicates on all Single Market issues, countries in the customs union or in agreements with the EU, as well as European Economic Area (EEA) countries are indirectly under the jurisdiction of the ECJ. Source Berenberg

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