Brexit – where are we now?
A report on the economic consequences of Brexit by Capital Economics
It’s now almost 18 months since the UK voted to leave the EU. With the Brexit negotiations still at an early but seemingly critical stage, the ramifications of the vote are still hotly debated. In what is undoubtedly a complex, emotional and highly political debate, many myths and misperceptions persist on the subject of Brexit from all sorts of angles.

Leaving the politics to one side, Woodford’s focus is purely on the economic consequences of Brexit. And so, following the “Economic impact of Brexit” report that we exclusively published in early 2016, we have again commissioned Capital Economics to revisit the subject with a new report, “Brexit – where are we now?”. The report combines innovative and in-depth analysis of existing information and statistics, a wide range of economic impact studies, and fresh research, as well as Capital Economics’ macroeconomic projections.
The views expressed in this report are those of the author at the date of publication and not necessarily those of Woodford Investment Management Ltd. The contents of this article are not intended as investment advice and will not be updated after publication unless otherwise stated.
The performance of the economy overall after Brexit will be determined by the Brexit settlement (whether there will be a deal) and also by what happens afterwards (the extent of policy activism). Vigorous policy activism is inevitable in the case of ‘no deal’. Thus, three macroeconomic scenarios are plausible:

1. ‘No deal’
2. ‘Compromise deal’
3. ‘Deal with ambitious policies’

The form of Brexit

We see the most likely form and timetable for Brexit to be the ‘compromise deal’ scenario, namely:

- Negotiations continue for the next year and reach a conclusion in October / November 2018
- A deal is reached covering withdrawal issues (e.g. citizens’ rights, the bill), transitional arrangements and the overall design (though not details) of a future free trade agreement
- Parliamentary ratifications of the deal (EU and UK) take place over the following two months and Britain leaves the EU, including the single market and customs union, on 29 March 2019
- Britain retains some features of membership during the transitional period, which runs to the end of current EU budget framework, which is the end of 2020
- During transition, Britain continues to make ordinary contributions to the EU. Retained features are likely to include customs privileges and most single market rights
- From the beginning of 2021, the UK enters a new relationship with the EU, based on an extensive free trade agreement
- At that point, Britain ceases to make large contributions to the EU budget and only pays in much smaller amounts for specific programmes, as Switzerland does

In the ‘no deal’ scenario, Britain relies on World Trade Organization (WTO) trading rules. Markets and policymakers react in ways that blunt the impacts to a significant degree. In the ‘deal with ambitious policies’ case, the political settlement is much the same as in the ‘compromise deal’ case, but policymakers are able to maximise the opportunities from leaving the EU.

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Justin Chaloner
Glyn Chambers
Melanie Debono
Alexandra Dreisin
Trade

The EU is Britain’s largest trading partner, but has been declining in importance and is likely to continue to do so. Nevertheless, with Britain likely to leave both the single market and the customs union in due course, it is likely that trade with Europe will decline in share terms. However, Britain will have the opportunity to pursue valuable new trading agreements with a wide range of countries outside Europe, where most of the global growth is now occurring.

**Base case schedule for other trade deals**

Source: Capital Economics

Regulation

There is a significant body of evidence to suggest that EU regulations across a very wide range of areas have added to the costs of business and, in a substantial number of areas, may have had a net cost for the economy overall. However, Capital Economics believes that there is high uncertainty around the political feasibility of substantially repealing most of these laws. Instead, Brexit may offer the UK the opportunity to pursue a different regulatory path in the future, potentially making it more competitive.

Gains to UK GDP

<table>
<thead>
<tr>
<th></th>
<th>0%</th>
<th>0.25%</th>
<th>1%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low case</td>
<td>No deregulation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Base case</td>
<td>Modest deregulation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High case</td>
<td>Ambitious deregulation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
WHERE ARE WE NOW?

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Immigration

Migration from the EU has been high in recent years, but has dropped following the UK’s decision to leave the EU. It seems likely that measures to reduce immigration will be introduced after Brexit. Policy may change to restrict the number of low-skilled workers entering the country, but could also move towards attracting more highly skilled workers (including from outside the EU). Moreover, it is unlikely that the future immigration regime will involve a ‘hard land border’ between Northern Ireland and the Republic of Ireland.

Manufacturing

Manufacturing exports to the EU account for around 90% of total British goods exports to the union. They also make up some 35% of value-added production in the sector. With trade in goods being regulated by single-market rules and with the third highest share of EU workers, the effects of Brexit, both positive and negative, on manufacturing may be stronger than in many other sectors’ cases.
Financial services

The loss of passporting rights will have an effect, but the proportion of business that will actually relocate will likely be a small fraction of the industry. Euro clearing is more likely loss, but Brexit will open the possibility for Britain to gain a regulatory advantage over continental rivals and possibly to negotiate trade deals that are more inclusive of, and favourable towards, financial services.

The City of London will likely remain a hub of prosperity after March 2019. London’s pre-eminent position as a global financial centre pre-dates the single-market, and the City possesses intrinsic advantages which will endure.

<table>
<thead>
<tr>
<th>Financial services industry growth per annum to 2027</th>
<th>Low case</th>
<th>Base case</th>
<th>High case</th>
</tr>
</thead>
<tbody>
<tr>
<td>No deal and complete passporting loss</td>
<td>0.6%</td>
<td>1.7%</td>
<td>3.0%</td>
</tr>
<tr>
<td>Compromise deal with limited loss</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Combining deal and new global opportunities</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Life sciences

Pharmaceutical exports and the UK’s place in the launch sequence of medicinal products should be unaffected by Brexit, while the relocation of the European Medicines Agency (EMA) seems unlikely to have much of an effect. Participation in many life sciences-related EU programmes is possible for countries outside the union, and Britain could continue to be involved. There are potential benefits in terms of deregulation, cooperation with the United States and perhaps some of the much-discussed £350m / week for healthcare!

<table>
<thead>
<tr>
<th>Life sciences industry growth per annum</th>
<th>Low case</th>
<th>Base case</th>
<th>High case</th>
</tr>
</thead>
<tbody>
<tr>
<td>No deal and weaker economy</td>
<td>4.0%</td>
<td>4.5%</td>
<td>7.0%</td>
</tr>
<tr>
<td>Compromise deal with modest partnership/deregulation upgrades</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wave of new opportunities</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
WHERE ARE WE NOW?

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Property

Capital Economics expects the performance of the property sector, a relatively well-insulated industry, to be more influenced by the performance of the broader macroeconomy than by Brexit itself. Demand for commercial property is more sectorally diverse than is commonly realised which suggests that concerns that a post-Brexit financial services slowdown will prompt a correction in commercial property prices appear over-played, as does the only modest increase in anticipated supply.

Meanwhile, the historic inflexibility of residential property prices suggests that a meaningful impact is only likely if Brexit causes a material change in macroeconomic conditions, something which Capital Economics does not envisage.

Construction

Construction is relatively insulated from developments with respect to trade as the industry exports and imports relatively little. In general, we expect the sector to be fairly unaffected by Brexit but it would be vulnerable to any economic slowdown or contraction in total demand. It could make small gains from lesser regulation, but lose out in terms of fewer EU citizens in the workforce.

House price growth per annum to 2027

<table>
<thead>
<tr>
<th>Case</th>
<th>Change per annum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low case</td>
<td>1.4%</td>
</tr>
<tr>
<td>Base case</td>
<td>3.2%</td>
</tr>
<tr>
<td>High case</td>
<td>3.6%</td>
</tr>
</tbody>
</table>

Construction output growth per annum to 2027

<table>
<thead>
<tr>
<th>Case</th>
<th>Change per annum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low case</td>
<td>0.7%</td>
</tr>
<tr>
<td>Base case</td>
<td>1.7%</td>
</tr>
<tr>
<td>High case</td>
<td>2.1%</td>
</tr>
</tbody>
</table>
WHERE ARE WE NOW?

Public finances

For the public purse, the issues are obviously the Brexit bill and the level of ongoing contributions to the EU in future. Capital Economics estimates a base-case bill of €38bn, which also covers payments for a one-and-three-quarter-year transition arrangement. Thereafter, Capital Economics anticipates that Britain will probably wish to participate in some EU programmes, but that the payments will be small.

Consumers

Consumption held up well immediately after the referendum, but lower sterling / higher inflation has since weighed on household spending and consumer confidence to a degree. This may to reverse in the months ahead as inflation declines.

No deal may mean further sterling weakness, which could be detrimental for consumption again. However, the primary influence of consumer behaviour will be the performance of other parts of the economy such as the labour market and longer-term real wage growth.

Consumption could be boosted modestly if the UK adopted lower tariff schedules than the EU.
Overall macroeconomic impact

At the outset it should be stated that, while Brexit could result in change on many issues, it is not likely to have a meaningful impact on the large proportion of the economy that doesn't participate in international trade. Indeed, there are good reasons to think that the British economy will continue to perform well whether or not it is inside or outside of the EU. For example, the UK benefits from a prestigious higher education sector, a large pool of skilled employees in high-value sectors such as finance, biotechnology and information technology, good transport connections, a welcoming political environment, the global status of London, and a strong rule of law. The UK ranks ninth for ease of doing business in the World Bank's Doing Business report.

No deal case: temporary slowdown but no cliff edge (Probability of occurrence: 35%)

In the 'no deal' scenario, without a withdrawal agreement with the EU, there are negative impacts stemming from high levels of uncertainty and EU trade being subject to tariffs and more non-tariff barriers, plus difficulties in 'grandfathering' existing trade deals, loss of access / equivalence rights and perhaps actual disruption to trade. Nevertheless, it cannot be ignored that markets and policymakers will react to those events. Interest rates would likely be very low, there would be no need for any contributions to Brussels after March 2019, and the government would probably react by cutting some taxes and perhaps supporting affected industries with subsidies. What's more, the devaluation would help exporters, tariffs would boost government coffers, and trade negotiations with other countries would no doubt be accelerated.

Hence, we believe that even this scenario would not result in a major slowdown or recession, though it is to be expected that there would be some economic dislocation in 2019 and that economic growth in that year would therefore dip under 1%. The years of 2020 and 2021 also see weaker-than-trend growth, but the economy then picks up as things settle down.
Compromise deal: steady as she goes (Probability of occurrence: 50%)

In the ‘compromise deal’ scenario, the positives from Brexit are likely to include:

1. Reaching new trade deals with other developed and emerging markets
2. Removing or reducing regulation in limited areas
3. Savings on contributions to the EU

The negatives will likely be:

1. Output lost during the current period of uncertainty that isn’t recouped afterwards
2. Reduced trade with EU countries, including some financial services activities
3. Some output loss from reduced migration

The graphic shows the extrapolated net effects on the overall output level by 2027, versus the status quo of EU membership.

Coupled with a loss in output due to uncertainty, the negatives are likely to be more dominant in the couple of years immediately after 2019; the positives are more likely to be dominant in the medium to long run, resulting in a net position that is slightly better than what would be expected with a continuation of EU membership on existing terms by 2027. This is based on the governments of the period being moderately successful in securing a free trade agreement with the EU, reaching deals with other countries and ending most contributions to the EU, but not assuming a great deal of progress on deregulation.

Deal with ambitious policies: the upside case (Probability of occurrence: 15%)

We consider a ‘deal with ambitious policies’ case in which further measures to boost the economy are enacted.

These would include expedited trade agreements, securing novel trade agreements that deeply incorporate services (particularly financial), setting an immigration policy based completely on boosting economic value added and undertaking targeted deregulation efforts.
As we set out in this report, there is also considerable doubt about the size of the benefits of the single market and the effects of leaving it. In a high case, it turns out that the losses are minimal.

High-case scenario

- Faster trade deals
- Services well included in trade deals
- Single-market exit means no access loss
- Optimal policy on EU migrants
- Sizeable deregulation efforts

- All sectors of the economy will experience a mix of positives and negatives from Brexit
- ‘No deal’ will cause some damage, but will not be a ‘cliff edge’, and nimble policy adjustment could allow the economy to regain momentum afterwards
- The government’s goal to make Britain a global leader in free trade is the best approach to make a success of Brexit – the more this is pursued, the more probable is a net benefit

Free trade

There is strong evidence of significant benefits from the conclusion of free trade deals. Meta analyses of hundreds of papers suggest that the average boost to trade volumes could be 46%.

Single market

Benefits of economic integration beyond free trade have diminishing returns. Analyses suggest that the single market only added approximately 1.3% to British output.
EU vs Free trade

Moving from close integration with one block to a suite of free trade agreements leads to more trade. We find that British trade could be booted by 6.3% over 10 years by doing so.

Unilateral free trade

Unilateral free trade could bring net economic gains, but may be politically difficult. A partial version leads to more modest price falls – 0.5% – but poorer consumers would benefit most.

Financial services

Financial services have a wide range of possible Brexit outcomes. Our estimates of growth rates over 2017-2027 range from 0.6% to 3% depending on what happens with EU and other trade.
Life sciences

Of all sectors covered here, life sciences are the most likely to record net gains from Brexit. Proposed downsides generally have little basis and some deregulation and investment can be expected.

‘Brexit bill’

Based on a full membership contribution for 2019 and 2020, we find an estimated Brexit bill of €37.8bn. But the UK could argue that the EU should have a duty to mitigate some liabilities within this.

Contribution savings

When Britain leaves the transition period, it should be able to move to only paying the EU for specific programmes. Based on the Swiss experience, this will result in a 93% reduction in contributions.
'No deal' outcome

Compared to the 'compromise deal', 'no deal' sees a loss of output of 2.4% by 2023, but 0.8% is recouped by 2027. Relative to 'Remain', the difference in 2027 is only 0.5%.

Economic growth

In the expected 'compromise deal' case, GDP growth is around 2% during the transitional phase, dips to 1.6% in 2021, then rises towards 2.5% thereafter.
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The economy has performed reasonably well since the referendum. We were more sanguine about the economic prospects following a 'leave' win, but the economy has, if anything, performed slightly better than we were expecting.

Looking at the prospects for the Brexit deal, while the negotiations have been tetchy so far, there do seem to be grounds for a compromise. The UK’s ultimate destination currently looks likely to be that of a third country with which the EU has an enhanced free trade agreement.

However, Britain is likely to wish to maintain many of its existing single-market and customs-union privileges for a period and it has indicated that it is willing to pay for this. Given that the British bill is one of the primary issues for the EU side, it does seem that the scope exists for a compromise.

If, for whatever reason, that doesn’t happen, then the most likely outcome is Brexit without a deal, though the UK opting to remain in the European Economic Area and the EU’s customs union would also be possible in that circumstance.

In this section, we assess how the economy has performed since the referendum on EU membership and assess what we know of the likely eventual form of Brexit – considering the key issues of the negotiations and setting out, with evidence, our expectations regarding the final settlement.
There are various explanations for the economy’s overall resilience.

First, some forecasters genuinely saw a vote for Brexit as an adverse external shock akin to the Lehman crisis, with similar potential effects on consumer and business sentiment and financial markets. But that was never likely, given that it was something that was favoured by over half of voters, that the scale of the potential impacts was not very large and that those impacts would, in any case, be delayed for two years whilst an exit deal is negotiated.

**Figure 2: Real GDP growth and forecasts for real GDP growth in the case of a leave vote**
Source: Capital Economics, Thomson Reuters, International Monetary Fund, HM Treasury

Note: Dashed data represents projected real UK GDP growth for 2017, assuming that growth rates in Q3 and Q4 match that of Q2 (0.3%).
Second, the potential changes in Britain’s trading relationship with Europe are simply not of sufficient magnitude to cause such a shift in output and, what is more, the effects were always likely to be significantly delayed by the two-year withdrawal process, which was well known at the time.

Third, policymakers responded to the outcome. Monetary policy was loosened via interest rates being lowered from 0.50% to 0.25% in August 2016 and an increase in asset purchases. Furthermore, the Chancellor announced a slowdown in the planned pace of fiscal tightening in November 2016 such that the government would not need to balance its books by the end of the decade as previously set out.

Fourth, the drop in the pound has acted as an effective shock absorber, helping to boost the stock market and increase the competitiveness of exporters. (See Figure 3.) Nevertheless, sterling’s depreciation following the ‘leave’ vote has contributed to inflation outpacing nominal pay growth again. This is causing a squeeze on consumers’ real income, though the experience has been worse in many recent years. (See Figure 4.)

Figure 3: UK export surveys and sterling Trade Weighted Index (TWI)
Source: Capital Economics, Thomson Reuters

Figure 4: UK average earnings and consumer price index (CPI)
Source: Capital Economics, Thomson Reuters
The rate of jobs growth did appear to lose steam after the referendum, slowing to around 1% per annum over the second half of 2016. This may reflect the tightness of the labour market by historical standards, rather than being a result of the ‘leave’ vote. Employment as a proportion of the population over 16 is at its highest level since the 1970s. The unemployment rate has now fallen below the Monetary Policy Committee’s ‘equilibrium rate’ of 4.5%.\(^3\) Business investment weakened in advance of the referendum, but there have been no large falls subsequently. Investment appears to have proved resilient to uncertainty, perhaps due to credit conditions remaining supportive. Surveys of firms’ investment intentions have also held up well and point to an acceleration in annual growth of real business investment. (See Figure 5.)

**Figure 5: Real business investment growth rate and investment intentions**

Source: Capital Economics, Thomson Reuters, IHS Markit

In summary, over the last year, the economy has performed at near the levels it has performed at since the financial crisis. There may have been a modest post-referendum slowdown driven by higher inflation in the first half of 2017, but there are encouraging signs that even that will prove temporary. Certainly, forecasts of a post-referendum recession proved unfounded. (See Figure 1.)

The potential Brexit deal

The EU negotiating position is that there are three key issues that must be cleared up initially:

1. The rights of EU citizens living in the UK, and UK citizens living in the EU
2. Agreeing a methodology for calculating the so-called ‘exit bill’
3. Solutions to try to avoid the imposition of a hard border between Northern Ireland and the Republic of Ireland

The British view is that these three issues – and particularly that of the Northern Ireland border – are intimately linked with the future trading relationship between the UK and the EU.
Brussels expects the UK to make a contribution towards the union’s outstanding financial commitments, which would limit any disruption to its programmes from Brexit. Britain will likely have to agree to this ‘divorce bill’ to secure a new trading agreement with the EU, even though the legal obligation on the UK to do so is debatable. The EU’s case for an exit bill is primarily dependent on the union having entered into various financial commitments on the basis of continued British contributions in the current EU budget framework – multiannual financial framework – for 2014-2020.

The UK is seeking to preserve certain aspects of membership at least for a temporary period. Britain has indicated that it is open to contributions to the EU to pay for these privileges. The ground does therefore seem to exist for a potential compromise involving British payments in exchange for certain single-market or customs-union benefits for a limited period, paving the way for an eventual free trade arrangement (though this may not be concluded before March 2019). Continued British contributions for transitionary privileges would therefore be:

1. A way for the UK to pay for its temporary privileges
2. A way for the EU to plug the hole in its current budget
3. A way to remove many of the notional liabilities – from the 2014-2020 multiannual financial framework – in the exit bill

The third party in the configuration of the final deal is the British Parliament, which now has much more influence after the 2017 general election result. If the opposition parties were able to unite on a particular issue then, together with Conservative rebels, they might be able to force the government to change tack.

At present, however, that looks unlikely, especially for any of the key ‘red line’ issues. After all, Labour still appears quite uncertain of its own position. What’s more, few Conservative MPs actually rebelled on the legislation enabling Article 50 in spite of much speculation beforehand, while there are a small number of committed pro-Brexit Labour MPs who have and could end up voting with the government – as they did at the Second Reading of the Withdrawal Bill. Overall, while amendments to forthcoming Brexit bills are likely, it still looks difficult for Parliament to force the government to make a major change in stance.

As a result, the timetable and key developments at this stage seem likely to be as follows:

- Negotiations continue for the next year and reach a conclusion in autumn 2018
- Parliamentary ratifications of the deal (EU and UK) take place over the following few months
- Britain leaves the EU, including the single market and customs union, on 29 March 2019
- Britain retains many of features of membership during a transitional period, which runs to end of current EU budget framework, which is the end of 2020
- During transition, Britain continues to make normal contributions to the union. Retained features are likely to include customs privileges and significant single-market rights
- From the beginning of 2021, the UK enters new relationship with EU based on an extensive free trade agreement
Specific events
2017  Q4  Talks progress to future trade arrangements?
2018  Q1  Italian election
  Q2  Terms of withdrawal finalised
  Q3  UK Parliament votes on draft final agreement
  Q4  Ratification by European, UK & European National Parliaments
2019  Q2  UK starts to **formally** negotiate non-EU trade agreements

The other options

If this Brexit ‘compromise deal’ scenario does not transpire, what are the other likely scenarios? Table 1 provides an overview of EU relationships with non-member countries.

**Table 1: Options for Britain’s relationship with the EU**

<table>
<thead>
<tr>
<th></th>
<th>UK’s current position</th>
<th>EEA (Norway)</th>
<th>EFTA &amp; Bilateral deal (Swiss)</th>
<th>Customs Union (Turkey)</th>
<th>Free Trade Deal (Canada)</th>
<th>WTO Rules Only</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restrictions on exports to EU</td>
<td>None</td>
<td>On some agricultural and fish products</td>
<td>On some agricultural products</td>
<td>On services, public goods and agricultural products</td>
<td>On some agricultural products, manufactured goods</td>
<td>Average tariff of 4.4%</td>
</tr>
<tr>
<td>Acceptance of EU laws</td>
<td>Accepts EU laws</td>
<td>Significant acceptance of EU regulations</td>
<td>Opt-in to EU regulations</td>
<td>Exports to EU have to conform with EU standards</td>
<td>Exports to EU have to conform with EU standards</td>
<td>Exports to EU have to conform with EU standards</td>
</tr>
<tr>
<td>Financial passporting</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>
**BREXIT SO FAR**

Capital Economics, November 2017

<table>
<thead>
<tr>
<th>UK's current position</th>
<th>EEA (Norway)</th>
<th>EFTA &amp; Bilateral deal (Swiss)</th>
<th>Customs Union (Turkey)</th>
<th>Free Trade Deal (Canada)</th>
<th>WTO Rules Only</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU budget contributions</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Free movement of labour</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes, with exceptions</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Reach-own free trade agreements</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Broadly, the alternative options fall under two overarching categories:

- **Leaving without a deal or a minimalist deal that includes little on trade.** This is probably the second most likely outcome. The parties could fail to reach an agreement or an agreement may be thrown out by either side at the parliamentary ratification stage. With this option, it’s also likely that the British side will not make an exit payment. We explore what this means for the economy later in this report.

- **Britain becomes more worried about the consequences of Brexit and consents to a more diluted form.** This could involve remaining within the single market or customs union, or agreeing to terms that are close to membership of these arrangements, for the long term. This would likely not involve major economic changes from the status quo. Such a change in stance would likely be welcomed by the EU as it would probably involve the use of an off-the-shelf model (Norwegian, Swiss or Turkish) which may make the negotiations easier.

It is, of course, also possible that Britain will, in spite of everything, somehow remain a member of the EU. However, given the political hurdles to this, the probability of it occurring is very low. Still, nothing is inevitable until it has happened.

**Footnotes**


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The EU is Britain's largest trading partner, but has been declining in importance and is likely to continue to do so. Nevertheless, with Britain likely to leave both the single market and the customs union in due course, it is likely that trade with Europe will grow more slowly in value terms, and decline more quickly in share terms, than would have been the case with a maintained status quo. This will be particularly so if Britain leaves the union without a free trade agreement, which academic studies show to have positive effects on trade volumes. The evidence suggests that Britain's departure from the single market will be less important than the free trade agreement. It is doubtful that many of the non-tariff barriers that allegedly could accompany the former event would actually be imposed, particularly in the near term given the starting point of complete regulatory equivalence.

On the flip side, Brexit will definitely offer the country an opportunity to pursue valuable new trading agreements with a wide range of countries outside Europe, where most of the global growth is now occurring. Consistent with the large number of academic studies showing higher marginal value of free trading arrangements over deeper forms of economic integration, it is therefore to be expected that, providing that Britain succeeds in reaching these agreements, there will be net positive impacts from Brexit versus the status quo.

Therefore, in a low-case scenario involving no deal with the EU and a slow accumulation of other deals with countries outside Europe, we project net trade volumes to be 4.6% lower in 2027 versus what they would be with a continuation of the status quo. In the more likely case of a EU free trade agreement and deals with other leading economies, trade volumes would be 6.3% higher and, in an optimistic high case involving rapid deal-making, they would be 9.6% more.

Some authors have suggested that Britain could reap significant economic benefits from adopting a unilateral free trade policy. There are good arguments both for and against this. At the very least, there is a strong case for Britain to look at changing the tariff schedules it inherits from the EU and lowering some of them. This would boost consumption and benefit poorer households in particular, while it is possible that some of the costs will fall on European exporters rather than British firms. Partial unilateral free trade would also allow Britain to retain the bargaining chip of removing tariffs completely for use in free trade talks.

In this section, we consider the likely impact of Brexit on the UK's international trade. First, we examine Britain's current trade links with the EU. Second, we evaluate the economic implications of leaving both the customs union and the single market, including comparing these arrangements with a free trade orientated policy. Fourth, we evaluate the potential benefits of Brexit in terms of new trade agreements and unilateral free trade. Finally, we determine and quantify low, base and high-case scenarios for trade.
Britain’s trade links with the EU

The UK has substantial trade links with the EU. The Office for National Statistics reports that just under half of British exports are destined for the EU. Total exports account for around 30% of the UK’s gross domestic product (GDP), so the total value of all British exports of goods and services to the EU represents around 12% of the country’s economy. (See Figure 7.)

Figure 7: Exports account for less than 30% of UK GDP
Source: Capital Economics, Office for National Statistics

There is a considerable degree of mutual interdependence of trade between the two parties. Some 47% of the UK’s goods exports go to the EU and 18% of the EU’s goods exports are destined for the UK. There is a disparity among dependence of EU countries on UK trade. For example, while the UK accounts for 6% of Italy’s goods exports, it accounts for 13% of Ireland’s. (See Figure 8.)

Figure 8: Exports of goods by destination as share of total in 2016
Source: Capital Economics, Thomson Reuters
Meanwhile, it does not appear to be the case that any one region or regions is particularly exposed to Brexit through having a disproportionately strong goods-trading relationship with the EU. Wales, the North East and Northern Ireland are somewhat more exposed than other parts of the country in terms of trade in goods, while the south of England generally and London in particular are less prone to any goods tariffs. However, the picture is different in terms of trade in services, where London and the South East are more exposed to trade in services – in these cases, financial services and tourism – than the other regions. (See Figure 9.)

Membership of the customs union

The EU’s customs union was established on 1 July 1968. No customs duties are levied on goods travelling within the customs union and members of the union, which comprises all EU members plus Monaco, Turkey, Andorra and San Marino, impose a common external tariff on all goods entering the union. Furthermore, members do not have an independent trade policy, and the European Commission negotiates for and on behalf of the union as a whole in international trade issues, rather than each member state negotiating individually.

It is this latter condition regarding common control of trade policy, enshrined within an element of the customs union known as the Common Commercial Policy, that has prompted the UK to set out to leave the customs union upon leaving the EU. Indeed, most non-EU countries in Europe, with the notable exception of Turkey, also reside outside the EUs customs union.

The ability to reach new trade deals with both developed and rapidly growing emerging markets is potentially one of the primary economic benefits of leaving the EU.

Costs of leaving the customs union

The benefits of a departure from the customs union, in terms of trade deals with other countries, will take time to transpire. Moreover, there are potential costs, most notably:

- The imposition of tariffs on British exports to the EU
- The potential loss of contingent free trade agreements
- The need to conform with EU rules of origin
- Customs declarations for imports and exports
Tariffs under World Trade Organization (WTO) rules

It is possible that the UK will leave the EU without concluding a new trading agreement. If this occurs, British exporters would face the EU's Most Favoured Nation tariff rates when selling into the EU customs union. Under the WTO agreements, the Most Favoured Nation treatment stipulates that all members may not grant special favours to any other member. Therefore, a tariff applied to one member must similarly apply to all. If Britain does not agree upon a new trading agreement with the EU for the post-Brexit period, the Most Favoured Nation tariffs will apply to all trade with EU countries. However, there are three reasons to suggest that these tariffs would not have severe consequences for British exporters.

First, tariffs have fallen substantially over the last few decades as part of a global trend towards reducing trade barriers. The average EU Most Favoured Nation tariff on manufactured goods has fallen to just under 2%, compared to nearly 6% at the start of the 1990s, and the average tariff on all products has fallen from around 8% to 4.4% in the same time period. (See Figure 10.)

Figure 10: EU Most Favoured Nation (MFN) average tariffs remain low
Source: Capital Economics, World Trade Organization

The average tariff that could potentially be imposed by the EU varies across sectors. (See Figure 11.) The impact of these tariffs will depend on the tariff rates and the importance of the goods on which they are applied in the UK's trade profile. For example, agricultural (food and drink) product sectors would be hit with the highest tariffs, averaging 11%, with some dairy products facing tariffs in excess of 35%. But food exports to the EU totalled only £7.9bn in 2016. While this accounted for 70% of all the UK's total food exports that year, it was equivalent to 39% of the sector's gross value added (£20.2bn) and only contributed to 3% of the country's total goods exports (£501bn). On a broader analysis, despite average tariffs not varying significantly, more often than not, higher tariffs tend to be for goods which account for lower shares of the UK's exports to the EU. The agricultural industry could still suffer, however. (See Figure 12.)
Figure 11: EU tariffs on selected industries in 2017
Source: Capital Economics, World Trade Organization

Figure 12: Maximum EU tariffs for selected goods and exports of these goods by the UK to the EU in 2016
Source: Capital Economics, World Trade Organization, Office for National Statistics

Note: Maximum tariffs may not match those in previous figure due to the use of broad HS2 codes for analysis in this figure. Analysis based on Capital Economics’ classification of tariffs into Office for National Statistics trade classifications. Maximum Most Favoured Nation tariff is calculated as the maximum of the average Most Favoured Nation tariff charged on subcategories.
TRADE

Capital Economics, November 2017

What's more, not only will the impact on a large share of exports be limited, but exchange-rate movements may leave the impact of tariffs irrelevant. After Britain voted to leave the EU on 23 June 2016, the value of the pound dropped 7% in trade-weighted terms on 24 June and fell further over the ensuing months. This benefited exporters, whose goods and services became relatively cheaper than their competitors. The unexpected event of leaving the EU without agreeing a free trade deal could well lead to a further devaluation of the pound which may partially or completely offset the negative impact on exporters of a rise in tariff rates. While a weaker pound would benefit exporters, it would be a detriment to consumers who, due to the same movements in sterling, would face higher import prices. Given closely integrated global supply chains, there would also be an impact on prices of imports used in the production of other goods, including exports. The resultant upward pressure on inflation would reduce the scope for monetary authorities to maintain or increase monetary loosening.

Second, EU tariffs would apply only to goods, not services. And manufacturing has fallen substantially as a share of the British economy, down from nearly a fifth (19%) of GDP in 1995 to just under 10% (9.7%) in 2016.4

Third, the EU is now a less important global player. Its share of world GDP has fallen, from 27% to 17% from 1990 to 2016. This is likely to fall further as emerging markets continue to grow faster. As a result, Europe has become less important as an export market for the UK. The share of Britain’s exports of goods and services that go to the EU has fallen from 55% in 1999 to 44% in 2016. (See Figure 13.)

Figure 13: EU share of world GDP, at purchasing-power-parity
Source: Capital Economics, International Monetary Fund

These three factors – falling tariffs, the decline in manufacturing and Europe’s diminishing importance – mean that tariffs would not be a major barrier to British exports to the EU if the UK leaves without securing a new trading agreement.

Contingent free trade agreements

Membership of the EU provides the UK with access to 34 bilateral and regional trade agreements in place or provisionally applied. These cover 60 partners and allow the UK to trade with these countries freely while it remains a member. A further seven free trade deals have been signed off by the EU but have not yet been ratified, including with Canada (now provisionally applied), Japan, Singapore and Vietnam.

Not including signed but not ratified deals and trade deals that have been only provisionally applied, the EU has ratified and currently has in force 26 trade deals with 26 countries. Trade with these countries accounts for 12% of British exports and 11% of British imports.5

It is possible that the UK will negotiate new trade deals with countries that currently have a free trade agreement with the EU. This should be easier than striking a deal with third countries that don’t have an existing arrangement with Brussels. The UK could seek to ‘grandfather’ these agreements (or at least use them as a template) with the third country after Brexit. Some of them are ‘mixed competence’, with the EU as well as the member states being party to the agreement. This is the case, for example, with the agreement with South Korea. Therefore, it looks theoretically simple for agreements, particularly of the latter type, to remain in force after Brexit, with the UK continuing to comply with the terms of the agreement and the third country also complying with respect to trade with both the UK and the rest of the EU.
The continuation of existing trade agreements will depend on political negotiations between the UK and the third country, as well as the spill-over implications of the UK–EU negotiations, within the confines of WTO rules. It is possible that some, or all, third countries may wish to change the existing terms to reach a more favourable agreement. This could either result in the temporary continuation of existing terms while a new deal is negotiated or the existing deal could be cancelled and trade would continue under WTO rules. Canada has indicated that it would be open to using the Canada–EU agreement as the outline for a British–Canadian deal and that it could be further improved upon.6

Even if all existing free trade agreements need to be renegotiated, the task for the UK would not be as onerous as it may appear. This is because roughly 74% of Britain’s exports and 70% of its imports related to these contingent agreement countries are associated with just three trading blocs: the European Free Trade Association (EFTA), South Korea and South Africa. As a result, the negotiations involved regarding the large majority of trade affected by current free trade agreements would be limited to just three regions.

Rules of origin

If the UK does not agree a trade deal with the EU members, and reverts to WTO guidelines, rules of origin do not need to be adhered to.7 In the case that Britain leaves the customs union and a free trade agreement is reached, British exporters will need to adhere to the EU’s rules of origin.

Rules of origin are criteria determining what share of a good was produced where. This is to establish what tariff rate is to be applied to it when it is imported into the EU (or any country). The rules would ensure that no third country could use the UK to gain low-tariff access into the EU. The rules usually stipulate that a certain share of the product, its components or production should originate from the parties involved in the agreement. This would allow for them to be traded at a lower tariff rate than is applied to third countries.

Some British exporters currently meet the rules of origin requirements by pooling their inputs to production across multiple member states. This is unlikely to create a problem for exporting to the EU, if the free trade agreement stipulates that the share can be made up of components from both parties. It would be an issue for exporting under free trade agreements with other countries, even those that currently have a free trade agreement with Brussels, unless there is an agreement to allow for EU components in British goods.

The other costs associated with rules of origin are administrative and include time filling in forms related to the products in question. This may not be a material barrier to trade, especially given that British exporters trading with countries outside the EU will already be dealing with such paperwork. Moreover, even exporters currently selling to other countries are required to submit Intrastat declarations if the value of their goods exceed a certain amount.8 The change in departing from the customs union is merely that additional reporting may be required, potentially at actual borders rather than by means of inland declarations.

However, exporters in countries with a trade agreement sometimes prefer to trade under WTO rules if the tariffs are not too burdensome. For example, Switzerland has a trade agreement with the EU but more than 50% of the goods imported into the EU from the country are traded under WTO rules.9 This is because some companies find it cheaper than proving they qualify for lower tariffs as outlined in the trade agreement between Switzerland and the EU.

Customs declarations

Out of the customs union, British exporters could potentially face having to make customs declarations and undergo customs checks at the borders of the EU. The time taken to process exports can lead to significant delays. UK exporters would need to ensure any duties or value-added-taxes are paid ahead or in time. We doubt that these additional burdens would have a material impact on exports to the EU. With new digitalised systems, they should largely be an inconvenience, rather than an impediment, to trade.

Mitigating the costs of leaving the customs union

The British government has set out negotiating positions to substantially mitigate the costs of leaving the customs union. Firstly, it plans to have a wide-ranging free trade agreement with the EU. So far, the EU’s most extensive trade agreement has been with Canada, which provides for:
- EU firms to bid for Canadian public contracts – the first non-Canadian firms to be able to do so
- Easier access of EU professionals to Canada’s labour market by recognition of EU qualifications
- EU firms to sell services into Canada, especially through allowing firms to send specialised workers: for example, engineers to Canada temporarily
- Easier access to investors by, for example, not imposing restrictions on foreign shareholdings of firms
- The elimination of 99% of duties EU firms have to pay at Canadian customs

Reaching a trade agreement with the EU should be easier than with other countries given that the negotiations are starting at a time when the EU and the UK apply zero trade tariffs to one another and conform to the same regulations. There are, of course, obstacles – chiefly those caused by the other issues in the withdrawal process.

Moreover, the two parties could come to a transitional agreement, whereby the trading relationship remains unchanged until a free trade agreement is reached. It has been suggested that Article 24 of the General Agreement on Tariffs and Trade allows two countries to enter into an interim agreement, on the proviso that they are working towards securing a full free trade agreement within a ‘reasonable timeframe’, thought to be 10 years. Therefore, it is possible that the UK and EU could continue to trade on a zero-tariff basis even after the UK has left the EU in March 2019.

Given that the EU and UK are starting from a harmonised position, it should be possible for a new agreement between the two to be at least as extensive as the Canadian deal. It might also include more on financial services and security co-operation. The UK has also set out that it will seek one of:

- A ‘highly streamlined customs arrangement’ between the UK and the EU that would leave as few additional requirements on EU trade as possible. This would:
  1. Aim to continue some of the existing arrangements between the UK and the EU
  2. Put in place new practices to reduce and remove barriers to trade
  3. Implement technology-based solutions to make it easier to comply with customs procedures
- A new ‘customs partnership’ that would align Britain’s approach to the customs border with the EU. This would remove the need for a UK-EU customs border. One potential approach would involve the UK mirroring the EU’s requirements for imports from the rest of the world where their final destination is the EU. This is unprecedented as an approach and could be challenging to implement.

Furthermore, the British government has stated that it would be open to remaining in a customs union with the EU for an interim period after Brexit. The caveat is that it would expect to have the freedom to pursue and conclude free trade agreements with other countries during this period, but not necessarily to implement them until after the end of the interim period. From the British perspective, this period could also be used to seamlessly ‘grandfather’ the existing EU free trade agreements.

A powerful incentive for both sides to reach an agreement that minimises customs disruption is the wish to avoid customs posts along the border between the Republic of Ireland and Northern Ireland. These would be politically controversial in the border counties and would almost certainly result in some form in the absence of a deal on the issue. Britain has made proposals to minimise this problem, such as proposing that local small businesses would be exempt from customs.

Nevertheless, Michel Barnier, the EU’s chief negotiator, has underlined that the UK’s choice to leave both the single market and customs union will mean that a deal that makes trade ‘frictionless’ will not be possible. So, while some of government’s recent suggestions to streamline customs will likely be adopted, others will not and exporters will likely face certain barriers to trade relative to remaining in the EU. Even with vastly improved customs processes in place, the government recognises that there would “remain an increase in administration compared with being inside the EU customs union”.

- Easier access of EU professionals to Canada's labour market by recognition of EU qualifications
- EU firms to sell services into Canada, especially through allowing firms to send specialised workers: for example, engineers to Canada temporarily
- Easier access to investors by, for example, not imposing restrictions on foreign shareholdings of firms
- The elimination of 99% of duties EU firms have to pay at Canadian customs
The four freedoms and single market membership

The EU single market seeks to guarantee the free movement of goods, capital, services, and labour – the ‘four freedoms’ – within the EU. It also extends, with exceptions, to the European Economic Area countries and, to a somewhat lesser degree, to Switzerland. The freedoms are designed to increase competition, specialisation and economies of scale and allow goods and factors of production to move to the area where they are most valued.

- **Free movement of goods.** The EU has abolished internal customs duties and quantitative restrictions such as quotas on imports and exports, and prohibits any national measures which may be considered to have an equivalent effect.
- **Free movement of services.** Trade in services is often affected by non-tariff barriers. These include subsidies which sustain loss-making enterprises, technical barriers to trade and obstacles to the establishment and provision of services. The single market attempts to address these barriers by providing rights to:
  1. Deliver services on a cross-border temporary basis in different member states
  2. Persons to establish themselves as self-employed individuals in another member state and companies to establish branches or subsidiaries
  3. Ensure recognition of equivalent qualifications across the EU.
- **Free movement of persons.** EU workers have the right to:
  1. Work in any member state
  2. Travel to any member state to seek employment
  3. Live in any member state
  4. Claim some benefits after being employed in a member state
- **Free movement of capital.** Capital is allowed to move without restriction between EU countries and between member states and third countries for the purposes of investment or payment. There are some broad exemptions, such as those to protect the integrity of national tax systems and other safeguard measures to prevent capital movement during exceptional circumstances for a period of three months.

Since the referendum, there has been considerable discussion of ‘access to’ and ‘membership of’ the single market. The terms are often conflated, but they have unambiguously different meanings. Any country can trade with the countries of the single market. Such ‘access’ to the single market is currently enjoyed by, for example, the United States. Countries that have concluded a free trade agreement with the EU, such as South Korea, Mexico and Canada, have ‘access’ to the single market, but on preferential terms. Imports from countries outside the single market need to comply with relevant legislation from Brussels – covering, for example, product safety and environmental standards. The EU’s free trade agreements sometimes include provisions for the EU and the third country to align and recognise the equivalence of domestic rules and standards to facilitate trade.

By contrast, ‘membership’ of the single market involves all of a country’s economic activity – whether or not engaged in cross-border trade within the EU – being subject to the legislation established by Brussels, and acceptance of the four freedoms, including the principle of the free movement of persons. This, its supporters contend, allows highly liberalised trade with other members of the single market in all areas where the single market operates.

Countries can be members of the single market, while nonetheless remaining outside the EU. For example, European Economic Area states are members of the single market in all aspects covered by the European Economic Area agreement and benefit from the similar liberalised trade conditions as the EU members. However, a number of areas fall outside the scope of this agreement, such as agriculture and fisheries. Switzerland participates in certain more limited aspects of the single market via bilateral treaties.

Britain was a strong supporter of the single market prior to, and at, the time of its formation on 1 January 1993. However, freedom of movement has allowed high levels of EU migration into the country in recent years, following the accession of member states from central and eastern Europe. This development was an important driver of the campaign for Brexit. The government’s current stance is that the UK will leave the single market, but that Britain will petition the EU to gain easier access rights than the average third country. This may come through the form of some ongoing contributions to the EU budget.

Costs of leaving the single market

Leaving the single market could mean that exporters face additional costs in selling into the EU. British exports might face non-tariff barriers, such as product standard regulations and quotas. While services exports are unlikely to be hit by tariffs after Brexit, these barriers could be significant if there is an acrimonious departure from the union. (See Table 2.)
Table 2: Non-tariff barriers British exporters could face outside of single market

<table>
<thead>
<tr>
<th>Non-tariff barrier</th>
<th>What it means</th>
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</thead>
<tbody>
<tr>
<td>Sanitary and phytosanitary measures (SPS)</td>
<td>Plant and animal health regulations</td>
</tr>
<tr>
<td>Technical barriers to trade (TBT)</td>
<td>Regulations on the contents of products, the process by which they were manufactured, their labelling etc.</td>
</tr>
<tr>
<td>Pre-shipment inspection and other formalities</td>
<td>Requirements that goods be checked or licenses secured before they can be imported</td>
</tr>
<tr>
<td>Contingent trade-protective measures</td>
<td>Policies that protect the economy from the impact of certain imports, such as anti-dumping measures, safeguards for agriculture etc</td>
</tr>
<tr>
<td>Non-automatic licensing, quotas, prohibitions and quantity control, measures other than for SPS or TBT reasons</td>
<td>Policies that limit the total number of imports of a certain good, such as quotas, rules stating that imported goods can only be used in certain industries or temporary bans on certain products</td>
</tr>
<tr>
<td>Price-control measures, including additional taxes and charges</td>
<td>Charges or taxes (other than tariffs) that change the price of imports, for example, by ensuring that imports do not undercut the price of domestically-produced goods</td>
</tr>
<tr>
<td>Finance measures</td>
<td>Policies that regulate access to foreign exchange for imports, for example, by requiring deposits to be paid in advance, or that customs duties must be paid ahead of time</td>
</tr>
<tr>
<td>Measures affecting competition</td>
<td>For example, compulsory requirements to use national services, or use of a single state-owned importer for some goods</td>
</tr>
<tr>
<td>Trade-related investment</td>
<td>Requirements that goods should contain a certain proportion of locally-produced content, or policies that limit imports based on the performance of exports</td>
</tr>
<tr>
<td>Distribution restrictions</td>
<td>Measures which make it harder to sell imported goods in all parts of a market, for example, by stating that goods can only be sold in areas that meet certain conditions</td>
</tr>
<tr>
<td>Restrictions on post-sales services</td>
<td>Policies stating that post-sales services (customer services, repair services, etc.) must be provided by a local company</td>
</tr>
<tr>
<td>Subsidies</td>
<td>Money from government for domestic producers, making it harder for importers to compete</td>
</tr>
<tr>
<td>Government procurement restrictions</td>
<td>Ensuring that governments buy goods from domestic producers</td>
</tr>
<tr>
<td>Intellectual property</td>
<td>Ensuring that imports comply with patents, trademarks, industrial designs, copyright, geographical indications</td>
</tr>
<tr>
<td>Rules of origin</td>
<td>Rules requiring products to be able to demonstrate in which countries they were produced, often so that it can be determined whether the good can benefits from preferential access under a bilateral free trade agreement</td>
</tr>
<tr>
<td>Export-related measures</td>
<td>Policies undertaken by the exporter’s government, for example, to limit exports to a certain country through trade embargos, or to reduce exports to keep domestic prices low</td>
</tr>
</tbody>
</table>

Some of the key potential non-tariff barriers that could be imposed are:

**Technical barriers to trade, i.e. product standards**

Exporters would still need to adhere to EU product standards in order to export freely to the single market. At least initially, however, this would be a minor inconvenience because British and EU standards would be starting out from the point of being analogous. In the medium to longer term, firms may need to conform to different standards for selling to the domestic and EU markets. However, this may not be a material cost as firms already need to do this with respect to their non-EU exports.
Tariff quotas

Outside of the single market, the UK may face tariff quotas on its exports. Under tariff quotas, specified quantities of goods can be imported into the EU at a reduced or zero duty rate. Preferential tariff quotas could be specified in a trade agreement with Brussels. These would allow for a predetermined volume of goods originating in the UK to be imported into the EU at a more favourable rate of duty. Autonomous tariff quotas could be opened up by Brussels at any time to stimulate competition inside the union, and these would not specifically benefit the UK over any other third country. Products that can benefit from tariff quotas include raw materials or semi-finished agricultural or industrial goods.

Other

Other non-tariff barriers to trade may be substantial if the UK were to leave the single market. These could include restrictions on post-sales services, government subsidies on EU products, which will make it harder to compete with such products, or even random checks on goods crossing borders for fiscal or health reasons.

With respect to the ‘passporting’ rights for financial services, these are likely to be lost upon the UK leaving the single market in 2019, but the UK may be granted regulatory equivalence status at least initially. This is covered more extensively in Financial services.

Mutual Recognition Agreements

Manufactured goods need to meet certain requirements before entering the EU market. These requirements confirm that the goods have undergone conformity-assessment procedures certified by the appropriate bodies. The EU recognises these conformity assessments in free trade agreements and, where a free trade agreement is not in place, conformity is acknowledged through mutual recognition agreements (MRAs). Japan and the United States operate with the EU through MRAs, for example. If the UK were to leave the EU without a free trade agreement, a lack of MRAs could disrupt trade.

Initially, these MRAs may seem like a non-tariff barrier, as the EU could withhold MRAs from the UK. However, this would be a case of discrimination which would be justiciable in WTO courts and the UK would be sure to win, though it is not clear how long the case would take to be resolved. Negotiating MRAs with the EU ought to be relatively pain-free, as it involves continuing with the status quo. Similarly, the UK would also need to agree to continue current terms with regards to other countries, such as the United States and Japan, with which the EU has MRAs.

To avoid delays at customs, even when MRAs are in place, cross-border traders register as Authorised Economic Operators (AEOs). This means that they fill in declarations electronically in advance. The UK is part of the AEO system via its membership of the European Economic Area and, therefore, some commentators have argued that leaving the latter presents a significant risk to trade. However, the AEO system is organised by the World Customs Organization and is administered domestically in the UK by HM Revenue and Customs. It should be straightforward to agree with the World Customs Organization the continuation of current arrangements after Brexit. Moreover, following the introduction of the Trade Facilitation Agreement (under the auspices of the WTO) the provision of facilities for electronic pre-submission of documents for customs clearance is now a legal obligation for the EU.

The potential costs arising from leaving the single market are not immediate ones (as with the customs union), but rather more likely to be problems that emerge over time. That is, of course, based on the notion that the EU or the UK doesn’t adopt an immediately vindictive attitude to the other’s exports, subjecting them to excessive checks and restrictions, or that there is a lack of agreement over mutual recognition issues. While there will be new non-tariff barriers between the UK and the EU after Brexit, it is unlikely that either side will impose many. This is because we are starting from the position of regulatory harmonisation, and neither side has an economic interest in seeing them imposed, or they simply run counter to EU regulations.

When the government comes to issue a position paper on the single market, we expect that it will seek to secure equivalence and non-discrimination against British goods and services at least during a period of transition. Indeed, it seems probable that the aim will be to remain largely within rules of the single market during that period.
The single market versus trade agreements

Despite the creation of the single market, the share of Britain’s exports of goods that went to the then 14 members of the EU did not change much after 1993. (See Figure 15.)

Figure 15: Share of UK goods exports to EU 14 countries has been in decline
Source: Capital Economics, Office for National Statistics

Indeed, the single-market share now appears to be in decline. There is other evidence that the single market has not been the economic boon that its founders intended:

- Andrea Boltho and Barry Eichengreen have found that the whole process of European integration may have boosted output levels by 5%, but the vast majority of that was caused by the early stages of integration, with only 0.75-1.0% attributable to the single market and the contribution of the euro difficult to determine.16
- Two large meta-analyses of trade agreements have found that free trade agreements have an unambiguously positive impact on GDP, but, when it comes to deeper forms of economic integration, the impacts are either smaller or not clear at all.
  - “It is... worth noting that custom unions – EU, CARICOM, MERCOSUR, CACM, CISCU – do not seem to consistently outperform the free trade areas in terms of trade impact. Indeed, in the meta-analysis regression, the coefficient of the customs union’s variable was never significant.”17
  - “The EU and NAFTA... involve some of the largest bilateral trade flows worldwide. Whether looking at the median or mean coefficients, estimated using naive or structural gravity, the North-American agreement seems to be associated with larger amounts of trade creation.”18
- Various studies suggest that the net impact of the single market since its formation in 1993 is on the order of 1.0-1.5% of GDP only. (See Trade scenarios).
- 14 leading countries outside the single market operating on WTO rules, including the United States, India and Japan, have been able to increase their sales into the single market by much more than the UK – by 52% compared to 25% – for the period 1993 to 2015.19

It could well be that the benefits of the single market have mostly accrued to external countries who have been able to reap the benefits of only having to conform with one set of standards for export to European markets, but haven’t had to conform to single-market rules in other areas of their economies. If correct, this could see the UK gain the benefits of the single market by leaving it.

Overall, there is substantial evidence to support a conclusion that the economic benefits of free trade agreements are greater than those that accompany greater levels of economic integration, such as customs unions or a single market (if there even are net benefits of the latter).
Whether measured in nominal or in purchasing-power-parity terms, the UK remains one of the largest economies in the world. Indeed, recent analyses of demographic trends indicate that it could become Europe's largest economy by 2050. As a result, there is likely to be interest from other countries in obtaining favourable trading terms with Britain after Brexit. A number of countries, some much smaller than the UK, have been able to reach significant numbers of trade agreements with partner countries, both large and small. It is likely that Britain will be able to do likewise. We consider the country-by-country prospects below.

It is possible that the EU would have negotiated deals with these economies in the future. However, the UK may be able to strike deals faster (being one country) and make them better suited to the British economy.

Based on their importance to British trade, future growth prospects and willingness to negotiate a deal, along with the likely ease with which an agreement could be struck, we expect the UK to prioritise negotiations with the following countries or country groups: the EU; the United States; the EFTA; China; Japan; Australia; Canada; India; South Korea; Brazil and New Zealand. Beyond the EU, Britain's largest five export and import partners are the United States, the EFTA, China, Japan and India, and we review the prospects for each one of these in turn (See Table 3.)

United States

Aside from the EU bloc, the United States is Britain's largest trading partner, both in terms of exports and imports, accounting for roughly 20% of the UK's exports of goods and services and 11% of imports of goods and services in 2015. Exports to the United States almost doubled between 2005 and 2015, growing at an average annual rate of 6% per year. A similar trend can be seen with imports, which grew at an average annual rate of 5.2% per year over the same time period. Accounting for roughly 16% of global output, the United States is currently a meaningful trading partner and presents a large market for Britain to expand trade with in the future.

Roughly half of all UK imported goods from the United States consist of machinery and transport equipment. This includes cars, industrial machinery and telecommunications equipment. These goods account for the largest share of the United States' exports to the UK as well. Any trade deal between the two economies will likely focus on these items.

The United States has indicated that it is keen to negotiate a trade deal with the UK, notwithstanding President Trump's scepticism towards other trade agreements. Given the importance of trade with America to Britain, it is likely that reaching such a deal will be prioritised by British trade negotiators. Obstacles to reaching a deal include food standards and agricultural trade, as the current standards in the UK, imposed by the EU, vary widely from the standards required in the United States. What's more, the trade deal approval process in the United States has many steps. Any deal would need to be passed by Congress and then signed into law by the President. That said, Republican congressional leaders, who currently hold majorities in the Senate and House of Representatives, have made positive comments with respect to such a deal.

European Free Trade Association (EFTA)

The EFTA consists of four European states – Iceland, Liechtenstein, Norway and Switzerland. This regional trade organisation and free trade area is Britain's third largest export partner and fourth largest import partner, accounting for roughly 5% of the UK's exports and imports of goods and services in 2015. Export growth to this trading bloc has been strong over the last decade, rising at an average rate of 5.8% per year, while imports have grown at an average annual rate of 3.5% over the same time period.

While these four nations account for less than 1% of global GDP, given the strong trade ties with the UK and the ease with which a trade deal could be replicated, a trade agreement would be prioritised and would arguably be the first to be concluded. The EFTA nations have similar regulatory standards on a number of issues to Britain, and any deal would likely come without the political undertones currently at play in negotiations with the EU.

Britain could even seek to join the EFTA, though this would be potentially more complex than it appears as it would fundamentally change the nature of the current organisation.
China

China’s admittance to the WTO in 2001 has fuelled global trade, and, as a result, China has become an important trading partner to many nations around the world. The UK is no exception. China is Britain’s fourth largest export partner and third largest import partner, accounting for roughly 3.2% of exports of goods and services and 7.2% of imports of goods and services in 2015. Exports to China from the UK have grown rapidly over the last decade, increasing at an annual average rate of 13.5%.

The UK’s primary trade with China consists of machinery goods. Roughly two fifths of British imports from China are electrical machinery, and mechanical appliances, while just over one quarter of all British exports to China are vehicles. While the rapid economic development and growth of the Chinese economy over recent years has lost some of its momentum, the country is still set for above-average growth in the coming years. China represents a potentially large export market for British goods and services, and the Chinese government has signalled its willingness to trade freely with the world.
### Table 3: Overview of key metrics of UK’s largest trading partners

Source: Capital Economics, International Trade Centre, Office for National Statistics, World Bank

<table>
<thead>
<tr>
<th>Share of UK exports of goods and services</th>
<th>Share of UK imports of goods and services</th>
<th>Average annual growth in UK exports</th>
<th>Average annual growth in UK imports</th>
<th>Tariffs applied on UK exports in the main sector*</th>
<th>Tariffs applied on imports to the UK</th>
<th>Compared to EU average growth in the main sector*</th>
<th>Likely priority for trade negotiations</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>2005 to 2015</td>
<td>2017</td>
<td>2017 to 2040</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EU (ex-UK)</td>
<td>43.6%</td>
<td>53.0%</td>
<td>14.4%</td>
<td>2.3%</td>
<td>3.1%</td>
<td>4.4%</td>
<td>0.0% Similar</td>
</tr>
<tr>
<td>United States</td>
<td>19.6%</td>
<td>11.1%</td>
<td>15.5%</td>
<td>6.0%</td>
<td>5.2%</td>
<td>3.7%</td>
<td>1.2% Similar</td>
</tr>
<tr>
<td>EFTA</td>
<td>5.1%</td>
<td>5.0%</td>
<td>0.7%</td>
<td>5.8%</td>
<td>3.5%</td>
<td>na</td>
<td>0.0% Similar</td>
</tr>
<tr>
<td>China</td>
<td>3.2%</td>
<td>7.2%</td>
<td>17.8%</td>
<td>13.5%</td>
<td>11.0%</td>
<td>9.4%</td>
<td>1.6% Above</td>
</tr>
<tr>
<td>Japan</td>
<td>2.0%</td>
<td>1.7%</td>
<td>4.4%</td>
<td>2.2%</td>
<td>-0.6%</td>
<td>3.1%</td>
<td>8.3% Below</td>
</tr>
<tr>
<td>United Arab Emirates</td>
<td>1.7%</td>
<td>0.7%</td>
<td>0.6%</td>
<td>0.1%</td>
<td>-3.6%</td>
<td>4.5%</td>
<td>0.4% Similar</td>
</tr>
<tr>
<td>Australia</td>
<td>1.6%</td>
<td>0.8%</td>
<td>1.0%</td>
<td>3.9%</td>
<td>0.5%</td>
<td>2.5%</td>
<td>0.4% Similar</td>
</tr>
<tr>
<td>Singapore</td>
<td>1.5%</td>
<td>0.7%</td>
<td>0.4%</td>
<td>5.0%</td>
<td>-0.7%</td>
<td>0.0%</td>
<td>0.8% Above</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>1.5%</td>
<td>1.5%</td>
<td>0.4%</td>
<td>5.7%</td>
<td>1.2%</td>
<td>0.0%</td>
<td>0.4% Similar</td>
</tr>
<tr>
<td>Canada</td>
<td>1.4%</td>
<td>1.5%</td>
<td>1.4%</td>
<td>3.4%</td>
<td>4.4%</td>
<td>2.3%</td>
<td>0.4% Similar</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>1.3%</td>
<td>0.4%</td>
<td>1.5%</td>
<td>5.3%</td>
<td>0.0%</td>
<td>4.5%</td>
<td>0.0% Above</td>
</tr>
<tr>
<td>India</td>
<td>1.3%</td>
<td>1.8%</td>
<td>7.2%</td>
<td>4.4%</td>
<td>8.3%</td>
<td>13.3%</td>
<td>9.4% Above</td>
</tr>
<tr>
<td>Russia</td>
<td>1.1%</td>
<td>0.9%</td>
<td>3.2%</td>
<td>6.4%</td>
<td>-0.7%</td>
<td>7.0%</td>
<td>0.4% Similar</td>
</tr>
<tr>
<td>South Korea</td>
<td>1.1%</td>
<td>0.9%</td>
<td>1.6%</td>
<td>8.7%</td>
<td>3.9%</td>
<td>12.8%</td>
<td>0.0% Similar</td>
</tr>
<tr>
<td>Turkey*</td>
<td>0.9%</td>
<td>1.6%</td>
<td>1.7%</td>
<td>6.0%</td>
<td>6.0%</td>
<td>11.5%</td>
<td>0.0% Above</td>
</tr>
<tr>
<td>South Africa</td>
<td>0.8%</td>
<td>0.7%</td>
<td>0.6%</td>
<td>2.2%</td>
<td>-3.4%</td>
<td>7.4%</td>
<td>0.0% Above</td>
</tr>
<tr>
<td>Brazil</td>
<td>0.7%</td>
<td>0.4%</td>
<td>2.6%</td>
<td>11.8%</td>
<td>1.9%</td>
<td>13.6%</td>
<td>0.0% Above</td>
</tr>
<tr>
<td>Gibraltar</td>
<td>0.6%</td>
<td>0.1%</td>
<td>0.0%</td>
<td>8.3%</td>
<td>-25.4%</td>
<td>0.0%</td>
<td>0.0% Similar</td>
</tr>
<tr>
<td>Malaysia</td>
<td>0.4%</td>
<td>0.4%</td>
<td>0.7%</td>
<td>3.2%</td>
<td>0.7%</td>
<td>5.1%</td>
<td>0.0% Above</td>
</tr>
<tr>
<td>Israel</td>
<td>0.4%</td>
<td>0.3%</td>
<td>0.3%</td>
<td>0.6%</td>
<td>3.6%</td>
<td>3.4%</td>
<td>0.0% Above</td>
</tr>
<tr>
<td>Mexico</td>
<td>0.4%</td>
<td>0.3%</td>
<td>1.9%</td>
<td>7.0%</td>
<td>8.2%</td>
<td>7.4%</td>
<td>0.0% Above</td>
</tr>
<tr>
<td>Thailand</td>
<td>0.4%</td>
<td>0.6%</td>
<td>1.0%</td>
<td>7.9%</td>
<td>3.2%</td>
<td>10.2%</td>
<td>8.3% Similar</td>
</tr>
<tr>
<td>Egypt</td>
<td>0.3%</td>
<td>0.2%</td>
<td>0.9%</td>
<td>6.8%</td>
<td>0.9%</td>
<td>16.7%</td>
<td>0.0% Well above</td>
</tr>
<tr>
<td>New Zealand</td>
<td>0.2%</td>
<td>0.2%</td>
<td>0.1%</td>
<td>3.1%</td>
<td>0.0%</td>
<td>2.0%</td>
<td>0.0% Similar</td>
</tr>
</tbody>
</table>

* Tariffs applied on UK exports are the Most Favoured Nation simple mean tariff rate for all products. Tariffs applied on imports to the UK refer to the ad valorem equivalent tariffs applied by the EU, weighted by reference group imports.

** Provisionally applied.

**Japan**

Japan is Britain’s fifth largest export partner and sixth largest import partner, accounting for roughly 2.0% of British exports of goods and services and 1.7% of imports of goods and services. While exports to Japan from the UK have increased at an average annual rate of 2.2%, imports from Japan have declined at an average rate of 0.6% per year.
The largest sector of goods trade between Japan and the UK consists of machinery and vehicles, accounting for roughly two fifths of both imports and exports. Future growth of the Japanese economy is likely to be below the average growth in the EU in the coming decades, which may hamper demand for UK goods. However, Theresa May has recently secured a formal commitment from Japan that both countries will seek to replace a EU-Japan trade deal with a similar equivalent for the UK, once Brexit formally occurs. This agreement commits both nations to treating as an immediate priority the signing of an economic partnership agreement between the two nations.

India

India is Britain’s twelfth largest export partner and fifth largest import partner, accounting for roughly 1.3% of exports of goods and services and 1.8% of imports of goods and services in 2015. Both exports to and imports from India have grown rapidly over the last decade, increasing at an annual average rate of 4.4% and 8.3%, respectively.

Roughly one fifth of UK imports from India consist of articles of apparel, while roughly half of British exports to India consist of machinery, mechanical appliances and precious metals.

With economic growth over the next two decades expected to be well above that of the EU, India represents a potentially large export market for British goods and services, and is a priority for trade negotiations. The UK currently faces high tariffs on its trade with India because the country does not yet have a free trade deal with the EU. A prospective deal has been held up for a decade by EU regulations on intellectual property and data protection, with which India is refusing to comply. After Britain leaves the EU, there will be new potential to reach a trade deal with India. However, India could seek other concessions, such as improved access / visas for Indian students and professionals working in Britain, which could be difficult given the government’s wish to reduce immigration.

Unilateral free trade

Outside of the EU customs union, the UK could decide to adopt a unilateral free trade policy. This would mean removing any tariffs or non-tariff barriers on imports into the UK regardless of the trade policy applied to British exports abroad. Consumers would have the opportunity to buy goods or services from the cheapest producers around the world, which would maximise welfare and the productive capacity of the economy. Cheaper imported components could help – or force – British exports to become more competitive.

It might be argued that those competitive pressures would not be welcomed by domestic industries, but, set against this, it should be noted that not all of the burden of lower consumer prices would fall on domestic producers. For instance, a reduction in British tariffs to rest-of-world producers would also hit EU exporters, who would be forced to cut prices or lose market share in the UK. This shows that the policy could be net beneficial for the economy, as the gain to domestic consumers would be greater than the loss to domestic producers.

News outlets in August 2017 reported on an Economists for Free Trade report, to be published in autumn 2017, which argues that a unilateral free trade arrangement, in which the UK would not charge any tariffs on any trade partner and quit the EU’s trade barriers and regulations, would boost the economy by £135bn a year. The authors of the report cite estimates of a differential between EU prices and rest of world prices of around 20%, and use this estimate as an indicator of EU protectionism.

It is important to realise, however, that such a price differential would be based, not just on EU tariffs, but also on various other features of European markets. The latter could include regulations, but also aspects that are unrelated to regulation, such as underlying costs or strength of competition. Given that it is likely that the UK will keep most existing European regulations after Brexit (see Regulation) and that underlying market features will be likewise slow to change, it may be difficult for prices to drop significantly.

More generally, various political realities likely make a course of gradual opening and trade liberalisation more prudent and feasible than unilateral free trade. These include:

1. The desirability of securing reciprocal free trade from other nations
2. Lobbying by domestic industries that could be hard hit by the removal of tariffs
3. The government’s potential desire to spend the savings from no longer having to make EU contributions (which include tariff incomes) on things other than tariff reductions – these could be additional spending or cuts in other, more distortionary taxes.
Partial unilateral free trade

While there are some arguments against unilateral free trade, it is still the case that the removal or reduction of existing tariffs and non-tariff barriers on imports into the UK has the potential to have a material impact on the prices paid by British consumers. For example, imports of agricultural (food and drink) products into the EU currently face tariffs of 11% on average and some dairy products face tariffs in excess of 35%.

Notably, a reduction in food prices would benefit poorest households the most. The bottom decile of households by disposable income typically spend 17% of their income on food and non-alcoholic drinks, compared with 7% for the highest earners in Britain.

We have looked at a scenario in which the UK sets tariffs on all goods that are above the Most Favoured Nation average to the said 4.4% average. This policy would allow falls in domestic prices, while at the same time retaining the bargaining chip of removing all remaining tariffs for use free trade negotiations with other countries. All goods that have tariffs currently below the average stay as they are in this experiment.

Accounting for the share of domestically consumed goods that are imported, as well as each good's weighting in the basket of consumer products, we can quantify the effect of a decrease in the tariff rate for selected goods on inflation. We find that decreasing all tariffs that are greater than the Most Favoured Nation average to 4.4% has a one-off change on inflation to the tune of -0.5%. Therefore, if the UK is able to reduce existing tariffs to a maximum of 4.4% on all imported goods in 2019, the expected annual rate of inflation would drop from 2.0% to 1.5%. This translates to a reduction in overall prices of roughly £113 per year for the average British household, and £69 per year for the average household's spending on food and drinks.

Trade scenarios

Low case: No Brexit deal and slow other deals

In a low case for trade, the UK leaves the EU, including the customs union and single market, without reaching a transition or free trade agreement, despite the mutual benefits to both sides. In this case, the EU will impose tariffs on British imports at WTO levels until a trade deal can be agreed. In this low case, we have assumed that such a trade deal is not signed until 2025. While the tariff costs for British trade would not be insurmountable, such a scenario would also contain multiple non-tariff barriers. (See Table 4.) We assume that the ‘no deal’ outcome does not extend to a widespread lack of mutual recognition agreements or British non-participation in the system of Authorised Economic Operators. However, this scenario could see a period of temporary disruption in trade, as it is possible that not all of the necessary agreements will be in place.

At the same time, in this low case, trade deals with countries outside the EU are more difficult to reach than expected, due to the technical complexity of negotiating the details of these. We assume that trade deals with Canada and EFTA aren’t affected as they will be largely replicating existing models. However, this low case assumes that other trade deals will proceed at a fairly slow pace. (See Figure 16.)

Academic research suggests that the average impact on bilateral trade volumes from a free trade or reciprocal preferential trade agreement ranges is 43% to 48%. Therefore, the implementation of a free trade agreement between two countries increases bilateral trade flows by roughly 46%, or by 4.6% on average per year if we assume a conservative 10-year impact time frame. We apply these average gains of trade to our scenarios to quantify the overall impact of new trade deals on Britain's trade going forward. With no trade deal with the EU in this scenario for many years, we expect trade with it to suffer to the same degree as these numbers suggest. Once a deal is signed in 2025, trade between the two regions will begin to recover, and the gains from trade along with it.
### Table 4: Assumptions on non-tariff barriers for the base case, low case and high case trade scenarios

Source: Capital Economics

<table>
<thead>
<tr>
<th>Non-tariff barrier</th>
<th>Base</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sanitary and phytosanitary measures (SPS)</td>
<td>✗</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>Technical barriers to trade (TBT)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Pre-shipment inspection and other formalities</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>Contingent trade-protective measures</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Non-automatic licensing, quotas, prohibitions and quantity control, measures other than for SPS or TBT reasons</td>
<td>✗</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>Price-control measures, including additional taxes and charges</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Finance measures</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Measures affecting competition</td>
<td>✗</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>Trade-related investment</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Distribution restrictions</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Restrictions on post-sales services</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Subsidies</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Government procurement restrictions</td>
<td>✗</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>Intellectual property</td>
<td>✗</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>Rules of origin</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Export-related measures</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
</tbody>
</table>
We also apply an adjustment for the impact of leaving the single market on trade flows. Academic research suggests a positive contribution of the single market to the UK’s economy to the tune of only 1.3% growth in GDP. Therefore, leaving the single market would mean that this output boost would be lost. (See Table 5.)

In this low-case scenario, taking into account the effects of a significant drop in trade with the EU, coupled with the gains realised from the slow realisation of new agreements over the next decade will mean an overall decrease in Britain’s trade volumes of -4.6% between 2017 and 2027, over and above what would have happened otherwise.
Table 5: Summary of single-market impact studies
Source: Capital Economics, various papers

<table>
<thead>
<tr>
<th>Author, paper and date</th>
<th>Impact on GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monti, M and Buchan, D, The Single Market and Tomorrow’s Europe: A Progress Report from the European Commission (1996)*</td>
<td>1.10-1.50%</td>
</tr>
<tr>
<td>Boltho, A and Eichengreen, B, The economic impact of European integration (2008)*</td>
<td>0.75-1.00%</td>
</tr>
<tr>
<td>Bertelsmann Stiftung, Wachstumseffekte der zunehmenden europäischen Integration (2014)</td>
<td>1.00%</td>
</tr>
<tr>
<td>American Chamber of Commerce to the EU, The EU Single Market: Impact on Member States (2017)</td>
<td>1.30%</td>
</tr>
<tr>
<td>Average</td>
<td>1.26%</td>
</tr>
</tbody>
</table>

*Figure for impact on EU as a whole only

It should be noted, however, that this scenario is a trade-specific downside. It does not take into account likely macroeconomic policy and other responses to a no deal outcome. As such, this is a non-intervention low case and may be considered to be excessively pessimistic on that count.

Base case: Compromise deal and reasonable progress on other deals

In the base case, the UK leaves the customs union at the end of March 2019, but there is an agreement to maintain tariff-free trade for two years thereafter while a full free trade agreement is negotiated. Under this base scenario we foresee the government being able to achieve its plans for a ‘highly streamlined customs arrangement’ in which requirements on EU trade are simplified and customs procedures made easy.

We do not expect that the UK will remain in the single market in this base case. As a result, exporters will face some additional costs in selling into the EU, which will put negative pressure on trade with Europe in the short term. However, we do not expect these to be as onerous as in the low case, as neither side has an interest in seeing them imposed to a significant degree (or they run counter to EU regulations) – i.e. only a few are imposed. Thus, only half of the benefits of the single market are lost in this case. (See Table 4 and Table 5.)

Meanwhile, Britain will reach trade agreements with other partners sooner than in the low case, starting in 2019 with Canada, Japan and the EFTA region. This means that the average gains of 4.6% per year from trade agreements will be realised sooner, and the overall impact over the next decade will be greater. In this base case, the UK negotiates new trade deals with countries according to the timescale shown in Figure 17. On balance, the positive impact of new trade agreements (+8.4% in total) will outweigh the dampening impact of any fall in EU (-2.1%) from single-market exit, and we therefore foresee a rise in Britain’s trade volumes of 6.3% between 2017 and 2027, over and above what would have happened otherwise.

Figure 17: Base-case trade agreements timescale
Source: Capital Economics
High case: Compromise deal and accelerated trade deals

In the high-case scenario, as in the base case, the UK and the EU will finalise a favourable trade agreement by 2021 (after the transitional period). As with the base case, we anticipate a transition deal to be reached for almost two years after March 2019, easing the impact of the UK’s exit from the union on exporters.

Britain still quits the single market in this case, and similar non-tariff barriers will be faced by British exporters as in the base case. (See Table 4.) However, consistent with the out-performance by third countries of British exporters in selling into the single market, in this scenario these barriers are found to have a more or less trivial impact on trade volumes – as appears to have been the case for these third countries. The timescale for negotiating new trade deals with other countries is one year shorter than in the base case. (See Figure 18.)

Figure 18: High case trade agreements timescale
Source: Capital Economics

Accordingly, this scenario sees no adverse effects on UK–EU trade and there is then rapid trade growth with other countries. Hence, this will mean a rise in Britain’s trade volumes of 9.6% between 2017 and 2027, over and above the status quo counterfactual.

Footnotes

1. This excludes intra-EU trade.
8. Intrastat is the system for collective statistics on the trade in goods between EU member states. Intrastat excludes the supply of services. Intrastat declarations are a monthly obligation for companies who move goods cross-border in the EU. Intrastat website for United Kingdom trading businesses (accessed 27 September 2017).
17. Maria Cipollina and Luca Salvatici, Reciprocal trade agreements in gravity models: a meta-analysis (European Commission, Brussels) 15 January 2010. This study uses a meta-analysis approach combining 1,872 estimates from 85 papers.
18. Keith Head and Thierry Mayer, Gravity Equations: Workhorse, Toolkit, and Cookbook (University of British Columbia, Vancouver), 7 April 2013. This study uses a meta-analysis approach combining 2,508 estimates from 159 papers.
TRADE

Capital Economics, November 2017

24. Economists for Free Trade, *Brexit could boost UK economy by £135 billion, say top economists*.
26. Data from World Trade Organization. See *Figure 11*.
27. Office for National Statistics, *Detailed household expenditure as a % of total expenditure by disposable income decile group, UK: Table 3.2*, 2017.

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Chapter highlights

There is a significant body of evidence to suggest that EU regulations across a very wide range of areas have added to the costs of business and, in a substantial number of areas, may have had a net cost for the economy overall.

Still, the political feasibility of repealing or substantially amending these laws, with perhaps a few very specific exceptions such as the habitats or clinical trials directive, is highly questionable. It is notable that the government has not set out a list of regulations it would propose to change after Brexit and, given the parliamentary arithmetic at the moment, such repeals would prove to be difficult.

What, however, is more likely, is that Brexit will afford the UK an opportunity to take a different regulatory path in future and this might allow Britain to become a preferred lower-regulation destination outside the single market. But that will take time to evolve.

As a result, the scenarios present a range of regulatory gains to output, from zero in the low case to 1% of output in a high case by 2027.

In this section, we consider the impact of Brexit on regulation in the UK. First, we explore the cost of EU regulation on British businesses. Second, we assess the regulatory opportunity after Brexit. Finally, we analyse the implications of different scenarios for regulation.

Costs of regulation from Brussels

The ‘family’ of EU organisations can legislate, regulate and intervene across an extensive range of economic activities and throughout business and commercial life – with an impact on costs and competitiveness. Their 36 areas of activity cover everything from agriculture and audio-visual through energy, environment and employment policy to taxation and transport. (See Figure 19.)
This partly reflects the demands of establishing and maintaining a single market across member countries. A properly functioning internal market requires common rules in areas such as: consumer protection; product standards; company law; competition and state aid; some employment policy (such as health and safety at work); and statistics.

Of course, there may be good reasons to regulate or intervene in business activities. These include:

- Economic efficiency
- Consumer welfare
- Environmental protection
- Restraining monopoly, excessive market power and cartels
- Protecting the health and safety of workers and the public

However, any such benefits of regulation come at a cost to business:

- Administrative burdens: the costs to businesses of, for example, providing authorities with required information, record-keeping, public reporting and other such tasks that they would not have had to undertake otherwise
- Policy cost: both the initial and ongoing costs of restructuring business processes and activities to meet the regulatory requirements
- Wider knock-on costs: the impact through supply chains of higher prices and/or restricted supplier activities (e.g. wholesalers and retailers are impacted by the regulation of the transport and logistics sector)

The European Commission estimated, for 2007, that EU legislation imposed a total administrative burden on businesses of €124bn, which is equivalent to 1% of the bloc’s GDP. (See Figure 20.) A further review conducted in 2012 suggests that this had fallen by 25% (although this does not account for any new administrative costs introduced).
In addition, there are costs borne by the public sector in establishing and running the relevant regulatory authorities, and their monitoring, policing and enforcement activities.

At present, EU regulations have to be applied across the whole British economy, despite only 12% of output being exported there. The costs to business of such regulations are not trivial. The administrative burden of dealing with Brussels’ regulations is significant on its own and could be as much as 2.4% of the UK’s GDP. Reducing this administrative burden by 25% could boost UK output by 1.1%.³

The administration burden is only part of the drag on business and the economy imposed by regulations. Adding in the policy cost, estimates of the combined burden vary from 0.5%-3% of GDP. (See Table 6.)

### Table 6: Estimates of the administrative and policy costs of EU regulations

Source: As indicated

<table>
<thead>
<tr>
<th>Source</th>
<th>Scope</th>
<th>Key findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ian Milne, A Cost Too Far? (Hartington Fine Arts, Lancing), 2004</td>
<td>Estimate of net impact based on unsubstantiated assumptions about wider costs and the benefits of regulation</td>
<td>The cost of EU regulation (administrative and policy) is between 0.5 and 3% of GDP</td>
</tr>
<tr>
<td>Sarah Gaskell and Mats Persson, Still out of control? (OpenEurope, London), 2010</td>
<td>Estimate of annual gross cost in 2009</td>
<td>The cost of EU regulation (administrative and policy) is 1.4% of GDP</td>
</tr>
<tr>
<td>Better regulation Task Force, Regulation – Less is more (Cabinet Office Publications &amp; Publicity Team, London), 2005</td>
<td>Analysis of administrative costs relative to policy costs</td>
<td>Administrative costs are around 30% of total costs</td>
</tr>
</tbody>
</table>

In addition, there are wider ‘knock-on’ costs, which could be substantial as the additional costs borne by regulated business are passed on through the supply chain into more and more enterprises, and eventually to consumers themselves. Moreover, poorly formed regulations can distort markets by altering the relative prices of goods and services in a way that does not reflect their underlying economic costs, and may lead to an inefficient allocation of resources. These wider costs are rarely measured by impact studies, although some have suggested that the overall costs of all regulation could be in the order of 10% of national income. (See Table 7.)
The evidence from the UK is that the magnitude of costs imposed by different European regulations ranges widely. A detailed study by a London and Brussels-based business think tank, Open Europe, reviewed the 100 most costly EU regulations for British business. They found that over half (51%) of the total administrative cost of all 100 regulations was attributable to just four directives, relating to renewable energy, capital requirements, working time and climate and energy. Other environmental, employment and motor-vehicle industry regulations were also among the most expensive. (See Table 8.)

### Table 7: Estimates of the wider knock-on costs of regulation

<table>
<thead>
<tr>
<th>Source: As indicated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimates of the wider costs of all regulation (European and national) on the economy</td>
</tr>
<tr>
<td>Tim Ambler and Keith Boyfield, Route Map to Reform: Deregulation (ASI (Research) Ltd., London), 2005</td>
</tr>
<tr>
<td>A paper published by the Adam Smith Institute estimates that the direct compliance costs of regulation amount to 5% in Europe, but the authors suggest that it would be around 10% if indirect costs were also included.</td>
</tr>
<tr>
<td>Open Europe, Less Regulation: 4 ways to cut the Burden of EU Red Tape (Open Europe, London), 2005</td>
</tr>
<tr>
<td>Sir David Arculus, the head of the Better Regulation Task Force, stated that the total cost of regulation in the UK is between 10% and 12% of GDP.</td>
</tr>
</tbody>
</table>

The actual costs borne by a specific business will, of course, depend on a number of factors. For example, a European Commission survey of small and medium-sized businesses produces a list of most burdensome regulations that differs from that produced by Open Europe. (See Table 9.)

### Table 8: Ten most costly EU regulations for UK businesses

<table>
<thead>
<tr>
<th>Source: Capital Economics’ analysis of European Commission website, Open Europe</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK legislation</td>
</tr>
<tr>
<td>CRD IV package</td>
</tr>
<tr>
<td>The Agency Workers Regulations 2010</td>
</tr>
<tr>
<td>The Building and Approved Inspectors (Amendment) Regulations 2006 + The Energy Performance of Buildings (Certificates and Inspectors) (England and Wales) Regulations 2007</td>
</tr>
<tr>
<td>The Alternative Investment Fund Managers Regulations 2013</td>
</tr>
<tr>
<td>Data Protection Act 1998</td>
</tr>
</tbody>
</table>

*Data covers 77% of the cost of the 100 most costly EU regulations which, according to a 2015 study by Open Europe, cost Britain £33.3bn*
By leaving the EU and its single market, British authorities will become free to repeal or amend Brussels-originated regulations and reduce the burden on businesses, though the exact scope for the UK to divest itself of European rules and regulations will depend on the negotiated future relationship with Brussels.

Nevertheless, Brexit won't immediately lead to large-scale changes in regulation, as Britain will probably want to keep many EU rules initially. Indeed, the government has stated that there will be no changes in European regulations as they are transcribed into British law through the EU withdrawal legislation. Still, Britain will gain the right to set its own regulations to fit its own requirements. Over time, therefore, there will be the scope for following a different path for regulation. It is probably more likely that any benefits in the area of regulation will accrue through this route rather than the repeal or amendment of existing rules.

There are good reasons to believe that, by and large, domestic or local regulation is more effective and efficient than a European-wide system. EU regulations are ‘one size fits all’ and find it difficult to accommodate differences in national markets, customs, interests and conditions. In trying to cover so many national markets, there is a tendency for Brussels’ legislation to become overly prescriptive and burdensome. And EU regulations are arguably inflexible and difficult to amend especially when subject to qualified majority vote, which means they may not keep pace with changing global market conditions and technological developments.

Open Europe conducted a detailed review of both national and European regulations in force in the UK. It examined over 2,300 official government impact assessments on regulation introduced in the UK between 1998 and 2009, and considered the extent to which their broader benefits were expected to outweigh their costs. The review found that, on average, nationally-derived instruments had a benefit to cost ratio of 2.35 – in other words, the benefits exceeded costs by an amount equivalent to 135% of the costs. For European regulation enforced in the UK, the ratio was only 1.02 – meaning that their expected benefits were only 2% greater than their costs.

Two areas in which Britain is likely to gain the ability to set its own rules are farming and fishing activities. Britain is currently a part of the Common Fisheries Policy, the mechanism and set of rules through which European fishing fleets and stocks are managed. Research suggests that the UK would gain £420m in net terms (value of fish caught by other EU vessels in British waters less the value of fish caught by British vessels in the waters of other member states) taking back full national control of its fishing waters.
Regulation scenarios

Low case: No deregulation

There is considerable uncertainty about the political willingness to engage in extensive deregulation following Brexit, even if parliament gains the powers to do it. In particular, the current hung parliament is unlikely to be able to pass any deregulatory measures that could be politically controversial, and that rules out many, if not most, of the potential options.

Moreover, it is possible that the UK, even if outside the single market, will decide to implement many of the rules anyway. This would happen if policymakers wish to maintain as much regulatory equivalence as possible. It is likely that regulatory divergence will gradually open up, but Britain may decide to ‘shadow’ the single market at least for a period. Finally, even if governments over the next several years pursue divergent regulation from the EU, it is possible that, in some areas at least, they may opt to have more regulation rather than less.

Accordingly, in this low-case scenario, we assume a net position of no deregulation and therefore no gains to the British economy.

Base case: Modest deregulation

By leaving the EU, British authorities will be free to repeal or amend Brussels-originated regulations and reduce the burden on businesses. In a base case for regulation, it will still be politically difficult for the current government to engage in deregulatory efforts. However, we assume in this case that governments will not wish to ‘shadow’ the single market and will see the benefits of making the UK more attractive for business from a regulatory point of view than the EU.

Regulations that would be scrapped or at least amended in this case, thus improving the efficiency of the British economy, include:

- The Working Time Directive, which limits the hours an employee can be required to work to 48 hours a week (unless a worker voluntarily opts out), provides for paid annual leave of 5.6 weeks a year and imposes other restrictions on working hours
- The Agency Workers Directive, which gives agency workers the entitlement to the same or no less favourable treatment as other employees with respect to basic employment and working conditions after they have completed 12 weeks in a job
- The Clinical Trials Directive, which has been widely criticised as raising legal obstacles, bureaucracy, work load and costs in respect of clinical trials for new medicines
- The Habitats Directive, which provides for the conservation of rare, threatened or endemic species, but is widely seen as being over-proscriptive

While some regulation may be rolled back, more importantly future regulations implemented by the EU would not apply to the UK. For example, if the EU sets a Financial Transactions Tax in the future, Britain would likely not follow suit. The potential exists therefore for the opening up of a ‘regulatory gap’ between Britain and the EU, which will act to make the domestic market more attractive to foreign business. This could allow the UK to become the European ‘destination of choice’.

Only a small proportion of the estimated 0.5%-3.0% of output, administrative and policy costs of EU regulations are expected to be removed – perhaps yielding a net gain of 0.25%. However, by pursuing a low regulatory path with respect to future issues, the gain could be an additional 0.25%.

High case: Ambitious deregulation

In a high case, we expect there to be a more significant amount of deregulation in the UK. British authorities will feel free to repeal Brussels-originated regulations, and keep any new domestic regulations to a minimum.

Taking the estimates of the administrative and policy costs of EU regulations, as well as estimates of the wider knock-on costs of regulation, the total impact of a more active approach to deregulation on the UK economy could be roughly 1% of GDP.
Footnotes

1. Hyperlink to the website provided by Capital Economics

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Migration from the EU has been high in recent years, driven primarily by surges from eastern Europe and the relative outperformance, by the UK economy, of the euro-zone. Migration is sensitive to both political and economic influences, and this has been most recently demonstrated by the drop in EU migration following the referendum.

Various studies have suggested that migration has had positive effects on the economy, though this is likely to vary according to the number and skills of migrants.

It seems likely that measures to reduce immigration will be introduced after Brexit. The exact form of those is uncertain, but they will likely involve registration, permits and quotas.

Given the responsiveness of migration to policy changes in the past, it is plausible that measures to restrict free movement will act to reduce the number of Europeans seeking to move to the UK, especially if this takes place in the context of stronger economic growth in the euro-zone. Our base case is for a reduction in EU migration from current levels (around 130,000 per annum) to between 60,000 and 70,000 per annum after 2021.

In this section, we consider the possible impact of Brexit on Britain’s levels of migration. First, we examine current trends in net migration to the UK. Second, we assess the economic impacts of migration on the British economy. Third, we look at immigration policy in the context of Brexit. Fourth, we set out low, base and high-case scenarios for net migration.

Migration from the EU

Roughly half of all net migration to the UK over the last decade involves EU citizens. In the mid-2000s, the accession of many eastern EU countries caused a surge in migration. That appears to have been brought to an end by the financial crisis, but, even during the recovery years of 2010 to 2012, the levels are lower than during the mid to late 2000s, and this period may reflect an equilibrium level based on little in the way of political or economic changes. From the second half of 2012, EU immigration numbers rose again and it seems likely that this was primarily driven by the outperformance of the British economy versus the euro-zone, but perhaps also by a fresh initial wave of people coming from Romania and Bulgaria, for whom restrictions were lifted in 2014. (See Figure 21.)
Since the referendum, the UK has experienced a fresh drop in net EU migration, by approximately 50,000 people. The drop seems to be ongoing, and, with the euro-zone now growing faster, this decline could go further. In summary, the pattern of historical net migration to the UK shows considerable sensitivity to political and economic factors.

**Economic impacts of migration**

The Office for Budget Responsibility has found that higher net migration leads to lower public debt because migrants are more likely to be of working age – and thus in work – than the native population. Their latest report uses a baseline scenario of total net inward migration of 185,000 per year, in which public sector net debt is projected to reach 237% of GDP in 2066-2067. Under a ‘high migration scenario’ (net inward migration of 265,000 per year), public sector net debt as a % of GDP would be 26% lower in 2066-2067 relative to this baseline. On the other hand, in a ‘low-migration scenario’ (net inward migration of 105,000 per year), net debt as a share of GDP is projected to be 31% higher than the baseline scenario.

Several other studies have found positive fiscal impacts from immigration. (See Table 10.)

**Table 10: Summary of various studies of the fiscal effects of immigration to the UK**

<table>
<thead>
<tr>
<th>Author and year</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gott and Johnston (2002)</td>
<td>Migrants contributed 10% more than they received during the period of 1999 to 2000 when the government was running a budget surplus. This compares to UK-born individuals, who were estimated to have paid 5% more than they received.</td>
</tr>
<tr>
<td>Institute for Public Policy Research (IPPR) (2005)</td>
<td>Expanded on Gott and Johnston study. Migration had a positive impact on the UK’s public finances, and that this impact was growing. Migrants contributed more to the net fiscal position than locally born individuals when presented as a ratio of contributions to consumption of services.</td>
</tr>
<tr>
<td>Rowthorn (2008)</td>
<td>Expanded on IPPR study. Included adjustments which would flex underlying assumptions. With all adjustments included, Rowthorn concluded that the net contribution of migrants is negligible.</td>
</tr>
<tr>
<td>Dustmann et al. (2010)</td>
<td>EU-8 immigrants who arrived after the EU enlargement in 2004 paid substantially more (by over 35%) in taxes than they received in government assistance.</td>
</tr>
<tr>
<td>Organisation for Economic Co-operation and Development (2013)</td>
<td>The fiscal impact of immigrants tends to be small in most countries, yet immigrants tend to have a less favourable net fiscal position than the native-born population. This is almost exclusively driven by the fact that immigrant households contribute on average less in terms of taxes, and not by higher dependence on benefits.</td>
</tr>
</tbody>
</table>
Brexit and immigration

Rights of EU citizens

Both the UK and the EU have made proposals on the issue of the rights of their citizens currently residing in the other's territory. Britain has offered to guarantee the residence rights of EU citizens that have been in the UK for five years, and to allow a ‘grace period’ of two years following a specified cut-off point for individuals to obtain a work permit or return home. Rights would be enforced by British courts and the cut-off date could be any time between 29 March 2017 and 29 March 2019 (i.e. up to the date of Brexit).

Meanwhile, the EU appears to be pushing for member states' citizens resident in the UK to have their rights set and guaranteed by EU laws and the European Court of Justice, respectively. It is possible that the UK could be willing to give ground on the cut-off date, which will probably end up being 29 March 2019, and there could be a joint EU–UK court set up to adjudicate on rights.

Post-Brexit immigration regime

In the medium term, the decision to leave both the EU and the single market should mean that the UK will be free to design an immigration policy that meets its political and economic needs, with criteria set according to people's skills and professions rather than their country of origin.

While the government has a target to reduce total (including rest of world) net migration to under 100,000 persons per year, it has also acknowledged that this should be undertaken gradually to ensure minimal adverse effects on the economy. Policy is likely to change to restrict the number of low-skilled workers entering the country, but could also move towards attracting more highly skilled workers (including from outside the EU). This could take the form of work permits and sectoral quotas. Depending on the policy adopted, the numbers of migrants may fall, but the 'skill quality' of migrant labour could rise, boosting Britain's productivity performance and plugging labour shortages in specific sectors, including manufacturing and engineering. It seems likely that, even following Brexit, political and business leaders on both sides of the Channel will still wish to maintain relatively free movement of labour – at least for highly skilled workers. Moreover, there will still be some demand for, and acceptance of, unskilled migrants too.

It is unlikely that the future immigration regime will involve a ‘hard land border’ between Northern Ireland and the Republic of Ireland following Brexit. Irish nationals currently have a special status in the UK (not to be treated as foreigners) and the government has announced that it intends that free movement for Irish citizens will continue without border controls. What's more, it is likely that EU nationals will be able to continue travelling to the UK without needing a visa. The government appears set to control migration by setting limits on the numbers that can enter the country to live permanently, work or study.

Immigration scenarios

Low case: Meeting the migration target

In a low case, the government seeks to deliver on its migration target within the next five years. To bring total annual net migration down to under 100,000 persons probably means aiming to reduce European migration to something under 50,000 at least. Further policy changes are enacted to restrict migration from the EU, including tight quotas. These significantly decrease European migration to Britain. In this low case, we see EU net migration falling to between 60,000 and 70,000 per annum by 2020, and then drops to and stabilises at around 40,000 to 50,000 post 2021.

Base case: Just under 2010-12 levels

From April 2019, we expect the government to introduce increasing controls on free movement as the UK transitions to leaving the single market. The impact on migration will be minimal initially, and confined simply to the need to register to live, study and work. Thereafter, from 2021 onwards; the base case sees the British government establish quotas for particular sectors. Consequently, we see EU net migration falling to 90,000 to 100,000 per annum by 2020, and then dropping further to around 60,000 to 70,000 post-2021, where levels will stabilise. This may sound like a sharp reduction, but it is only a little lower than the levels of 2010 to 2012. We do not expect any significant changes to non-EU migration in this base case.
High case: Brexit, but with free movement

In this case, the free movement of EU workers to enter the UK is largely maintained, perhaps because Britain decides to remain a member of, or wishes to be closely aligned to, the single market. Yet it is likely that some moderate controls, such as a preference for domestic workers as has recently been enacted by Switzerland, may be deployed. Consequently, we see EU net migration falling slightly from current levels to 110,000 to 120,000 per annum by 2020, and then dropping to around 90,000 to 100,000 post 2021, where it should stabilise.

Footnotes

2. Office for Budget Responsibility, Fiscal Sustainability Report, January 2017. Note: The Office for Budget Responsibility takes care to note that their analysis is sensitive to any changes in the underlying assumptions, and thus findings can change considerably if these assumptions are flexed.
3. HM Government, UK government publishes proposals on rights of EU citizens, 2017

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Chapter highlights

Manufacturing exports account for around 90% of total British goods exports to the EU. They also make up some 35% of value-added production in the sector. With trade in goods being regulated by single-market rules and with the third highest share of EU workers, the effects of Brexit, both positive and negative, on manufacturing may be stronger than in many other sectors’ cases because:

- Goods trade with the EU is more likely than services trade to be subject to potential tariff and non-tariff barriers
- Being more dependent than others on workers from the EU, the sector is potentially more exposed to cuts in immigration
- On the other hand, goods trade is more likely to be liberalised with other countries than services trade, if new free trade agreements are reached

In the high and, to a lesser extent, base-case scenarios, the trade loss on the European side is not likely to be too large and this allows the gains from other markets to dominate, resulting in robust 10-year growth rates of 1.8% and 1.5%, respectively, over the period from 2017 to 2027. In the low case, the losses are dominant and growth is only 1.0%. These compare with the 1.1% annual growth rate over the 2010-2016 period. About half of the 0.4% gains in the expected ‘compromise deal’ case come from higher productivity and the other half from the boost from new trade deals.

In this section, we consider the likely impact of Brexit on the UK’s manufacturing industry. First, we examine Britain’s current trade in manufactured goods with the EU. Second, we assess the prospective impacts of leaving the EU on the industry. Third, we analyse the outlook for foreign direct investment and its importance for manufacturing. Fourth, we present low, base and high-case scenarios.

Trade in manufactured goods

Manufactured goods make up a sizeable share of the UK’s trade balance. In 2016, they accounted for 45% of exports. Trade with the EU is important for the UK’s manufacturing industry. Between 1998 and 2016, exports of manufactured goods to the EU accounted for 49% of the total UK’s goods exports, 87% of the total UK’s goods exports to the EU and 56% of the total UK’s manufacturing goods exports. (See Figure 22.)
Trade with the EU is important in terms of revenue for the industry. The government have calculated that the manufacturing sector ranks second, behind mining and quarrying, in its reliance on the continent for its revenues in terms of exports. The EU market accounts for 21% of the sector’s revenue. Manufacturing is also the sector that is most reliant on imports from the EU – 20% of total non-staff production costs are costs related to the EU. (See Figure 23.)

Figure 23: Importance of EU trade for UK sectors
Source: Capital Economics, House of Commons Library Briefing Paper by Federico Mor
Potential impacts of Brexit

In the event of Britain leaving the EU without a free trade agreement, trade could be subject to World Trade Organization (WTO) Most Favoured Nation rules, with tariffs being imposed on a wide range of goods exports. However, most manufacturing industries would not find that these would be particularly high. (See Figure 11 and Figure 12). Indeed, if such an outcome was accompanied by a further drop in sterling, it could act to erase the impact. The two exceptions to this, facing potential tariffs of 10% or so, are clothing and cars.

The automotive sector exported 79% of all cars manufactured in the UK in 2016, of which 56% went to the EU. If trade with the EU reverts to Most Favoured Nation rules, tariffs on cars themselves would be 10% while there would also be variable tariffs on components. It has been estimated that these would add £2.7bn to the cost of imports and £1.8bn to the cost of exports.

Even with a free trade agreement, manufacturers could face the additional burdens of rules of origin and clearing customs. However, exporters already face administrative burdens in selling into EU markets, such as Intrastat declarations. Moreover, assuming the government manages to secure a streamlined EU-UK customs arrangement as it intends, the incremental change in administration (and hence costs) is not likely to be significant.

There may be some disruption to trade after Brexit as a result of non-tariff barriers imposed following a departure from the single market. These could fall in the areas of:

1. Checks and inspections
2. Trade protective measures such as anti-dumping
3. Other limits to trade such as EU government subsidies.

Again, however, given the success of other third countries in accessing the single market, these are unlikely to be major barriers.

Offsetting any shorter-term difficulties with manufacturing exports to the EU, Britain should be free to pursue its own free trade agreements after Brexit. As set out in Trade, new trade deals should act to boost overall trade levels and, since they generally tend to be more likely to cover goods rather than services, manufacturing is well placed to benefit considerably.
There are concerns that Britain’s manufacturing sector will suffer after Brexit due to increased skill shortages. While the number of vacancies per 100 employees does not vary much across sectors, the manufacturing sector’s ratio (2.1) is below the national average (2.6) and lower than that in the retail and wholesale (3.0), financial services (3.3) and accommodation sectors (4.3). This suggests that skill shortages are relatively limited in the sector at present, at least compared to others.

The sector does, however, have a relatively high share of foreign born workers. About one in 10 workers in the industry were born in the EU. (See Figure 24.) There could be barriers to recruiting skilled workers from the EU after Brexit, but we would expect industries to petition the government strongly to allow the migration of the workers that it needs.

Figure 24: Share of total employment accounted for by those born in the EU by industry in the UK (2015)
Source: Capital Economics, Office for National Statistics

Finally, business costs in the sector could be lowered by the repeal or amendment of some EU regulations such as the Agency Workers Directive.

**Foreign direct investment**

The EU is an important source of foreign direct investment for the British economy. In 2015, it accounted for 43% of Britain’s stock of foreign direct investment. However, as has been the case with trade, this share has been falling in recent years, from a high of around 55% in 2009. Flows of foreign direct investment from EU countries have also been slowing over recent years and have even gone negative in net terms at times. More investment has been flowing in from non-member countries. (See Figure 25.)
Brexit is likely to have a limited impact on foreign direct investment flows because:

- Any additional tariff costs to exporting from the UK won’t be significant. Tariffs on exports to the EU are generally low, even for non-member states without a free trade agreement (See Figure 11 and Figure 12).

- The UK will remain an attractive location for foreign investment. It benefits from a prestigious higher education sector, a large pool of skilled employees in high-value sectors such as finance, biotechnology and IT, good transport connections, a welcoming political environment, the global status of London, a strong rule of law and the English language. In the World Bank’s Doing Business report (which assess countries according to the ease of doing business in them), Britain ranks highly on areas such as attaining credit, dealing with construction permits and protecting minority investors. It is one of the nine EU states that appear in the top 20 overall rank and, among these nine, is only second to Denmark. (See Table 11).

In the longer term, stronger trading prospects outside the EU mean that the UK could attract greater levels of inward foreign direct investment.

Figure 26: UK inward investment by industry from 2016 to 2017
Source: Capital Economics, United Kingdom Trade & Investment Department

Number of projects

01 Software and computer services
02 Financial services
03 Business and consumer services
04 Environment, infrastructure and transportation
05 Creative and media
06 Advanced engineering and supply chain
07 Food and drink
08 Automotive
09 Life sciences
10 Electronics and communications
11 Wholesale
12 Biotechnology and pharmaceuticals
13 Renewable energy
14 Chemicals and agriculture
15 Extraction industries
16 Aerospace
**Table 11: Ease of doing business ranking (top 20 countries, 2017)**

Source: Capital Economics, World Bank

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>New Zealand</td>
</tr>
<tr>
<td>2</td>
<td>Singapore</td>
</tr>
<tr>
<td>3</td>
<td>Denmark</td>
</tr>
<tr>
<td>4</td>
<td>Hong Kong</td>
</tr>
<tr>
<td>5</td>
<td>Korea</td>
</tr>
<tr>
<td>6</td>
<td>Norway</td>
</tr>
<tr>
<td>7</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>8</td>
<td>United States</td>
</tr>
<tr>
<td>9</td>
<td>Sweden</td>
</tr>
<tr>
<td>10</td>
<td>Macedonia</td>
</tr>
<tr>
<td>11</td>
<td>Taiwan</td>
</tr>
<tr>
<td>12</td>
<td>Estonia</td>
</tr>
<tr>
<td>13</td>
<td>Finland</td>
</tr>
<tr>
<td>14</td>
<td>Latvia</td>
</tr>
<tr>
<td>15</td>
<td>Australia</td>
</tr>
<tr>
<td>16</td>
<td>Georgia</td>
</tr>
<tr>
<td>17</td>
<td>Germany</td>
</tr>
<tr>
<td>18</td>
<td>Ireland</td>
</tr>
<tr>
<td>19</td>
<td>Austria</td>
</tr>
<tr>
<td>20</td>
<td>Iceland</td>
</tr>
</tbody>
</table>

Note: a lower ranking indicates that the country's regulatory environment is deemed to be more conducive to starting and operating a local firm. The World Bank ranks 190 countries.
Manufacturing scenarios

Low case: No deal

In a low-case scenario for manufacturing, there is no Brexit deal and, as a result, the EU imposes tariffs on British exports at Most Favoured Nation levels under WTO terms until a trade deal can be agreed. The latter does not happen until 2025. Although manufacturing could be damaged by this, any tariffs faced would probably be outweighed by a devaluation in the pound following the unexpected exit without agreement. That said, such a devaluation will push up the prices of imported inputs and may dampen domestic demand due to a squeeze on real incomes. We do not assume that the government responds with any measures, such as using the savings from its contributions to the EU budget to support specific sectors, to help manufacturing. There is little progress in making new trade deals with other countries, except those that can be ‘grandfathered’ from the EU.

Roughly 35% of all manufacturing output in the UK is exported, while the remaining 65% is consumed domestically. Domestic consumption for manufactured goods will be dented by a drop in consumer confidence and slower economic growth in the wake of the ‘no deal’ outcome. Hence, domestic manufacturing output grows by 11% between 2017 and 2027, equivalent to an average rate of 1.0% per year.

Manufactured goods exports will grow in line with our low-case-scenario trade forecasts. (See Trade scenarios.) This implied a fall in Britain’s trade volumes of 4.6% between 2017 and 2027, over and above what would happen otherwise. This means that manufacturing exports from the UK will grow 6% between 2017 and 2027, equivalent to an average annual rate of 0.6%. Overall, the sector expands by 0.9% per annum in real terms over the decade.

Base case: Compromise deal

In the base-case scenario, a transitional agreement between the EU and UK is reached. It leaves trade largely unaffected for nearly two years and thereafter governed by a free trade agreement. Britain negotiates trade deals with other countries per our trade base case in Trade. After Brexit, free movement is gradually curtailed, and there are occasional shortages of skilled workers. There is modest deregulation per our regulation base case. (See Regulation.)

We assume that domestic consumption for manufactured goods will grow in line with overall economic output for the ‘compromise deal’ macroeconomic scenario. (See Overall macroeconomic impact.) Thus, domestic manufacturing output will grow 13% between 2017 and 2027, equivalent to an average rate of 1.2% per year. Manufactured goods exports will grow in line with our base-case-scenario trade forecasts, which implied a rise in Britain’s trade volumes of 6.3% between 2017 and 2027, over and above what would happen otherwise. This means that manufacturing exports from the UK will grow 20% between 2017 and 2027, equivalent to an average annual rate of 1.8%. Overall, the sector expands by 1.5% per annum in real terms over the decade.

High case: Deal with ambitious policies

In the high-case scenario, as in the base case, the UK and the EU come to a transition agreement leading on to an ultimate free trade agreement. In this high-case scenario, the timescale for negotiating new trade deals is one year shorter than in the base case, as we set out in the trade high case, and deregulation proceeds per the deregulation high case.

We assume that domestic consumption for manufactured goods will grow in line with overall economic output in the ‘deal with ambitious policies’ macroeconomic scenario. (See Overall macroeconomic impact.) Thus, domestic manufacturing output will grow 16% between 2017 and 2027, equivalent to an average rate of 1.5% per year. Manufactured goods exports will grow in line with our high-case-scenario trade forecasts, which implied a rise in Britain’s trade volumes of 9.6% between 2017 and 2027, over and above what would happen otherwise. This means that manufacturing exports from the UK will grow 27% between 2017 and 2027, equivalent to an average annual rate of 2.4%. Overall, the sector expands by 1.8% per annum in real terms over the decade.
Footnotes


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**Chapter highlights**

Given the size of gross financial services exports to EU countries (£22bn), anything that may upset that flow should be of concern. Considerable media attention has focused on the possible end of so-called ‘passporting’ rights, which allow firms based in Britain to sell into other European Economic Area countries without having a base there.

Analysis shows that 29% of the industry’s revenue is generated by EU business, but only just over 10% is related to the ‘passport’, with most of this being banking and only small shares of asset management and insurance being vulnerable. Even that portion of the industry is unlikely to be fully lost because British firms may be granted equivalence status, allowing them to continue as before, or perhaps because they are able to set up a subsidiary in a member state while still carrying out the bulk of their activities in Britain.

On the other hand, euro-clearing activities, which are worth approximately £1.1bn to the economy, could be moved to the continent. The EU may decide not to require their relocation in the near term, but the prospect could be kept open for the future. That in itself may encourage firms to shift the business to the continent.

Nevertheless, due to financial services’ outsized importance for the UK, Brexit could help the industry in two key respects. One is that industry may avoid future deleterious regulation from Brussels (such as the potential Financial Transactions Tax), thus helping to retain London as a destination of choice. The second is that, in pursuing its own free trade agreements, Britain may be able to prioritise coverage of financial services in a way which the EU, as a collective entity couldn’t or wouldn’t be able to do.

These benefits will take time to feed through, but, over the next decade, it is to be expected that the losses and gains should balance out, with some prospects for net gains thereafter if the regulatory and particularly the trade regime vis-à-vis emerging markets is favourable.

However, there is a notably wide range of potential outcomes from Brexit for financial services.

In this section, we consider the possible impact of Brexit on the financial services industry. First, we look at the importance of financial services exports. Second, we explore the potential threats from Brexit. Third, we consider the opportunities post Brexit. Fourth, we set out low, base and high-case scenarios.
Financial services exports

The UK’s financial services sector is an important part of the economy, with London serving as one of the most prominent international finance centres in the world. Britain has the largest financial system in the G7 countries, as measured by the size of total financial assets as a proportion of GDP, with these assets amounting to over 1,500% of output.1 In 2015, exports of financial services to the EU amounted to £22.4bn or 25% of all services exports to the union; imports were £3.3bn. The resulting £19.1bn surplus was equivalent to 1.0% of British GDP. (See Figure 27.)

Figure 27: British financial services trade with the EU
Source: Capital Economics, Office for National Statistics, Thomson Reuters

The main sub-sectors of the financial services industry are (i) banking, (ii) asset management, (iii) insurance and reinsurance and (iv) market infrastructure activities, such as ‘euro clearing’.2 There is a large degree of interconnectedness between the different firms and activities in the industry.

The threat from Brexit

‘Passporting’ rights

Brexit could have a negative impact on the financial services industry. The most obvious concern is that, although there are no potential tariffs that could be imposed on financial services, leaving the EU will probably lead to Britain losing its ‘passporting’ rights. Passporting rights are granted in several pieces of EU legislation and allow British-based financial institutions to sell into the European Economic Area (the EU plus Iceland, Liechtenstein and Norway) without having a branch there.3 Similarly, banks in, say, the United States can locate in the UK and sell to the European Economic Area without establishing a further presence on the continent.

The British government has stated its intention to leave not only the EU but also the single market and hence the European Economic Area, as the latter is the agreement that provides for the single market. Consequently, there is a high chance that passporting rights will indeed come to an end with Brexit.

Losing these rights may cause disruption to business activity. Financial services providers located in the UK could find that they will not be able to provide financial services to clients in the European Economic Area as they do today. Firms could attempt to get around this by establishing subsidiaries in another European Economic Area country. However, they would then be subject to local governance and regulatory requirements and may require separate capitalisation, both of which increase costs. There would also be a loss of business and jobs within the UK. In the worst case, firms could relocate their activities to another relevant state.

There is some uncertainty over how important passporting is to the financial services industry – a recent House of Lords report presented evidence that firms themselves did not have a clear idea of their reliance on it.4 However, estimates have been made of the importance of passporting, and these show that it varies by activity, with it being most
- It has been estimated that around a fifth of the banking sector’s annual revenue is built on the access afforded by the passport. 5
- The loss of passporting will have a more limited impact on Britain’s asset management industry. While 21% of assets in 2015 were managed from the UK on behalf of EU clients, only 7% of assets under management would potentially be affected by the loss of passporting. 7 This is because portfolio management can be delegated to third countries, provided that certain conditions are met.
- Finally, the passport is of limited importance to the insurance industry with evidence suggesting that the majority (87%) of cross-border insurance business provided across the EU is done via subsidiaries i.e. without using the passport. 8 With only around 8-12% of the British insurance industry’s revenue related to activity in the EU, this suggests that only a very small fraction (c. 1.3%) of activity in the sector is at risk from the loss of passporting rights.

Table 12: Importance of the EU passport rights by financial services sub-sector  
Source: Capital Economics, Open Europe, 2016

<table>
<thead>
<tr>
<th>Industry</th>
<th>Main EU law</th>
<th>Importance of EU passport</th>
<th>Is EU equivalence available?</th>
<th>Does equivalence grant passport-like rights?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banking</td>
<td>MiFID (MiFID II/MiFIR in 2018) – allows provision of advisory services, investment services and portfolio management across the EU from a base in the UK</td>
<td>High – around a fifth of the British banking sector’s revenue is estimated to be built on access provided by the passport. Without passport-like access, banks would have to set up subsidiaries in other countries</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>CRD IV – allows provision of deposit taking and lending and payment services across the EU from a base in the UK</td>
<td></td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Asset management</td>
<td>AIFMD (professional clients) – allows asset managers to market services in all EU member states and to provide their services to funds domiciled anywhere in the EU</td>
<td>Low – around a fifth of assets managed in the UK are tied to EU clients. However, indirect access to the passport through the delegation of portfolio management functions is possible towards third countries provided certain conditions are met. Open Europe estimates that this reduces the share of assets that would be affected to 7%</td>
<td>No</td>
<td>Potentially (via MiFIR)</td>
</tr>
<tr>
<td></td>
<td>UCITS V (retail clients) – allows asset managers to market services in all EU member states and to provide their services to funds domiciled anywhere in the EU</td>
<td></td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Insurance</td>
<td>Solvency II – concerns the amount of capital that EU-based insurers must hold to reduce the risk of insolvency</td>
<td>Low – estimated that just over a tenth of cross-border insurance business provided across the EU from the UK is done using the passport</td>
<td>Yes (re-insurance)</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No</td>
</tr>
</tbody>
</table>
The above-mentioned estimates of the shares of sub-sectors at risk from the loss of passporting allow us to produce an estimate of size of total gross value added and share of the whole industry that is at risk, which is just over 10%. (See Table 13.)

Table 13: UK financial services industry gross value added at risk from loss of EU passporting rights
Source: Capital Economics, Open Europe, Oliver Wyman

<table>
<thead>
<tr>
<th>Sub-sector</th>
<th>Annual gross value added (£bn, 2016)*</th>
<th>Share of output at direct risk from loss of passporting**</th>
<th>Annual gross value added at risk from loss of passporting (£bn, 2016)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banking</td>
<td>58.0</td>
<td>20.0%</td>
<td>11.6</td>
</tr>
<tr>
<td>Asset management</td>
<td>16.0</td>
<td>7.0%</td>
<td>1.1</td>
</tr>
<tr>
<td>Insurance and reinsurance</td>
<td>31.5</td>
<td>1.0%</td>
<td>0.4</td>
</tr>
<tr>
<td>Market infrastructure and other</td>
<td>18.0</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Total</td>
<td>123.5</td>
<td>10.6%</td>
<td>13.1</td>
</tr>
</tbody>
</table>

* Mid-point of Oliver Wyman’s estimate.
** Estimated % of revenues that would be lost if passporting rights are removed. We have assumed a constant ratio of gross value added to revenue.

In the absence of passporting rights, firms based in the UK may have access to the single market through so-called ‘equivalence’ provisions. EU legislation allows for ‘third country’ access to the market for specific activities if the European Commission determines that the regulatory and supervisory framework in that country is equivalent to that in the EU. However, this type of access is available for fewer activities than those that are covered by passporting. In addition, it entails a process which is vulnerable to political influence and that can take several years. For example, to determine equivalence for central counterparties, who effectively guarantee contracts between banks, the European Commission took two years with respect to Hong Kong, three years with respect to Switzerland and four years with respect to the United States.10

That said, with the UK having been a member of the EU and with there being no government plans to change the regulatory regime in the near term, the country is quite likely to meet the equivalence threshold at least for a time after 2019. However, there is a risk of regulatory divergence over time and the UK could lose its status of equivalence. The risk of a potential future loss of equivalence status could also prompt firms to relocate to EU bases rather than take the risk of a sudden revocation of these rights in the future.

Moreover, Britain may not wish to maintain equivalence anyway. If the UK wishes to regulate financial services differently from the EU, as it probably will in order to make the most of global opportunities, then the loss of equivalence could follow as a corollary. As a result, it seems plausible that equivalence in certain areas will be lost over a period.

‘Euro clearing’

The UK is currently a major global centre for over-the-counter (OTC) derivatives activity and central clearing. London currently accounts for around three-quarters of the global market for those derivatives contracts denominated in euros.11 (See Figure 28.) The EU has proposed new laws that would enable it to shift euro-denominated clearing transactions from London to the continent if it thought such dealings posed a systemic risk to its financial stability.12

Separation of euro-derivatives clearing would reduce the benefits of central clearing. Industry estimates suggest that a single basis point increase in cost resulting from splitting clearing of interest rate swaps could cost EU firms £22bn per year across all of their business. With respect to the British economy, it has been estimated that euro-clearing activities add £1.1bn in gross value added and support around 5,000 jobs.13 The relocation of euro clearing would therefore create additional costs for everyone. Nevertheless, it is plausible that it could be forced to relocate for political reasons.
**Other potential negative impacts**

There is a risk that other activities will relocate to the EU. The interconnectedness of the financial services industry as a whole means that any effects of Brexit could be felt more widely than just the affected business line. For example, a large share of activity related to the clearing of currencies other than the euro could relocate away from the UK in order to maintain capital efficiencies if euro clearing was to move. In the absence of clarity over the UK's future relationship, firms may take pre-emptive action against uncertainty by relocating or restructuring even if these actions ultimately prove to be unnecessary.

The industry could be weakened further following Brexit if the UK imposes an overly restrictive migration policy. According to analysis of the 2011 Census by TheCityUK, around 1 in 10 of the City of London’s workers come from other EU countries.

Nevertheless, behind all of this, Britain has a lingering advantage that is likely to mean that relocations are not much more than the minimum amount that firms are required to do through regulatory and political requirements. That advantage is firms’ impressions on what regulatory changes could be in store in future. The EU has already indicated that it intends to, or could, impose new regulations on financial services firms in the areas of:

1. Restrictions on over-the-counter derivatives
2. Implementation of Basel 3 regulations
3. Bankers’ bonuses
4. Financial transactions tax

Many firms are therefore likely to conclude that their chances of operating under a less onerous regulatory regime are higher in the UK, especially as the latter will be seeking to retain as much of its current financial services industry as possible. As a result, the number of relocations to other countries may not much exceed what companies think that they need to do in order to meet the legal requirements.

**The opportunity from Brexit**

The City of London will likely remain a hub of prosperity after March 2019. London's pre-eminent position as a global financial centre predates the single market, and the City possesses intrinsic advantages, including Britain's legal system, the English language, a convenient time zone perfectly placed between the working hours of Asia and New York, a large pool of skilled labour and a critical mass of expertise in support services such as accounting and law.

Notably, even if exports to Europe do fall or some services relocate to the continent in the years ahead, these losses could be offset over the long term by the fresh opportunities to boost trade with non-EU countries. A departure from the EU’s customs union will free the UK to negotiate bilateral trade deals with other countries, which could permit the industry to play a bigger role in such activities as the creation of Sharia-compliant central-bank liquidity facilities, coordinated support for emerging-market wealth management, supporting offshore Indian rupee-denominated bond trading and issuance, green finance and fintech.
This potential for growth in trade with countries outside Europe applies to all exports, but is perhaps more pertinent for financial services. In particular, there seems to be considerable scope for Britain to increase financial services exports to China and Hong Kong. They currently amount to just 1% of the UK’s total financial services exports, even though China is the world’s second largest economy. While the time zone difference may act as a barrier to growth in exports to these markets, it has not stopped a rise in financial services exports to Japan in recent years. Japan has accounted for around 2% of British exports of financial, insurance and pension services over 2007 to 2012; this share increased over the following years to reach 5.5% in 2015. It is likely that the UK will be able to negotiate trade deals with China and other emerging markets. Indeed, Switzerland brokered a trade deal with China that came into effect in 2014 and has reduced non-tariff barriers for its financial firms. 16 While it is too soon to reach a firm conclusion on the impact of this agreement, Swiss exports of financial services to China picked up after it was implemented. (See Figure 29.)

At the same time, though, some other EU countries, such as Germany, do not seem to have been hindered greatly by their inability to strike bilateral deals. Germany’s exports of financial and insurance services have grown at a much faster rate than those of Switzerland or Britain since 2006. That said, almost half of growth in these German exports was accounted for by exports to euro-zone economies. 17 Meanwhile, the United States achieved growth of 8.8% over the same period. (See Figure 30.)

Figure 29: Swiss exports of financial services
Source: Capital Economics, Swiss National Bank

Figure 30: Growth in exports of financial, insurance and pension services from 2006 to 2016
Source: Capital Economics, World Trade Organization

D1: United States
D2: World
D3: Germany
D4 United Kingdom
D5 Switzerland
Financial services scenarios

Low case: No deal and complete passporting loss

A low-case scenario would see the UK exit the EU in March 2019 without a transitional or trade agreement in place. There would be no continuation of passporting rights and the UK would not receive any guarantees regarding regulatory equivalence (so we assume it would not be granted, at least initially). Furthermore, the euro-zone would likely take steps to re-locate euro clearing to its member countries.

It is likely that banks would set up subsidiaries in EU countries to offset the loss of passporting rights, or make use of subsidiaries that they already have there without necessarily moving any jobs out of London. These measures would limit the disruption to business and keep jobs in Britain. However, there may be other cases where the loss of passporting results in the relocation not just of the passported activities, but also of other related functions, to the continent. Consequently, in this scenario, we envisage the industry shrinking by an amount equal to the whole passported sector. Euro clearing is lost too. The total hit is on the order of 11.5% of gross value added. As set out in Table 13, banking would be the most severely affected sub-sector.

This low-case scenario also sees slow progress on new trade deals with economies across the globe. Even if these would only have had modest impacts to begin with, the slow pace means that the sector cannot offset the hit to output from the loss of passporting rights for several years. Immigration is not a major issue because the government takes an accommodating stance to help the industry through difficult times, but the sector is affected by lower economic growth and resultant reduced demand for financial services.

In the later years of this scenario, it can be expected that there will be some catch-up growth in the economy, especially after new trade agreements are reached (including with the EU). This helps to offset the sharp shrinkage in the sector in 2019-2020. Overall, the industry achieves weak growth of 0.6% per annum on average to 2027. This is actually equal to the industry’s rate of expansion over the years from 2010-2016, but that was a period when overhang from the financial crisis was still curtailing growth.

Base case: Compromise deal with limited losses

A transitional or free trade EU–UK deal is reached. However, that is not enough to prevent the loss of passporting rights. We still expect that the UK will, at least formally, leave the single market in March 2019, and passporting rights will go with that. Nevertheless, as a result of the deal, Britain is granted immediate regulatory equivalence.

Equivalence, subsidiaries and Britain's other innate advantages as a location for financial services help to limit the losses in the industry, with only a quarter of passported activities moving to the EU, though the majority of euro-clearing activities relocate in 2021. There is a tailored migration policy, allowing financial services firms to attract and hire the workers that they need.

Over time, the UK negotiates new free trade deals that support the growth of financial services exports. There are agreements with China and India by 2024. But, with China and Hong Kong accounting for just 1% of British financial services exports currently, it will take time before new trading agreements provide material benefits for the sector.

Overall, there are moderate early losses, but growth is able to match that of the economy overall after 2021. As a result, the average rate of expansion is 1.7% per annum over 10 years.

High case: Cushioning deal and new global opportunities

A high-case scenario would see the UK exit the union in March 2019 with a transition agreement in place and again being granted immediate regulatory equivalence. There are only token losses from the end of passporting, due to subsidiaries and equivalence, and it is agreed that euro-clearing activities can remain in Britain with greater oversight from the EU.

Quick progress on new trade deals including financial services with economies across the globe boosts the long-term prospects for the sector. While these take a few years to have an impact, the industry is soon able to realise the same growth rate with non-EU financial services exports as that achieved by the United States over the last 10 years – 6.7% in real terms. Of course, these exports only form a part of the industry's overall output and, as a result, overall financial services output grows at – still impressive – 3.0% per annum on average over 2017-2027.
Footnotes

2. Market infrastructure activities include settlement systems for wholesale payments, settlement systems for the exchange of securities and listed derivatives, and central securities depositories.
4. EU Committee, Brexit: financial services, December 2016.
5. Oliver Wyman, The impact of the UK’s exit from the EU on the UK-based financial services sector, 2016.
7. Open Europe, How the UK’s financial services sector can continue thriving after Brexit, 2016.
8. Open Europe, How the UK’s financial services sector can continue thriving after Brexit, 2016.
10. Open Europe, How the UK’s financial services sector can continue thriving after Brexit, 2016.
14. London Assembly Economy Committee, EU exit and financial services
15. Oliver Wyman, The impact of the UK’s exit from the EU on the UK-based financial services sector, 2016.
16. Federal Department of Foreign Affairs, Bilateral relations Switzerland-China
17. Data from Eurostat.

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Chapter highlights

In contrast to the stories with respect to manufacturing and financial services, the impact of Brexit should be more limited when it comes to life sciences. Participation in many life sciences-related EU programmes is possible for countries outside the union, and Britain could continue to be involved in many of these.

Life sciences activities in the UK are overwhelmingly unrelated to the location of the European Medicines Agency (EMA) here, except possibly safety and quality. Furthermore, there may be a new British agency to grant marketing authorisations so, to the extent that companies did locate functions close to the European agency, they may wish to do the same with the British one. As a result, departure from the oversight of the EMA and its relocation away from London are unlikely to affect the industry. Pharmaceutical exports from Britain to the EU will remain tariff free even if Britain trades on World Trade Organization (WTO) rules. What’s more, being outside the EU does not adversely impact a country’s position in the global launch sequencing of new medicinal products.

Moreover, there are potential Brexit benefits for the life sciences industry:

- Repealing some unhelpful EU regulations, notably that on clinical trials
- Avoiding being subject to further harmonisation of product effectiveness evaluations
- Spending some of the savings on contributions to Brussels on health
- Opening up new research and development partnerships with other countries

Finally, there are other issues which may affect the sector as a result of Brexit, but where the net effect is likely to depend on very detailed aspects of the ultimate settlement – including the intellectual property protection regime and the question of whether imports of cheap generic drugs from other countries will continue. Overall, the industry shouldn’t be adversely affected by Brexit and could see net benefits in a high-case scenario.

In this section, we consider the outcomes of Brexit for the life sciences industry. First, we evaluate the current role of the EU. Second, we discuss the concerns regarding Brexit. Third, we look at some of the opportunities that Brexit may present. Fourth, we analyse low, base and high cases.

The role of the EU

The EMA currently issues marketing authorisations for the sale of medicines across the EU – permitting them to launch in the 28 member states. This is only the first stage in the long process through which medicinal products secure market access, and the remaining stages are determined by national health technology, pricing and reimbursement assessments. The EU accounts for a quarter of all global pharmaceutical sales. It is an important export market for the life sciences industry in Britain. For example, exports to the union accounted for 34% of pharmaceutical sector revenues in 2013.
British universities benefit from funding from the EU. Britain accounts for 22% of EU research council grant-holders in the sciences. The UK is a net recipient of funds for research, development and innovation activities. Britain received €8.8bn in funding for these activities over 2007 to 2013, compared to an indicative contribution of €5.4bn.

**Concerns regarding Brexit**

The industry’s concerns regarding Brexit fall into the following areas:

- Loss of funding that originates from EU programmes
- Potential barriers to selling products into EU markets
- Risk of slower launch of innovative new products in the UK

For now at least, it doesn’t seem likely that funding for programmes of research will be disrupted. British organisations will be able to bid directly to the European Commission for EU funding projects until the UK leaves the bloc. Additionally, the Treasury has announced that it will underwrite the payments of these awards while the country is still a member of the EU (for example, universities participating in Horizon 2020), even when specific projects continue beyond Brexit. Since the research money received from the EU is recycled money – in the sense that it is money paid by Britain to Brussels that is then returned as research funding – the government's pledge in this regard is credible.

Moreover, Brexit does not necessarily close off all sources of EU funding. For example, one of the EU’s funding streams is the Horizon 2020 programme, which aims to distribute nearly €80bn of funding between 2014 and 2020. As of January 2017, a total of 16 non-EU countries are eligible for funding from it, including Norway, Iceland and Switzerland. Britain could continue to participate in this programme or its successors by contributing to the financing (though this may well require adhering the rules of the programme while having little or no influence on them).

On leaving the EU, the UK is expected to leave the purview of EMA, because that body is subject to the jurisdiction of the European Court of Justice. While Britain could continue to replicate EU authorisations after Brexit, the most likely outcome is that an equivalent domestic agency will be instituted (perhaps by ramping up the reach of the Medicines Health and Regulatory Agency) as, for example, Switzerland does.

It is doubtful that these developments will affect British sales of medicinal products and devices to the EU. The UK will still be able to sell into the EU after it is no longer a member. In the absence of a trade deal with the EU covering the pharmaceutical sector, British exports of substances used in the manufacture of medicines, as well as the medicines themselves, would face minimal tariffs. Most notably, EU Most Favoured Nation tariffs on pharmaceutical substances are zero.

Although tariffs may not have a material impact on trade, there may be new regulatory hurdles to export to the EU after Brexit. British companies may have to find an authorised EU importer as part of quality and safety requirements. Each company seeking to export medicines to the EU would have to establish a batch control site within a member state to confirm the drug had been manufactured in accordance with EU requirements. These new arrangements would increase the costs involved with manufacturing pharmaceuticals in the UK for export to the EU and may lead to British companies shifting some operations to the EU in an attempt to avoid any new import tariffs and regulatory hurdles.

However, a mutual recognition agreement (MRA) with the EU would limit such barriers to trade. The EU has signed MRAs on its medicinal products with seven countries, including Australia, Canada, Israel, Japan, New Zealand, Switzerland and the United States. These agreements are designed to “reduce technical barriers to trade by facilitating market access while safeguarding consumer interests in health”. They allow the EU and their counterparts to rely on each other’s inspection system, to share information on inspections and quality defects and to waive batch testing of products imported into their territories. Therefore, it should be possible for the UK and the EU to negotiate an MRA for medicinal products, especially since their standards are currently identical. In fact, it should be highly likely that an agreement will be reached.
Moreover, pharmaceutical companies typically have a wide presence in multiple countries across the EU. They are not geographically focused in one country or city in a similar fashion to financial companies for example. This is likely to limit the need for any relocations even if there is no MRA in place. Some companies may need to set up additional operational processes in Britain or the EU, such as drug safety and approval, in order to comply with EU requirements. Therefore, there will not be a ‘migration’ of pharmaceutical companies from the UK post-Brexit. Switzerland, with the largest pharmaceutical production industry in Europe, is an example of how the sector can thrive outside the EU.

With respect to the risk of losing ground in the international launch sequence of drugs, the case of Switzerland also shows that there is no disadvantage to being outside the EMA in terms of launch timing for pharmaceutical products. There is no significant delay in product launches in Switzerland, compared to EU countries. (See Figure 31 and Figure 32.)

**Figure 31: Being outside the EMA is not a disadvantage for pharmaceutical product launch timings**

Source: Capital Economics, Isabel Verniers, Stefan Stremersch and Christophe Croux in the International Journal of Research in Marketing

![Figure 31: Being outside the EMA is not a disadvantage for pharmaceutical product launch timings](image)

Mean lead or lag

Note: A mean lead (-) indicates that drugs are typically launched early in a country, compared to world averages, while a mean lag (+) indicates that drugs are typically launched late in a country.

**Figure 32: Typical launch sequence based on new chemical entities first launched between 2007 and 2008**

Source: Capital Economics, The international impact of Swiss drug regulation study by Tim Wilsdon, Eva Fiz and Hugh Kirkpatrick

![Figure 32: Typical launch sequence based on new chemical entities first launched between 2007 and 2008](image)

Note: The international impact of Swiss drug regulation study was conducted on behalf of Interpharma and Novartis in March 2013.
Brexit upsides for the industry

Britain may be able to use the additional freedoms granted by Brexit to boost the life sciences industry. An obvious area is in respect of regulation governing clinical trials. Following the implementation of a EU directive on clinical trials in 2004, the numbers conducted in the UK fell substantially. Commentators, including the National Health Service Confederation, suggested “dramatic” falls of 25% and a 2012 study found a statistically significant decline of 5% per annum. The government will have the option of removing the rules of this directive, so there is the potential for the number of trials to increase after Brexit.

Prospects of further regulatory harmonisation, most notably in assessments of clinical effectiveness or the added therapeutic value of medicines, mean that the UK may be better off outside the EU, setting its own regulatory regime, rather than being part of the bloc.

In the event of the UK leaving the bloc without signing a new trading agreement, life sciences might be more likely than other sectors to receive additional funding, as the sector has high levels of state involvement already. Moreover, Boris Johnson, the Foreign Secretary, has recently revived a pledge by the ‘Leave’ campaign during the referendum to spend some of the savings from much reduced or zero contributions to the EU in the future on the National Health Service. If this transpires, some of the extra funding will likely find its way through to medicines and devices, thus potentially boosting the life sciences industry.

The current government appears willing to provide more research and development funding than it otherwise would have done without Brexit. In the 2016 Autumn Statement, the government announced that state funding for research and development would increase by an additional £2bn above existing spending by 2020, a rise of around 20%. Funding will increase year-on-year and will be boosted by a cumulative £4.7bn by 2020-2021.

Collaborative scientific working with other European countries should continue after Brexit, in much the same way as it does for Switzerland, and there will also be opportunities to boost research partnerships with other countries. For example, Britain has already reached an agreement with America to make it easier for researchers to travel, collaborate and share facilities, potentially focusing on synthetic biology, information technology and genetic modification research.

Life sciences scenarios

Low case: No deal and weaker economy

Even in a low-case scenario, there is no reason to believe that the government will not ensure that research funding for the life sciences sector continues. Similarly, a mutual recognition agreement should still occur and exports should flow as before (as noted, even with WTO tariffs, medicines are zero-rated by the EU). The only real downside comes from a weaker macro-economy and perhaps from somewhat lower inflows of skilled research workers. Hence, the industry's growth rate is unlikely to be impacted more than any other sector’s.

This is also the view of specialist consultants working for life sciences companies. IMS, a well-known data-collection and analysis company within the pharmaceutical sector, has estimated that, in a low-case Brexit scenario, the industry growth rate would still be 4% per annum. This forecast was issued 6 months after the referendum and accords with our current view based on the expected macroeconomic deviation from the compromise deal.

Base case: Compromise deal with modest partnership / deregulation upsides

In the base-case scenario, there is also little effect on research funding from leaving the EU. The UK government can use some of the savings from EU membership to fund research, as well as paying to remain within the Horizon 2020 programme. Britain finds it straightforward to reach an MRA, allowing it to continue selling pharmaceutical products into the EU without additional cost or hassle. The departure of the EMA has little impact on the UK pharmaceutical sector or the country's desirability as a place to invest or to launch new medicinal products.

The clinical trials directive is overturned and the domestic industry is able to engage in new research partnerships with organisations in the United States and Far East. Overall, in this case, the life sciences sector is neither harmed nor helped by Brexit. As a result, the industry growth rate is in line with that expected in our 2016 report for the Biotechnology and Biological Sciences Research Council, which was 4.5% per annum.
High case: Wave of new opportunities

In our high-case scenario, the government sees the life sciences sector as a priority and increases funding above the level that it enjoyed within the EU. New trade deals incorporate research partnerships with a number of the signatory countries, resulting in Britain enhancing its status as a hub for research and development. There is more deregulation than anticipated, resulting in new research in recently neglected areas such as genetic modification. Moreover, all of the other features of the base case – including the MRA with the EU – hold. IMS estimates that, in a high Brexit case, the industry could grow by up to 7% per annum.

Footnotes

2. The Royal Society Science Policy Centre, The role of the EU in funding UK research, 2015.
3. The Royal Society, UK research and the European Union, 2015. Note: contributions are indicative estimates reported by the Office for National Statistics. They are indicative because member states’ contributions are not made to individual expenditure programmes, but to the EU budget as a whole.
4. HM Treasury, ‘Chancellor Philip Hammond guarantees EU funding beyond date UK leaves the EU’, August 2016.

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Chapter highlights

With respect to commercial property, concerns have focused on how the potential loss of Britain's status as a commercial gateway to Europe might result in a collapse in demand. However, most foreign purchases in domestic commercial property are for investment rather than operational reasons, and, as a result, they are more related to the overall performance of the British economy rather than the nature of the trading relationship with Europe.

Another source of concern has centred on the possible hit to financial services from Brexit (see Financial services) and the chance that that could cause a sharp drop in commercial property demand. However, as set out in Financial services, we do not believe that the drop in financial services exports to the EU will be large. What's more, demand for commercial property, even in London, is more sectorally diverse than is commonly realised, thus requiring a downturn across multiple sectors to cause a noticeable impact on the market. In addition, the net increase in the stock of commercial property over the next few years is not expected to be large, limiting the scope for falls in rental values.

The residential property market is driven by the economy overall and is also marked by a distinct price rigidity caused by sellers’ ability to sit out any periods of modestly weak demand. As a result, Brexit will only cause a fall in prices if it causes a large shock associated with a recession and high unemployment. However, we do not expect it to have this affect. Accordingly, even in a low-case scenario, prices still rise by 1.4% per annum over the next decade, and, in other circumstances, they will not be far off the 3.5% seen in recent years.

In this section, we consider the likely effects of Brexit on the British property market. First, we explore whether Brexit will adversely affect the commercial property market. Second, we assess what it will mean for the residential property market. Third, we set out low, base and high-case scenarios.

The commercial property market, the City and Brexit

Overseas buyers have accounted for roughly half of all transactions, by value, in the British commercial property market over the past few years. (See Figure 33.) Many foreign firms and industries use the UK as a commercial gateway to the rest of Europe; for example, the majority of American investment banks’ revenues in Europe are booked through their EU headquarters in London.
If Britain lost rights of easy access to the single market, there is a worry that this could rapidly change the country’s gateway status, with adverse consequences for property markets. If demand from overseas buyers did drop following Brexit, the impact could be material.

However, there are a number of important factors that should continue to support the demand for British commercial property. In the first place, most purchases of commercial property in the UK by overseas buyers are for investment, rather than operational, purposes. Therefore, a slump in the market would probably require a large number of buyers to expect that Britain’s underlying economic growth prospects will be harmed significantly by Brexit. The risk of this is probably greater if the UK leaves the union without a transitional or trade agreement in place and especially so if this scenario isn’t anticipated until late 2018. Beyond the macroeconomic environment, factors such as the legal system and language, as well as the size, liquidity and transparency of the British market, act to attract property investors and are not a function of EU membership.

There is more reason for concern over the impact of Brexit on the City of London and, consequently, the London property market. As discussed in Financial services, it is possible that Brexit could damage the City by forcing institutions to re-locate to the continent. This would cause a drop in demand and a rise in vacancy rates, and the premium commanded by Central London office space would shrink. As we stated in Financial services, there is, however, considerable doubt as to whether these relocations will actually occur. Our assessment is that they, and any resultant decline in demand, are likely to be modest. So far, investment banks have announced plans to move only around 13,000 jobs to Europe. This is the equivalent of just 0.6% of office-based jobs in London.

Moreover, employment data and agency sources suggest that financial services firms have not been the key driver of central London office take-up in recent years, even in the City. Financial services account for roughly 15% of office-based jobs in London. But, over the past five years, employment in the financial services sector has fallen. This decline was equivalent to 4% of total new office jobs created over the period in the city. Instead, it is professional, scientific and technical services that have been driving London’s office-job creation. (See Figure 34.)
Even if there was a financial services exodus and even if the resulting drop in commercial property demand was material, the impact on the construction sector might not be, given the current state of the London construction cycle. When the numbers of expected new office completions are netted off against premises that will probably be withdrawn from the market, the net increase in stock for 2017 to 2021 is modest. This means that it would take a large drop in demand for vacancy rates to spike and rental values to start to fall. (See Figure 35.)

If that was to happen, it is possible that investors might begin to reassess the substantial price premium commanded by City office space. A rolling five-year average of the difference between City office yields and the yields for regional office markets shows that this premium has approximately doubled since 2009. That could go into reverse, but it does require many ‘ifs’.
The relationship between economic performance and the property market is strong (see Figure 36.) A robust economy can support a healthy rate of jobs growth and rising real incomes, which increase consumer confidence and encourage households to spend more and, potentially, to borrow more – including in the property market. In addition, notwithstanding their effects on the path of interest rates, rising employment and incomes mean that consumers are more able to service existing and new debt. This can improve the appetite of financial institutions to lend and lead to an increase in the number of mortgage approvals.

Brexit will only have a meaningful impact on the residential property market if it causes a material change in macroeconomic conditions, or the perceptions thereof. The referendum result itself had little impact, with both transactions and house-price growth holding steady. (See Figure 37.)

**Figure 36: Annual change in real household spending, GDP and house prices in the UK**
Source: Capital Economics, Thomson Reuters

**Figure 37: Transactions and change in house prices in the UK**
Source: Capital Economics, HM Revenue and Customs, Nationwide

Note: The spike in the data in March 2016 was caused by a surge in transactions in advance of the stamp duty surcharge.
In the near term, the squeeze in real incomes stemming from the exchange-rate-driven rise in inflation is likely to reduce residential house price growth in 2017 and 2018 to 2% per annum. With house prices already high relative to earnings and with little scope for lenders to loosen credit criteria, the pace of gains will be increasingly constrained by the rate of income growth. Similarly, we expect no capital-value growth in commercial property markets.

If Britain approaches the deadline for leaving the EU without a new free trade or transitional agreement in place, there could be high levels of uncertainty and business investment may fall. Furthermore, if the UK actually leaves the EU without agreeing transition arrangements or a new free trade deal, there is the potential for trade and confidence to be affected adversely, thus impacting consumers, businesses and economic output.

This low-case scenario would also be accompanied by the complete loss of passporting rights and euro clearing, with significant relocations to the continent. The latter would primarily affect commercial property, resulting in anaemic growth in commercial rents and falls in capital values. Meanwhile, on the residential side, slower growth and higher unemployment will feed through to a decline in transactions, rather than an outright fall in prices. The number of transactions falls to just over 1m in 2020, before recovering to 1.4m by the end of 2027, giving an average of 1.2m over the decade. House-price growth averages 1.4% per annum compared to 3.5% in recent years (2010 to 2016). However, even in this low case, there is no crash or even fall in prices, though growth is obviously much reduced.

Figure 38: Change in nominal house prices and transactions in the UK
Source: Capital Economics, HM Revenue and Customs, Nationwide, Thomson Reuters

Property scenarios

Low case: No deal and resultant sluggish growth

Brexit would have to cause a large economic shock to lead to a sharp fall in house prices. Sellers can often avoid lower prices when the economy is weak by simply waiting longer for the right offer. A price correction would require conditions that would cause widespread forced selling – a sharp rise in interest rates or unemployment or a credit crunch. Our review of the effects of Brexit so far suggests that these are somewhat unlikely. Transactions, however, are typically more responsive to macroeconomic changes and so may change due to lesser Brexit impacts. (See Figure 38.)
Base case: Compromise deal and benign conditions

There is a ‘compromise deal’ on Brexit, along the lines set out in Brexit so far. As a result, uncertainty subsides during the course of 2018 and the economy grows at a reasonable, if unspectacular, pace, perhaps faster later on in the decade, as new trade deals are reached. On the commercial side, a modest uptick in rental values occurs, but capital values remain subdued. Residential housing transactions are expected to rise modestly from 2016 levels of 1.2m to an average of 1.4m over the next 10 years, and house-price growth averages 3.2% per annum.

High case: Deal and trade boost in other sectors

If the UK is able to negotiate new free trade deals quickly and if there is minimal disruption to trading relations with the EU in 2019, the economy may strengthen and productivity may rise. In commercial property, the stronger economic environment will increase demand and the prospects for rental growth. On the residential side, stronger growth in the economy will lead to rising employment and incomes and therefore greater activity in the market. This would support higher average annual transactions of around 1.5m over 2017-2027. House-price growth is modestly higher at around 3.6% per annum over the same period.

Footnotes

1. Open Europe, How the UK’s financial services sector can continue thriving after Brexit, 2016.
2. City A.M., ‘Banking Brexodus? One year on, this is what banks have said about Brexit and job moves’, June 2017.

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Chapter highlights

With an extremely small traded component, construction is fairly insulated from changes in the trading relationship between Britain and the EU, though not if those changes have a macroeconomic effect. For, as with residential property, the prospects for the sector are likely to be heavily influenced by those for the macroeconomy. Moreover, the construction sector has historically been more volatile than the whole economy.

As a result, construction is quite vulnerable to any slowdown or contraction in total demand. Relatedly, a sharp rise in uncertainty could mean that projects get cancelled or delayed.

Changes in the regulation or immigration regimes will also affect construction, but probably in relatively small ways and in opposite directions.

Based on the fact that we do not expect the macroeconomy to be significantly harmed by Brexit, construction output should expand by 1.7% per annum over the course of the next 10 years in a base case for the sector. This is lower than the 2.9% experienced between 2010 and 2016. The drop is not particularly attributable to Brexit, but rather to the fact that the sector is unlikely to continue to outpace the economy as a whole, especially given the pressures from the public and retail construction slowdowns. However, near-term Brexit uncertainty will also contribute.

In this section, we consider the likely effects of Brexit on the construction industry. First, we examine the recent data on construction, the role of uncertainty and the current prospects for the sector. Second, we discuss the possible ramifications from Brexit for construction. Third, we set out our scenarios.

Construction, uncertainty and current prospects

While data for the construction sector are volatile, it doesn't seem that the referendum result had a big impact on the sector's output. Although some survey evidence suggested a temporary decline in output following the referendum, official statistics point to output growth holding up. (See Figure 39.)
Moreover, construction starts have actually risen each quarter since the referendum. Private housing construction orders edged up to £3.7bn in the second quarter of 2017 – a post-crisis high. (See Figure 40.) This strength of the sector is perhaps unsurprising given the resilience in the economy overall.

However, while the construction sector doesn’t seem to have been affected by uncertainty so far, it is possible that it could be as Brexit progresses. Greater uncertainty is more likely to lead to greater risk aversion and a wait-and-see approach towards capital spending. Indeed, the amplitude of booms and busts in the construction sector has typically been much more extreme than for the whole economy – possibly a reflection of the large-scale, lengthy in time and irreversible nature of many projects. (See Figure 41.)
In theory, given Britain’s infrastructure needs and a perceived housing shortage, there should be scope for a strong performance in the construction sector over the next few years. However, there are reasons – unrelated to Brexit – to expect that the sector’s near-term prospects are weak.

In the public sector, housing associations’ ability to progress new developments is being hampered by the cuts to social rent of 1% per annum for the four years from April 2016. Reducing rental income lowers the returns from investing in new housebuilding. Meanwhile, retail construction is likely to continue to be hit by the present shift to online selling and the movement away from large supermarkets to smaller convenience stores.

**Potential Brexit effects**

The construction sector has among the lowest import intensities of all British industries. Imports accounted for less than 1% of total production in 2014 – and exports accounted for less than 2% of total final demand in the same year. Hence, the issue of the UK’s trading relationship with the EU is likely to be of lesser direct importance for the sector. It is also comparatively insulated from changes in the value of sterling. (See Figure 42.)
There are limited gains to be had in the construction sector from deregulation following Brexit. For example, even if the Working Time Directive was removed, health and safety or noise regulations could prevent construction workers from working longer hours. A potential repeal of the Habitats Directive could be of more relevance, but the effect on construction output is unlikely to be large.\(^1\)

Survey evidence suggests that more than two-fifths of housebuilders say that labour availability is a constraint on production. (See Figure 43.) Given that it takes years to train skilled tradesmen, immigration is the easiest route to meet the current labour shortage, and about 7% of workers in the industry are born in the EU. (See Figure 24.) The migration policy after Brexit will determine whether or not the construction sector suffers from substantial labour shortages. If it did, output could be affected adversely.

**Figure 43: Share of housebuilders reporting labour availability as a constraint on production**

Source: Capital Economics, HBF

**Construction scenarios**

**Low case: No deal and uncertainty**

The construction sector is likely to be materially affected by Brexit if there is a deterioration in the macroeconomy. A weaker economic environment, perhaps caused by additional uncertainty as Britain approaches the deadline for leaving the EU without a free trade or transitional agreement looking likely or by the negative economic consequences of no such deal, could cause firms to reduce capital spending. This scenario is also likely to see a slowdown in the housing market, with a lower number of housing starts and lower business confidence, both of which would act to dampen investment in construction projects.

As we have seen, construction growth typically follows the health of the overall economy, but with much greater amplification of booms and busts. Given the headwinds that the sector is already facing, little growth or even contraction is to be expected in the early years of this scenario. However, business confidence and investment should normalise after 2024, as Britain finally enters new trading relationships with the EU, China, India and Brazil. Overall, we project that construction output growth would average 0.7% per annum from 2017 to 2027.
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Construction output growth will be slightly weaker than GDP growth in the next few years, partly due to the sector's current headwinds and partly due to Brexit-related uncertainty. Most notably, the Brexit process will probably lead to greater risk aversion and a wait-and-see approach towards capital spending. If there is to be any effect of prevailing uncertainty on the economy, it is more likely to have an impact on the construction sector than elsewhere. Later in the period, with Brexit in the rear-view mirror, growth is expected to mirror that of the economy overall. As a result, construction output growth averages 1.7% per annum from 2017 to 2027 in this case.

High case: Deal and good policies elsewhere in the economy

This could arise if the UK is able to negotiate new free trade deals quickly and if there is minimal disruption to trading relations with the EU in 2019. Stronger growth in the macroeconomy would give greater confidence to businesses to invest in the UK. This would lead to a boost in capital spending and therefore construction sector output. In addition, a stronger economy would result in greater tax revenues, possibly leading to a modest increase in construction output from public sector contracts. Construction output growth would be set to average 2.1% per annum over 2017-2027 in this case.

Footnotes

1. For instance, Natural England receives around 26,500 land use consultations annually, of these, they object to less than 0.5% on Habitats Regulations grounds. Most of these objections are successfully dealt with at the planning stage. Source: HM Government, Report of the Habitats and Wild Birds Directives implementation review, 2012.

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Beyond the question of the performance of the macroeconomy post-Brexit, the two key issues with respect to the public finances are:

1. The settling of Britain's account with the EU (the so-called ‘Brexit bill’)
2. What amounts Britain may pay to the EU in future in exchange for some participation in its activities

The legal basis for the ‘bill’ is questionable and, in the event of no withdrawal agreement being reached, that would probably result in Britain paying nothing more to Brussels other than its ordinary contributions for the period up to the end of March 2019.

A more likely outcome, whatever the legality of the situation, is that Britain will undertake to make a one-off payment to the union to account for projects that were entered into on the expectation of continued British membership. That amount could be subject to technical deliberations, and the British side could argue that the scope of EU projects should have been reduced or the contributions of other countries increased once the fact of British withdrawal became evident.

Consistent with our expectations regarding the likely complexion of the Brexit deal, we also expect that the UK will offer to make ongoing contributions equal to Britain’s current net contribution in return for special privileges with respect to customs and the single market during the anticipated transition period in 2019 and 2020.

Thereafter, however, Britain should be able to reduce its contributions considerably. Its contributions should definitely be lower than those of Norway, which is still a member of the European Economic Area. Instead, a level of participation in EU contributions along the lines of Switzerland’s seems most likely. This would see net contributions fall from €12bn presently to around €0.8bn – or by 93%.

In this section, we examine the possible impact of Brexit on Britain’s public finances. First, we look at the UK’s existing contributions to the EU budget. Second, we explore the scale of a potential ‘Brexit bill’. Third, we consider what payments the UK is likely to make in the future, beyond any transitional period. Fourth, we propose low, base and high cases for the public finances.
 Contributions to the EU budget

As a member state, the UK makes contributions to the EU budget and then receives funding for EU programmes in this country. Britain is a net contributor to the union, and its net contributions stood at around €12bn in 2015 – equivalent to 0.4% of gross national income (GNI). (See Figure 44.) The EU’s budgeting is orchestrated on a multiannual financial framework that sets out spending for a period of at least five years, placing ceilings on spending per year and by type of expenditure or programme. The current framework runs from 2014 to 2020. Excluding the EU’s revenue from fines on companies and income tax on its employees, between 2000 and 2015 the UK provided between 9% and 16% of the EU’s income.

Figure 44: UK is a net contributor to the EU’s budget
Source: Capital Economics, European Commission

The figures reveal one important fact about Britain’s contributions to the union: although they are highly controversial and generate a great deal of media coverage, they are less important, when it comes to evaluating the economic repercussions of Brexit, than the effects on trade, consumption, investment and the larger industries of the economy, particularly as the upsides and downsides in those areas can be much larger. Nevertheless, 0.4% of gross national income is still not a small number.

The UK will continue to make its normal annual contributions to the EU budget until it formally leaves the union in March 2019. There has been much discussion of potential further contributions and these fall under two categories. First, a payment on leaving the EU or the ‘exit bill’. Second, future payments for access to EU programmes and / or the single market.

Payment on leaving the EU

The possibility of an ‘exit bill’ is based on the EU’s expectation that the UK should make a contribution towards the union’s outstanding financial commitments. Britain could have to agree to this ‘divorce bill’ to secure a new trading agreement with the EU, even though the legal obligation on the UK to do so is debatable. The union’s rules for withdrawal merely state that the departing country and the bloc have two years to agree a mutually beneficial and planned exit. However, it seems unlikely that the EU will agree to a new trading agreement without the UK paying an exit bill. The British government has recognised that Britain has financial obligations to the EU and vice-versa, and that they need to be resolved.

The EU entered into various financial commitments on the basis of continued British contributions, and the Commission has suggested that the UK should pay its share of the outstanding budget commitments, which should be calculated based on its share of total contributions to the EU budget over 2014 to 2018 (taking into account the British rebate) – that share is around 13%. We examine five components of this bill.
Reste à liquider

The EU commits to certain multi-year projects but pays them at a later date; commitments are therefore higher than payments. The difference between the two is called the ‘reste à liquider’. These are essentially outstanding payments for commitments made under previous budgets. If the UK had to pay a 13% share of the current (end of 2016) overhang of €239bn, this item would result in a bill of €31.1bn. However, some of these reste à liquider projects will be committed to the UK, and Britain should expect to receive whatever share of reste à liquider was meant to be spent on it. If that was the case with reste à liquider items, then the net reste à liquider position for the UK is €19.1bn.

Outstanding spending

The EU has legally binding financial commitments under the current multiannual financial framework, which runs to 2020. These are different to the commitments under the reste à liquider, which are legacies from previous budgets. Partly because of this set of liabilities, we think that the two sides will probably agree to a post-Brexit transition period going out to the end of 2020. Such a deal, as set out in Brexit so far, will require the UK to pay a share of the union’s outstanding spending equivalent to its originally planned budget contributions for 2019 and 2020. Britain would also still receive spending from EU programmes in transition as well.

The Office for Budget Responsibility estimates that, if Brexit were not to happen, the UK’s net contributions to the EU budget would be €12.1bn in 2019 and €12.0bn in 2020. We estimate therefore, that the post-Brexit payments to the EU would total €21.1bn. Furthermore, Britain’s EU budget rebates are received in arrears. Accordingly, after making a final full contribution to the EU budget in 2020, Britain will receive a final rebate in 2021. The Office for Budget Responsibility estimates that this should be €5.5bn.

Pensions

Pensions of EU employees are funded by the budget of the EU. Current staff pay into the budget to be paid a pension later on. There is no specific fund or pension account. If this item is included in the bill, there could well be disagreement over whether Britain will pay for the pension costs of only British workers at EU institutions or whether the appropriate amount is a share of the commitments to all EU workers.

Estimates of the EU’s current total present value of pension liabilities due from member states have ranged from €29.0bn to €63.8bn. These estimates are for all employees, i.e. for both British and non-British EU officials. The range reflects methodological uncertainties identified by other authors – the Centre for European Reform and Bruegel – regarding the liabilities. Bruegel proposes a lower estimate of the liabilities and that the member states should only be liable for two thirds of pension liabilities, i.e. €29.0bn, because officials provide a third of the pension scheme’s financing themselves.

If the UK had to pay a share of these pension liabilities equal to its budget contribution of 13%, it would need to pay €3.8bn or €8.3bn. Taking the average of the two estimates, the UK’s payment would be €6.0bn.

Contingent liabilities

Contingent liabilities are payments that would only need to be made in special circumstances, such as in the event that a country fails to repay its loans to the EU. These are difficult to quantify as they are derived from estimating risks of default on loans and are not simply the total value of the loans themselves.

The Centre for European Reform put the value of EU guarantees and provisions at €23.1bn in 2015, implying a UK liability of €3.0bn (based on a 13% share). For the same year, Bruegel shows net contingent liabilities attributable to the UK of €5.2bn, implying a UK liability of €0.7bn (based on a 13% share). An average of the two yields a figure of €1.8bn.

Receipts

So far we have only considered the UK’s obligation to contribute to the EU’s liabilities. These will be offset to some extent by the UK’s share of the EU’s assets, which include buildings, equipment and financial investments, though the union’s liabilities are larger than its assets. The European Investment Bank’s shareholders are the EU’s member states. Once out of the union, the UK should leave the bank. Britain could request its share of the Bank’s reserves to use as it desires. The EU itself has said the UK should be reimbursed by the Bank.
Again based on a 13% share, the Centre for European Reform figures put this at £2.9bn, while Bruegel puts it at €6.6bn. The average is therefore €4.8bn.

**Net exit bill**

Our estimate for the net exit bill comes to €37.8bn (£32.5bn), including €21.1bn of net contributions in 2019 and 2020 after Brexit. The European Commission, based on comments from Michel Barnier, has been rumoured to be aiming to charge an exit bill of around €60bn. It is unclear whether this included any receipts for the UK.

Others have also made detailed estimates of the size of the bill. In addition to those presented in Table 14, The Financial Times have calculated figures of £55.7bn to £77.3bn. Thus, the range of estimates is from €24bn to €77bn. These other estimates were all prepared before the European Commission announced its intention to use 13% as the British share of liabilities: they used figures of 12%, 15% and 15.7%. However, this is not the sole reason for the difference between the estimates. Others include assumptions regarding whether there would be budget contributions in 2019 and 2020, the appropriate rebate and the relevant assets and receipts.

**Table 14: Breakdown of potential Brexit Bill (€bn)**

<table>
<thead>
<tr>
<th>Source: Capital Economics, Centre for European Reform, Bruegel, Financial Times, Institute for Government</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Payments (net of any equivalent receipts)</strong></td>
</tr>
<tr>
<td>Reste à liquider (RAL)</td>
</tr>
<tr>
<td>Budget contributions in 2019-2020</td>
</tr>
<tr>
<td>Pension liabilities</td>
</tr>
<tr>
<td>Contingent liabilities</td>
</tr>
<tr>
<td><strong>Receipts</strong></td>
</tr>
<tr>
<td>Assets (share for UK)</td>
</tr>
<tr>
<td><strong>Total exit bill</strong></td>
</tr>
</tbody>
</table>

**Mitigation and arbitration**

All of these estimates of the prospective bill could be on the high side in that we have not made any allowance for mitigation efforts that the EU should now be investigating and potentially undertaking. That is to say, having received advance notice of Britain’s intention to leave the Union, it can be reasonably argued that the latter should be altering its spending plans and programmes to account for the forthcoming exit – and the end of British financial support. In short, it should be seeking to reduce the size of its future liabilities – or to increase the funding provided by other countries. Indeed, even if some spending commitments have been set down by EU law, that law can still be altered. Of course, there may be cases where projects have advanced sufficiently that they cannot be altered, but it seems improbable that this would be the case in all instances. If the two sides are ultimately deadlocked over the size of the bill, it is possible that it could be referred to international arbitration, where mitigation and other issues may be considered.

**Future ongoing contributions**

The UK may decide to participate in some EU programmes after Brexit. Other non-EU countries take part in some of the union’s programmes. For example, Turkey participates in programmes including Horizon 2020, Erasmus+, Creative Europe, Competitiveness of Enterprises and SMEs and Employment and Social Innovation. Norway – a member of the European Economic Area – participates in at least 12 programmes. Participation can be subject to certain conditions and abiding by certain rules.

Although the UK’s ultimate relationship with the EU will probably be like that of a third country with whom the EU has a free trade agreement, we suspect that Britain will still wish to participate in some EU programmes. Therefore, in terms of post-transition contributions to the EU budget, the closest analogue is likely to be Switzerland, which is outside the EU’s customs union and partly outside the single market, but still chooses to participate in selected EU programmes, including Horizon 2020, Galileo, ITER and Creative Europe. We expect Britain to agree a similar level of participation.
Switzerland’s contributions to the EU are low. Estimates have varied from 0.02% to 0.08% of GDP. Taking an average, this analogue suggests that Britain will pay the EU an annual contribution of €0.8bn to participate in programmes from the end of the transition period onwards. This is just under 6.8% of current British net contributions. Hence, Britain should be able to look forward to a possible 93% reduction in its contributions from 2021. However, there are a number of caveats to this:

- These savings could easily be eradicated if Brexit has an adverse impact on the economy, resulting in higher government borrowing. As set out in economic impacts of migration, lower levels of immigration would also be expected to lead to higher borrowing.
- The government might also wish to compensate exporters if no free trade agreement is reached with the EU or pay businesses for the loss of access to EU structural funds, which currently amount to some €2.5bn a year.
- Approximately €4.3bn in revenues currently lost to the EU stem from customs duties, and these will obviously be reduced if the UK is successful in negotiating low or zero-duty arrangements with other countries via new free trade agreements. Of course, such deals should yield net benefits for the economy (and hence boost tax receipts), but they will come at an up-front cost to the public finances.

In all cases, Britain will continue to pay its normal EU contributions until the date on which Brexit occurs. The Office for Budget Responsibility estimates a net contribution for 2018 of €12.3bn and €3.0bn for one quarter of 2019 – €15.3bn (or £13.2bn) in total.

Public finances scenarios

In all cases, Britain will continue to pay its normal EU contributions until the date on which Brexit occurs. The Office for Budget Responsibility estimates a net contribution for 2018 of €12.3bn and €3.0bn for one quarter of 2019 – €15.3bn (or £13.2bn) in total.

Low case: High bill and Norway-equivalent contributions

In this case, higher estimates for the Brexit bill turn out to be well substantiated, and the British government consents to the amount concerned in order to secure a transition and future free trade deal with the EU. The amount is, however, unlikely to be as high as some of the highest estimates that have been proposed. This is because those estimates were based on an assumed British share of liabilities of 15% or 15.7%, while the European Commission has, as noted, since conceded that the relevant share is to be 13%.

A high bill would probably be in the €55 to €60bn range. For example, we have modified the Centre for European Reform’s high case to change the British share of liabilities from 15.7% to 13.0%. That results in an estimated high case bill of €56.7bn. That also approximately accords with the reports that the EU is seeking a bill of €60bn.

Beyond the transitional phase, the EU may object to the UK paying a Swiss-equivalent contribution to participate in selected programmes after Brexit and obliges it to pay the equivalent of Norway, which is higher – equivalent to 0.115% of GDP. Based on our ‘compromise deal’ forecast for GDP (see Overall macroeconomic impact), this would suggest a net contribution of €0.8bn in 2021.

Base case: Mean bill and Switzerland equivalent contributions

In this case, the exit bill should be equal to our estimate as set out in Table 14 – €37.8bn (including €21.1bn of net contributions in 2019 and 2020 after Brexit). Ongoing contributions after transition are equivalent to those of Switzerland. Based on our ‘compromise deal’ forecast for GDP (see Overall macroeconomic impact), this suggests a net contribution of €0.8bn in 2021.

High case: No post-Brexit payments

If the UK leaves the EU without agreeing a deal, it will pay its ordinary contributions to Brussels’ budget until it leaves on 29 March 2019 (and receive its ordinary receipts until that time) and then neither pays nor receives anything more thereafter. In this case, with ties negatively affected, it is also unlikely that Britain would participate in any EU programmes thereafter (at least until relations improved following the ‘no deal’ outcome). Therefore, no further payments are made post-Brexit.
Footnotes

7. This includes payments for the period from the second quarter of 2019 to the end of 2020 i.e. for the transitional period after Brexit. Note that Office for Budget Responsibility numbers for the net contribution to the EU budget are from its fiscal supplementary tables from March 2017. The net contribution numbers do not include receipts that are not administered by British Government bodies and therefore do not reflect all EU transactions with the UK. HM Treasury publishes an annual EU Finances White Paper that shows all union transactions with Britain, including private sector receipts.
8. The Office for Budget Responsibility, fiscal supplementary tables, March 2017.
10. Centre for European Reform, The €60 billion Brexit bill How to disentangle Britain from the EU budget, February 2017.
11. Centre for European Reform, The €60 billion Brexit bill How to disentangle Britain from the EU budget, February 2017.
16. Exchange rate used is the average daily exchange rate for 1 July 2016 to 30 June 2017 which was 1 euro = £0.86.
20. The Office for Budget Responsibility fiscal supplementary tables from March 2017.
21. This share is an average of two estimates: one by Bruegel (0.16%) and one by the European Policy Centre (0.07%). These estimates can be found in Ewa Chomicz, EU budget post-Brexit (European Policy Centre, Brussels), March 2017 and Zsolt Darvas, ‘Single market access from outside the European Union’, July 2016.
CONSUMERS

Chapter highlights

Consumer spending held up well in the quarters immediately after last year’s referendum. Since then, higher inflation, mainly stemming from the fall in the value of the pound, has weighed on consumers to some degree. However, this can be expected to fall away over the coming months, and that may boost consumption again.

A further fall in sterling may occur if Britain leaves the EU without a deal, and that could be detrimental for consumer spending again. However, it will likely be through the performance of the economy overall that Brexit will primarily affect consumers – with the positive and negative effects on producers feeding through to consumers via the labour market and possibly in wealth effects via equities. Consumer sentiment may, of course, be affected more directly.

Between the low and high cases, consumer spending growth ranges from a mean annual rate of 1.8% per annum to 2.5% per annum for 2017-2027. Consumption could be modestly boosted if the UK adopted lower tariff schedules than the EU.

In this section, we consider the possible impact of Brexit on consumers. First, we examine how the referendum had an impact on consumption. Second, we evaluate households’ current vulnerabilities. Third, we look at how Brexit may affect consumption. Fourth, we set out low, base and high-case scenarios.

Impact of the referendum on consumption

Consumption accounts for the majority of demand in the British economy. In 2016, consumer spending was 65% of GDP, which is a modest rise from 62% in 1990. It is an important determinant of overall economic performance in the UK.

One way to gauge what may happen with consumption in the near future is to look at consumer confidence indices, which measure households’ net optimism regarding the economic situation. Consumer confidence remained in line with historical norms after the referendum. It was in negative territory, but this is quite normal for a variable that is typically only positive in times of a booming economy. As a result, there was strong consumption growth in late 2016. (See Figure 45.)
The average post-referendum fall in the value of sterling of 11.9% since 23 June 2016 contributed to a rise in the rate of consumer goods’ import-price inflation of 5.5%. As a result, prices are now rising faster than average earnings. (See Figure 46.)

Household spending growth is set to remain constrained in late 2017 as inflation of 3% squeezes the growth of real incomes. We expect that inflation will drop back in the first quarter of 2018 and the pressure on real earnings will be eased at that time.

Existing vulnerabilities

On the face of it, recent consumer-related data suggest that household spending rests on some shaky foundations. For example, in the first quarter of 2017, households reduced the proportion of their disposable income that they save from 3.3% to 1.7% – the lowest rate since comparable records began in 1963 – though this may be explained by tax changes or households choosing to maintain consumption by reducing saving as they perceive that higher inflation is only temporary.
Along with a reduction in the savings rate, households have funded recent consumption growth through additional borrowing – primarily unsecured credit. With mortgage lending remaining subdued, this has contributed to household debt as a share of income starting to rise again, increasing vulnerability to an economic downturn. (See Figure 47.)

Figure 47: UK household debt as a share of disposable income
Source: Capital Economics, Thomson Reuters, Office for National Statistics

Brexit impacts

It is likely that Brexit would result in a further devaluation of the pound if the UK leaves the EU without negotiating a withdrawal agreement. This devaluation would occur before a formal exit from the union as it would be clear that a deal was not going to be agreed in time or that the negotiation period was to be extended. It could exceed the depreciation of around 10% that occurred immediately after the referendum result. This would again hamper consumers’ spending ability unless they increase their borrowing.

As discussed in unilateral free trade, it is possible that the UK will be able to adopt lower tariffs than the EU, and this might lead to price cuts for consumers. Although the bolder claims for large price falls seem unlikely to be realised, a policy aimed at removing the higher EU prices may result in price falls of 0.5% (see unilateral free trade) and could boost consumption.

It seems likely that the primary effect of Brexit on consumption will come via the macroeconomy. The above factors notwithstanding, producers seem likely to be more affected by Brexit than consumers (at least in direct terms anyway) via changes in trading relationships, regulation and migration. These effects will then be channelled to consumers via employment, wage and equity effects – or perhaps more directly through changes in consumer confidence.

Consumption scenarios

Low case: No deal and further fall in the pound

If Britain approaches the deadline for leaving the EU without a transitional or new free trade agreement in place, this could create high levels of uncertainty and reduce business investment. Companies would face new costs in trading with EU countries. It is also likely that there would be a fall in the value of the pound, leading to a temporary spike in inflation. All of these developments would hit consumer confidence and consumption.

Taking these factors into account, real wages in this scenario grow at an average rate of 3.2% between 2017 and 2027, while employment is expected to grow at around 0.5% on average over the same time period. Our consumer spending forecast is then based off the expected growth of real household incomes – i.e. reducing the growth in aggregate nominal wages by the expected inflation rate. Accordingly, annual consumer spending growth averages 1.8% in this scenario over the period 2017 to 2027.
Base case: Compromise deal and benign circumstances

A continued close relationship with the EU, based on a transitional deal leading to an extensive free trade agreement, and minimal disruption to business activity should provide support for growth in households’ real incomes and therefore spending. Real wages in this base-case scenario grow at an average rate of 3.5% between 2017 and 2027, while employment is expected to grow at around 0.7% on average over the same time period. Accordingly, annual consumer spending growth averages 2.2% over the decade.

High case: Deal with ambitious policies

In this case, there is minimal disruption to trading relations with the EU after Brexit, and the UK is able to negotiate new free trade deals with other countries quickly. The government also adopts partial unilateral free trade, reducing prices modestly for consumers (though more noticeably for the poorer consumers) and boosting spending. The economy is given a further lift by deregulation efforts. These developments lead to stronger employment and income growth. Real wages in this high-case scenario grow at an average rate of 4.1% between 2017 and 2027, while employment is expected to grow at around 0.7% on average over the same time period. Accordingly, annual consumer spending growth is likely to hit 2.5%.

Footnotes

1. Data from Office for National Statistics.
2. Data from Thomson Reuters.

The views and opinions expressed in this report are solely those of Capital Economics and do not necessarily reflect the views of Woodford Investment Management.
Although economic growth did slow in early 2017, it shows signs of reviving, prompting the Bank of England to raise interest rates for the first time in ten years earlier this month. Although political uncertainty is set to continue, it shouldn’t weigh on the economy to a greater extent than it has done already. We have developed three macroeconomic Brexit scenarios: ‘no deal’, ‘compromise deal’ and ‘deal with ambitious policies’ and modelled their effects on the economy.

In the case of no Brexit deal being reached, the economy would be faced with negative headwinds in the form of uncertainty, tariff and non-tariff barriers, short-term disruption and loss of market access (such as passporting rights). However, many mitigating factors, including policy interventions, would soften the blow, and therefore such a scenario leads to much weaker growth in 2019 (0.8%), but no recession. Total output is some 2.4% lower by 2023 in this case than in the ‘compromise deal’ case, though some of these losses are then recouped such that, by 2027, the differential is reduced to 1.6%. Furthermore, comparing this scenario to that of remaining in the EU on status quo terms, the output differential in 2027 is a relatively low 0.5%. Hence, the public perception of this outcome as a ‘disaster’ or ‘cliff edge’ is not justified.

In the more likely case of a deal with the EU being concluded along the lines set out in Brexit so far, growth maintains a rate of around 2% per annum over the next few years. When the transition period ends, growth is weaker in 2021 as some trade is lost and some non-tariff barriers come into force, but it then returns to its trend level thereafter, perhaps nudging a little higher at times when new bilateral trade deals are concluded. Compared to a continuation of the status quo, output is 1.1% higher in 2027 with this scenario.

Finally, the case of a deal combined with optimal policy choices on trade, deregulation and immigration leads to a pick-up in productivity growth and, consequently, gross domestic product (GDP) growth. It averages 2.6% over the forthcoming decade.

In this section, we consider the overall impact of Brexit on the UK economy. First, we explain our short-term forecasts up to 2019. Second, we define plausible low, base and high-case scenarios for the post-Brexit period. These cases transpire to be:

1. A credible ‘no deal’ scenario, complete with policy responses,
2. A scenario in which Britain strikes a ‘compromise deal’ with Brussels
3. A scenario in which there is a ‘deal with ambitious policies’

Near-term forecasts

The UK economy is set for reasonably strong growth over the next 18 months or so, despite political uncertainty and Brexit negotiations. (See Table 15.)
**OVERALL MACROECONOMIC IMPACT**

Capital Economics, November 2017

**Table 15: Short-term forecasts of different variables for the UK economy**

<table>
<thead>
<tr>
<th>Source: Capital Economics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GDP (quarterly growth rate)</strong></td>
</tr>
<tr>
<td>Q3 2017</td>
</tr>
<tr>
<td>0.4%</td>
</tr>
<tr>
<td><strong>Policy rate (end of period)</strong></td>
</tr>
<tr>
<td>0.25%</td>
</tr>
<tr>
<td><strong>US dollar per pound sterling (end of period)</strong></td>
</tr>
<tr>
<td>1.35</td>
</tr>
<tr>
<td><strong>Euro per pound sterling (end of period)</strong></td>
</tr>
<tr>
<td>1.13</td>
</tr>
</tbody>
</table>

Although there has been some recent slowing in economic growth as rising inflation has cut the growth in households’ real incomes, this should prove transitory. There are several factors that should support growth in the near term. First, exports continue to benefit from the depreciation of the pound and, with a slowdown in consumer spending tapering imports, net trade should provide a boost to growth. Second, firms’ investment intentions have held up well and suggest an increase in real business investment is in prospect if uncertainty diminishes ahead of a Brexit deal. Third, a modest easing in austerity should help to support the economy. The government has around £25bn per annum by 2020/2021 that it could spend, while still meeting its fiscal targets.

Political uncertainty could still weigh on the economy, and the general election result has, if anything, compounded Brexit uncertainty with a more opaque political outlook. Firms might put off investment decisions, and households may delay making major purchases as a result. Nevertheless, the economy has generally proved resilient to recent political uncertainty, including the hung Parliament in 2010 and the outcome of the referendum last year. In particular, since the latter, general uncertainty has been protracted and still doesn’t appear to have had much of an impact on economic growth. (See Figure 48.)

**Figure 48: Capital Economics’ uncertainty index and change in real UK GDP**

Source: Capital Economics, Thomson Reuters

The general resilience of the economy and the rise in inflation suggest that interest rates are likely to rise soon. Indeed, the MPC has indicated that the first rise may occur in November 2017. Tighter monetary policy and reasonable economic growth of around 0.5% per quarter will help the pound to strengthen modestly against the euro in the near term.
While Brexit could result in change on many issues, it is likely that it won’t have a material impact on the large proportion of the economy that doesn’t participate in international trade. There are arguably more important issues for the economy over the next decade – notably the issue of whether productivity will recover. Output per worker growth averaged 1.9% per annum over 1998 to 2007, but has been subdued since the global financial crisis. (See Figure 49.)

Deriving post-Brexit scenarios

In other options, two broad alternatives to the likely Brexit compromise deal were cited – the cases of ‘no deal’ and of Britain remaining within the single market and customs union. The latter case is uninteresting for this report, as it largely involves a continuation of the status quo, economically, if not politically. But, the same can certainly not be said of the ‘no deal’ scenario. Hence, we primarily focus on two key Brexit outcomes – the ‘compromise deal’ and the ‘no deal’ cases.

The performance of the economy after Brexit will not just be determined by the nature of the Brexit settlement, but also by the policies that are pursued afterwards. The identification of each sector’s high-case scenarios throughout the foregoing chapters has typically focused on events or choices policymakers could make that would maximise the potential benefits of Brexit – accelerating new trade deals, extending them to services, cutting costs for business through deregulation, cutting tariffs on products from the rest of the world, etc.

So, for the scenarios at the macroeconomic level, there are two key issues:

1. ‘Compromise deal’ versus ‘no deal’ and
2. Normal policies versus ambitious policies

Potentially, this would leave us looking at four possible macroeconomic scenarios. However, in reality the ‘no deal’ scenario will require quite a vast amount of policy setting work to respond to the new situation. Therefore, vigorous policy activism is inevitable in that case. Accordingly, ‘no deal’ with standard policies seems unlikely to transpire. Thus, we have three macroeconomic scenarios:

1. ‘No deal’
2. ‘Compromise deal’
3. ‘Deal with ambitious policies’
OVERALL MACROECONOMIC IMPACT
Capital Economics, November 2017

No deal scenario

This case features the following events:

- Uncertainty weighing heavily on investment decisions in the near term, resulting in low growth in the immediate period leading up to Brexit, perhaps at little more than the rate of the second quarter of 2017.
- The negotiations fail to reach an agreement, and Britain therefore leaves the EU at the end of March 2019 without a free trade or transitional agreement in place. It takes years for talks on free trade to be revived and an agreement reached, which finally comes into force in 2025. In the intervening years, the trading relationship is governed by World Trade Organization (WTO) Most Favoured Nation rules and the associated tariff rates.
- There will be non-tariff barriers with respect to trade with the EU. In particular, these include more technical barriers to trade – inspections and certifications. There is short-term disruption in trade in 2019 as the imposition of non-tariff barriers causes delays in the transportation of goods and cancellation of some contracts, and only some of the required mutual recognition arrangements are in place. However, after several months of dislocation, the new regime is eventually operating smoothly.
- Financial services passporting rights are lost. A range of financial services activities move out of the UK due to concerns that the ‘no deal’ outcome will make it more difficult to sell financial services into the EU. These moves include an early flight of euro clearing and a loss of passported financial services activities.
- It proves impossible to seamlessly replicate the EU’s existing trade deals for the UK. Instead, Britain is forced to rely on WTO Most Favoured Nation rules for trade with those countries with which the EU has concluded a deal. Britain therefore begins a slow process of ‘re-agreeing’ deals with those countries, but this takes up to 10 years to complete.

This ‘no deal’ case does not, however, incorporate the situation of a total breakdown in UK–EU relations. So, practical and essential matters such as aviation, mutual recognition agreements and Authorised Economic Operators are agreed upon. Nevertheless, all of these events would have negative effects on the economy. But they will also cause repercussions and reactions by markets and policymakers that would heavily mitigate any negative economic shock from leaving the EU without a deal. These positive responses would likely include:

- The pound falls further, cushioning any impacts for exporters. A fall of nearly 20%, based on the response of the currency since the referendum, may be expected.
- Contributions to the EU are simply what is due in normal contributions up to March 2019. There is no divorce bill and no further payments are made thereafter.
- As Britain is a large net importer from the EU, in the short run tariffs placed on EU products result in higher government tax revenues and encourage domestic production (and/or EU firms to set up subsidiaries in Britain).
- The government responds to the new environment with changes in economic policy. Corporation tax is lowered to 15% and there is an energetic drive to cut more regulations, resulting in cost savings of 1% of output. The government supports a small number of adversely affected industries with subsidies. Due to higher spending and the lowering of some taxes, government borrowing is higher.
- In addition, the government moves faster to secure other free trade agreements and this bear fruit resulting in a faster than ‘compromise deal’ case set of new accords with other trading partners, including the US, the European Free Trade Association and China.

We have modelled the macroeconomic effects of these developments. Our modelled fluctuations in overall output incorporate the effects of responsive changes in interest rates and the exchange rate, which feedback onto the pattern of output growth.

Monetary policy would still be tightened in the near term in this scenario, with rates rising to 0.75% by mid-2018. However, once the ‘no deal’ outcome becomes increasingly likely, we expect the Bank of England to ease policy. With growth subdued in 2019, rates will be cut back to 0.25% again. Although there will be a fall in the exchange rate in 2018-2019 (as investors overreact), the Bank will likely look over this, as it did with the 2016 drop. From 2021, as the economy starts to stabilise, interest rates will slowly be normalised, rising to 2.5% by 2027. Following its sharp fall at the time of the ‘no deal’ Brexit, the pound will strengthen against the euro as growth begins to rise again following the 2019 dip (and as the overshooting effect wears off). As the years go on and policies adjust, there will be a recovery in sentiment towards British assets, including the currency. Policies help to offset reduced trade openness, meaning that productivity growth is only marginally (0.1%) lower across the decade. Figure 50 shows output growth, interest rates and the exchange rate in this case.
Compromise deal scenario

In this case, Brexit proceeds along the lines set out in the potential Brexit deal.

- There is a deal in which Britain leaves the single market and customs union in 2019 but secures transitional arrangements that allow the country to retain most of the benefits of both until the end of 2020 as a new and extensive free trade agreement is forged.
- Non-tariff barriers imposed on British exports are limited (though, of course, products must conform to EU standards), but approximately half of the beneficial effect of the single market is lost, amounting to about 0.6% of output. In particular, there is some loss of trade at the end of transition in 2021.
- The UK makes full membership contributions in 2019 and 2020, with the latter also helping to resolve the question of how much of a divorce bill should be paid. Thereafter, Britain pays into the EU budget in order to participate in specific programmes, like Switzerland.
- British economic growth is boosted by new trade agreements with non-European countries, reached according to the timetable set out in the trade base case. Regulations and immigration are also as set out in their base cases.

Figure 51: Change in real UK GDP, bank rate and euro exchange rate in 'compromise deal' scenario
Source: Capital Economics, Office for National Statistics, Thomson Reuters
We again model GDP growth as a result of this scenario, incorporating the effects of responsive interest rate and policy rate changes. In this ‘compromise deal’ scenario, economic conditions are relatively benign and Brexit-related uncertainty diminishes as the negotiations make progress. The Bank of England has already indicated its intention to raise interest rates in the near future. With growth at reasonable (c. 2%) levels, a gradual process of interest rate normalisation occurs, taking many years. Commensurate with this, the value of the pound rises slowly against the euro.

Figure 51 shows our expectations for key economic variables in this scenario. In summary, although growth is somewhat weaker than trend in the transitional period and especially in 2021, overall, this case sees the UK economy performing well over the next 10 years or so. Productivity growth rises, but only by a modest 0.2% per annum due to the mix of positive and negative drivers.

Comparing this scenario with the status quo of EU membership on current terms, we evaluate the prospective differences in the level of total GDP by 2027 as follows:

- **Uncertainty:** From June 2016 to March 2019, indicators of the performance of the economy suggest that it has and will lose modest amount of ground versus potential growth of around 2% (the average annual rate for January 2010 to June 2016). This is most likely due to uncertainty. Between 2016 and 2019, we expect it to total 0.3% of GDP. To be conservative, we assume it is not recouped in later years.

- **Trade:** The base-case trade scenario estimated trade-volume gains from new trade deals of 8.4% over 10 years and a decline of 2.1% from the loss of single market access – a net gain of 6.3%. HM Treasury analysis of several papers on the relationship between trade and GDP per capita concluded that the elasticity was likely in the 0.2 to 0.3 range. Accordingly, using the midpoint of this range, the inferred loss of European trade equates to 0.6% of output and the gains from new trade deals are 2.1%.

- **Regulation:** In Regulation, we identified that EU regulation cost British companies 0.5% to 3.0% of GDP and possibly a great deal more when indirect effects are incorporated. We conservatively estimated that modest deregulation in a base-case scenario, coupled with Britain avoiding new EU rules, could amount to a saving of 0.5% of output.

- **Immigration:** If immigration follows the path set out in the base-case immigration scenario, we estimate that 984,000 fewer EU migrants will come to the UK over the next 10 years compared to a counterfactual of immigration at the levels seen between 2014 and mid-2016. Based on 61% of these being in employment (the proportion for EU nationals living here already who are in employment) at wages of 89% of the national average (the average wage for those same nationals), the loss in income would be £15bn, or 0.8% of current GDP. This will be an overestimate of the effect of reducing immigration as it does not incorporate the burden of welfare payments to some citizens.

- **Public finances:** Finally, as set out in public finances, the savings in contributions to the EU will be £3.6bn per year (plus adjustment for inflation) from 2021. However, Britain will pay £19.1bn more over and above normal contributions to settle its final bill with the union. If this payment is spread over 10 years, annual savings in contributions will be £7.7bn. In reality, this number may be lower still because of lower tariff revenues, as Britain reaches new trade deals, and as the government may compensate some recipients of EU structural funds. £5.0bn is likely more realistic, which is approximately 0.2% of the UK's estimated GDP in 2021.

Accordingly, the expected net position by 2027 is a modest gain of 1.1% of GDP with this ‘compromise deal’ scenario versus the alternative of a maintained status quo.
Deal with ambitious policies scenario

In this case, the following transpire to produce a better economic performance:

- There is little or no obvious uncertainty effect in the near term, nor is there any interruption due to the changes at the beginning and end of the transitional period.
- The government’s suggested ‘customs partnership’ with the EU comes into being. Thus, Britain is able to pursue an independent trade policy and, at the same time, have a no customs border with the EU. Fears of additional checks and non-tariff barriers to sell into the single market also prove to be largely unfounded.
- Although financial services passporting rights are still lost, there is little to no flight of financial services from the UK due to equivalence, subsidiaries and Britain’s innate advantages as a location for financial services.
- The process of making new trade deals proceeds faster than expected, per the high-case trade scenario. Some of these include services, and there is a surge in financial services exports to non-EU countries.
- Although it does not move to a complete unilateral free trade policy, Britain’s new set of tariff schedules levy much lower rates on food and drink, motor vehicle and clothing products. This leads to modestly lower consumer prices and a boost to consumption.
- There is more deregulation than expected. In addition, there are material benefits from amending regulations so that they better fit the British economy. In this high case, more effective regulation results in savings to the British economy of 1% of output.
- The government manages to set a very well-tailored migration policy – reducing the numbers of arrivals but boosting the skills quality such that there is little in the way of negative labour force effects from the reduction. There is no voluntary reduction in immigration from groups of highly skilled workers.
- The combination of these developments cause a surge in innovation and investment in the UK and, as a result, productivity growth slowly recovers to near pre-financial crisis levels by 2027 (an increase in the growth rate of 1 percentage point).
All other aspects of the ‘compromise deal’ scenario proceed as in that case, including the transition agreement. Furthermore, there is successful ‘grandfathering’ of EU trade deals. As in the two previous scenarios, we have modelled future output growth, incorporating the effects of responsive monetary policy and exchange rate movements. In the near term, reduced uncertainty surrounding Britain’s exit allows growth to pick up. As a result, interest rates rise more sharply to hit 2.25% by mid-2019, then continue to normalise more gradually, so that bank rate ends 2027 at 4%. The pound strengthens against the euro off the back of higher interest rates relative to the euro-zone and reduced uncertainty. As new trade deals boost growth, the UK is able to return to a position of outperforming the euro-zone, which raises the value of the pound a little more in the later years. Figure 52 shows the relatively stronger performance of economic variables that can be expected in this scenario.

Building on the comparison versus the status quo undertaken in ‘compromise deal scenario’, we are now in a position to summarise the relative growth positions of the three macroeconomic scenarios over the forthcoming 10-year timeframe (and also compare them with a continuation of the status quo of EU membership on current terms). (See Table 16.)
Table 16: Total differences in output across the three macroeconomic scenarios

Source: Capital Economics

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Total expansion in real GDP 2016-2027</th>
<th>Other cases relative to remain status quo level of GDP in 2027</th>
</tr>
</thead>
<tbody>
<tr>
<td>'No deal'</td>
<td>24.8%</td>
<td>-0.5%</td>
</tr>
<tr>
<td>Remain status quo</td>
<td>25.4%</td>
<td>-</td>
</tr>
<tr>
<td>'Compromise deal'</td>
<td>26.8%</td>
<td>1.1%</td>
</tr>
<tr>
<td>'Deal with ambitious policies'</td>
<td>32.7%</td>
<td>5.8%</td>
</tr>
</tbody>
</table>

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