Should We Stay or Should We Go?
The economic consequences of leaving the EU

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CEP ELECTION ANALYSIS

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- The European Union (EU) is the UK’s most important trade partner, accounting for half of all UK exports and imports. UK exports to the EU correspond to almost 15% of national output (GDP).

- EU membership matters to the UK economy primarily because it leads to lower trade barriers. This makes goods and services cheaper for UK consumers and allows UK businesses to export more.

- Leaving the EU (‘Brexit’) would lead to lower trade between the UK and the EU because of higher tariff and non-tariff barriers to trade. In addition, the UK would benefit less from future market integration within the EU. The main benefit of leaving the EU would be a lower net contribution to the EU budget.

- In our analysis of the consequences of Brexit, we consider an ‘optimistic scenario’ with small increases in trade costs between the UK and the EU, and a ‘pessimistic scenario’ with larger increases. In the optimistic case, Brexit reduces UK income by 1.1% of GDP. In the pessimistic case, UK income falls by 3.1% (£50 billion per year).

- In the long run, reduced trade may lead to slower productivity growth. Factoring in these effects could easily more than double the costs of Brexit and lead to a loss in the pessimistic case comparable to the decline in UK GDP during the global financial crisis of 2008-09.

- Leaving the EU would also affect foreign direct investment, immigration and economic regulation in the UK. These effects are harder to quantify than changes in trade, but are likely to lead to further declines in income.

- The EU is currently negotiating major new free trade agreements with the United States (the Transatlantic Trade and Investment Partnership) and Japan. Using estimates from previous EU-negotiated free trade agreements, we estimate these trade deals will lower UK prices by 0.6% and save UK consumers £6.3 billion per year. With Brexit, these benefits would be lost.

- Staying in the EU may cause political trouble for the major parties; but if the UK leaves the EU, the economic trouble will be double.
Introduction

Unlike during the Great Depression of the 1930s, governments today have mostly resisted the temptation to erect new trade barriers following the global financial crisis of 2008-09. As a consequence, although world trade fell during the recession, it quickly recovered and it has helped to sustain growth in the struggling global economy.

But there is major concern over the direction of UK trade policy, stemming from uncertainty surrounding its future relationship with the European Union (EU). The Conservatives are committed to holding an ‘in-or-out’ referendum on membership by 2017. Labour and the Liberal Democrats have opposed this, but UKIP would take the UK out immediately. While the political consequences of leaving the EU (so-called ‘Brexit’) are much debated, less attention is given to the economic consequences. How would Brexit affect the UK economy and the income of UK citizens?

Quantifying the precise effects of leaving the EU is difficult, but the evidence suggests that Brexit would harm the UK economy – primarily by reducing trade with EU countries. Leaving the EU would also prevent the UK from benefiting from future free trade agreements (FTAs) negotiated by the EU, such as the Transatlantic Trade and Investment Partnership (TTIP) currently being negotiated with the United States.

Jumping off the trade train

Predicting the likely effects of Brexit is difficult. Leaving the EU would influence the UK economy in many ways. Trade, foreign direct investment (FDI), immigration and economic regulations would all be affected. There is also substantial uncertainty over what form the UK’s relationship with the EU would take following Brexit. Given the unavoidable policy uncertainty, most analyses of Brexit consider a range of possibilities reflecting different future policies.

The best understood channel through which Brexit would affect the UK economy is via changes in UK trade. EU membership has reduced trade barriers between the UK and EU countries, leading to increased trade. When the UK joined the European Economic Community in 1973, just over 30% of UK exports went to the EU. By 2008, over 50% of UK exports went to EU countries (see Figure 1).
Consumers benefit from reductions in trade barriers that reduce the price of imported goods and services. Businesses benefit from new export opportunities that lead to higher sales and profits. Workers benefit from trade that allows the UK to specialise in industries where it has a comparative advantage. All these channels raise efficiency and therefore income.

We use a quantitative model of the global economy to estimate how leaving the EU would affect the UK economy through changes in trade. The model takes account of trade in 35 sectors (including intermediates) among the 40 major countries of the world. We analyse two scenarios for how leaving the EU would affect trade costs:

- An optimistic scenario, in which the UK continues to have an FTA with the EU (much like Switzerland and Norway currently do through the European Free Trade Association, EFTA).
- A pessimistic scenario, in which the UK is not able to negotiate such favourable terms and there are larger increases in trade costs.

We also account for fiscal transfers between the UK and the EU. The UK transfers some resources to the EU, mainly to subsidise agriculture and poorer member states. Ignoring transition costs and any direct or indirect benefit to the UK from these fiscal transfers, leaving the EU would bring home the equivalent of about 0.53% of national income (HM Treasury, 2013). This is the main potential benefit of Brexit.

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1 For technical details, see Ottaviano et al, 2014.
But non-EU members like Norway and Switzerland pay to be part of the European single market. On a per capita basis, Norway’s financial contribution to the EU is 83% of the UK’s payment and Switzerland’s contribution is 41% as large. Therefore, if the UK were to adopt the Norwegian or Swiss models after leaving the EU, the fiscal benefits of Brexit would be substantially less than 0.53%.

There are three main reasons why trade costs may increase after Brexit:

- Higher tariff barriers between the UK and the EU.
- Higher non-tariff barriers to trade (arising from different regulations, border controls, etc.) between the UK and the EU.
- Non-participation in future steps the EU takes towards deeper integration and the reduction of non-tariff barriers.

In the pessimistic scenario, we assume that MFN\(^2\) tariffs on goods apply to UK-EU trade. This seems reasonable immediately following withdrawal, but in the medium term, the UK may be able to negotiate an FTA with the EU. Hence, in the optimistic scenario, we assume that tariffs continue to be zero.

Another important source of trade costs lies in non-tariff barriers related to regulations and other legal obstacles that affect trade in both goods and services. In the pessimistic scenario, we assume that the UK faces two thirds of the reducible non-tariff barriers faced by the United States when trading with EU countries. In the optimistic scenario, we assume that the UK faces one quarter of the reducible non-tariff barriers.\(^3\)

Finally, over a period of time, intra-EU trade costs have been falling approximately 40% faster than trade costs between other OECD countries. In the event of Brexit, the UK would not benefit from future reductions in non-tariff barriers within the EU. In the pessimistic scenario, we assume that intra-EU non-tariff barriers continue to fall 40% faster than in the rest of the world over the next decade, leading to a cumulative fall in trade costs of 10%. In the optimistic scenario, we assume that intra-EU barriers fall only 20% faster than in the rest of the world, leading to a total fall in trade costs of only 5.7%.

Our analysis takes into account the effects of Brexit on both trade with the EU and trade with the rest of the world. It is sometimes argued that Brexit would allow the UK to increase trade with fast-growing economies such as China and India. In practice, changes in trade with the rest of the world are unlikely to be large. Being part of the EU does not restrict UK companies’ ability to trade with the rest of the world. And the size of the EU economy gives it a stronger bargaining position in trade negotiations than the UK would have on its own. Moreover, as our nearest neighbour, Europe is the UK’s natural trade partner.

\(^2\) Most Favoured Nation Status (MFN) is the highest level of tariffs allowed between members of the World Trade Organization.

\(^3\) These correspond to an increase of non-tariff costs of 5.4% in the pessimistic scenario and 2% in the optimistic scenario.
Table 1: The effect of Brexit on UK welfare (static model)

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<thead>
<tr>
<th></th>
<th>Pessimistic</th>
<th>Optimistic</th>
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<tbody>
<tr>
<td>1. Increase in tariffs</td>
<td>-0.14%</td>
<td>0.00%</td>
</tr>
<tr>
<td>2. Increase in non-tariff barriers</td>
<td>-0.93%</td>
<td>-0.40%</td>
</tr>
<tr>
<td>3. Future falls in non-tariff barriers</td>
<td>-2.55%</td>
<td>-1.26%</td>
</tr>
<tr>
<td>4. Fiscal benefit</td>
<td>0.53%</td>
<td>0.53%</td>
</tr>
<tr>
<td><strong>5. Total welfare change</strong></td>
<td><strong>-3.09%</strong></td>
<td><strong>-1.13%</strong></td>
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Notes: Welfare measured by change in real consumption in the UK. Source: Ottaviano et al, 2014.

Table 1 summarises the results of our analysis. In the optimistic scenario, there is an overall welfare loss of 1.13%, which is driven by current and future changes in non-tariff barriers. Non-tariff barriers play a particularly important role in restricting trade in service industries such as finance and accounting, an area where the UK is a major exporter. In the pessimistic scenario, the overall loss swells to 3.09%, with most of the impact coming from non-tariff barriers (2.55%). The costs of reduced trade far outweigh the fiscal savings. In cash terms, the loss is £50 billion in the pessimistic scenario and a still substantial £18 billion in the optimistic scenario.

The estimates in Table 1 are based on a conventional static trade model that does not take account of the dynamic effects of trade on productivity growth. Recent research has found that dynamic effects may double or triple the size of the static effects (Bloom et al, 2014; Sampson, 2014). Therefore, Table 1 is likely to underestimate the costs of Brexit.

An alternative way to evaluate the consequences of Brexit is to use the results of simple, less theory-based empirical studies of the effects of EU membership. Baier et al (2008) find that after controlling for other determinants of bilateral trade, EU member states trade substantially more with other EU countries than they do with members of EFTA. Their estimates imply that, if the UK leaves the EU and joins EFTA, its trade with countries in the EU will fall by about a quarter.

Combining this with estimates that a 1% decline in trade reduces income by between 0.5% and 0.75% (Feyerer, 2009) implies that leaving the EU and joining EFTA will reduce UK income by at least 2.2% in the optimistic scenario and between 6.3% and 9.5% in the pessimistic one. These estimates are much higher than the costs obtained from the static trade model, which suggests that the dynamic gains from trade may be important. To put these numbers in perspective, during the 2008-09 global financial crisis the UK’s GDP fell by around 7%.

The bottom line is that the costs of Brexit are likely to be at least double the losses obtained in the static analysis shown in Table 1. Hence, even under the most optimistic assumptions, we would expect a 2.2% fall in consumption per capita; under pessimistic assumptions, the fall could be as large as 6.3% to 9.5%.
Missing the next trade train?

The EU is currently negotiating a major new FTA with the United States (the TTIP) – as well as an ‘economic partnership agreement’ (EPA) with Japan. If the UK leaves the EU, it will not benefit from these and other free trade agreements negotiated by the EU in future.

Over the past two decades, the EU has negotiated a number of FTAs containing traditional tariff reductions as well as additional liberalisation measures linked to non-tariff barriers, services trade, government procurement and the protection of intellectual property rights. Economic theory predicts that FTAs lower trade barriers on imported goods, leading to consumer welfare gains from increases in product variety, higher quality products and lower prices for existing products.

CEP researchers (Breinlich et al, 2015) have quantified the impact of recent EU FTAs on consumers in the UK and the EU12 (the 12 member states of the EU prior to the 1995 enlargement – Belgium, the Netherlands, Luxembourg, France, Germany, Italy, the UK, Ireland, Denmark, Greece, Portugal and Spain). Their methodology consists of two steps. First, international trade data are used to compute measures of variety, quality and quality-adjusted prices available to consumers. Then it is estimated how these measures are affected by trade liberalisation resulting from FTAs entered into by the EU.

The main finding is that trade agreements negotiated by the EU provided UK and EU12 consumers with access to better quality products and lower quality-adjusted prices for imported products. On average, trade agreements the EU has entered into over the past two decades have increased the quality of UK imports from its FTA partners by 26% and lowered the quality-adjusted price of imports by 19%. For the EU12, quality increased by 28% and quality-adjusted prices decreased by 11%. Overall, consumer prices fell by 0.5% for UK consumers as a result of FTAs with trade partners that are not EU member states, saving UK consumers £5.3 billion per year.

Based on this historical experience, we estimate that the TTIP agreement with the United States would lower prices by 0.4% and the EPA with Japan would lower prices by 0.2%. Together, these agreements would save UK households £6.3 billion.

Foreign direct investment, immigration and regulation

The UK received the most FDI of any European country in 2011, and of all the countries in the world, only the United States has a higher stock of inward FDI (House of Commons, 2013). Part of the attraction of the UK for foreign companies is as an export platform to the rest of the EU, so if the UK is outside the trading bloc, this position is likely to be threatened (HM Treasury, 2010; Barrell and Pain, 1998). This matters because foreign multinationals tend to be high productivity firms and they bring new technologies and management skills with them (Bloom et al, 2012).

There is also some evidence of positive productivity spillovers from FDI undertaken in the UK (Haskel et al, 2002). Indeed, given the large sunk costs involved in FDI, the uncertainty generated by the possibility of an in-or-out referendum may have a negative impact on
investment in the run-up to the vote (see Bloom et al, 2007, on the importance of uncertainty for investment).

Outside the EU, the UK could restrict immigration from the rest of the EU, while UK citizens would be likely to face reciprocal restrictions on their ability to live and work in EU countries. Economically, migration acts much like trade, as people tend to move to countries where they can be more productive and earn higher incomes, increasing total welfare. Restricting this mobility will, just like restricting trade, reduce overall UK welfare. Di Giovanni et al (2012) find that the maximum size of such effects would be a loss of 1.5% of income.

A counter-argument used to support restrictions on labour mobility is that immigration from the EU has harmed UK-born workers in terms of jobs, wages and access to public services. But there is no compelling evidence that these negative effects exist (as shown in CEP’s Election Analysis of immigration and the UK labour market).

As a member of the EU, the UK is able to influence the rules and regulations governing the EU single market. Even if the UK maintained full access to the single market following Brexit, it would be in the same situation as Switzerland: UK exports would have to obey EU regulations, but the UK would not have a seat at the table when the rules of the single market were decided.

The UK will continue to remain outside the Eurozone. As the UK is one of the Eurozone’s major trading partners, downturns in the Eurozone will have negative effects on the UK economy, but by maintaining an independent monetary policy, the UK can insulate itself from the worst effects of a Eurozone meltdown. Whether or not Brexit occurs will not affect the UK’s ability to stay out of the Eurozone and run its own monetary policy.

Conclusions

The economic consequences for the UK from leaving the EU are complex. But reduced integration with EU countries is likely to cost the UK economy far more than is gained from lower contributions to the EU budget. Static losses due to lower trade with the EU would reduce UK GDP by between 1.1% in an optimistic scenario and 3.1% in a pessimistic one. The losses due to lower FDI, less skilled immigration, and the dynamic consequences of reduced trade could also be substantial.

Staying in the EU may cause political trouble for the major parties; but if the UK leaves the EU, the economic trouble will be double.

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Further reading


