

Key Points

This paper summarises the impact that leaving the European Union (EU) could have on Scotland's GDP and public spending based on recent studies of the implications of leaving on the UK's long run economic performance¹. The key results are as follows:

- Membership of the EU has made an important contribution to Scotland's economic performance. It has removed barriers to trade, attracted investment and allowed EU workers to migrate to Scotland.
- A number of research institutes have identified options available to the UK, short of full EU membership. These can be broadly grouped into three categories: European Economic Area membership, Free Trade Agreement with the EU and World Trade Organisation trading rules.
- There is a broad consensus that these options would damage economic growth in the long run, compared to full EU membership.
- The impact that such outcomes could have on Scotland will depend on a range of factors including whether the Scottish Government is able to secure a relationship for Scotland with the EU, distinct from that of the UK. The Scottish Government has established a Standing Council on Europe who are working on possible options for Scotland's relationship with the EU to support this process.
- As an illustration, applying the results of a range of UK level studies to Scotland, suggests that if the UK adopted an alternative trading relationship with the EU, it could potentially reduce Scottish GDP by up to £11.2 billion per year by 2030, compared to what it could be if Brexit does not take place.
- This would reduce tax revenue, and in turn public spending. Leaving the EU could reduce Scottish tax revenues by between £1.7 billion and £3.7 billion a year by 2030. To put this into context, it is equivalent to a reduction in the Scottish Government budget of between 6% and 13%.

1. Introduction

The outcome of the EU Referendum is projected to have significant implications for Scotland's future economic performance.

¹ The 'long-run' implications of the EU referendum refers to the impact it is expected to have by 2030.

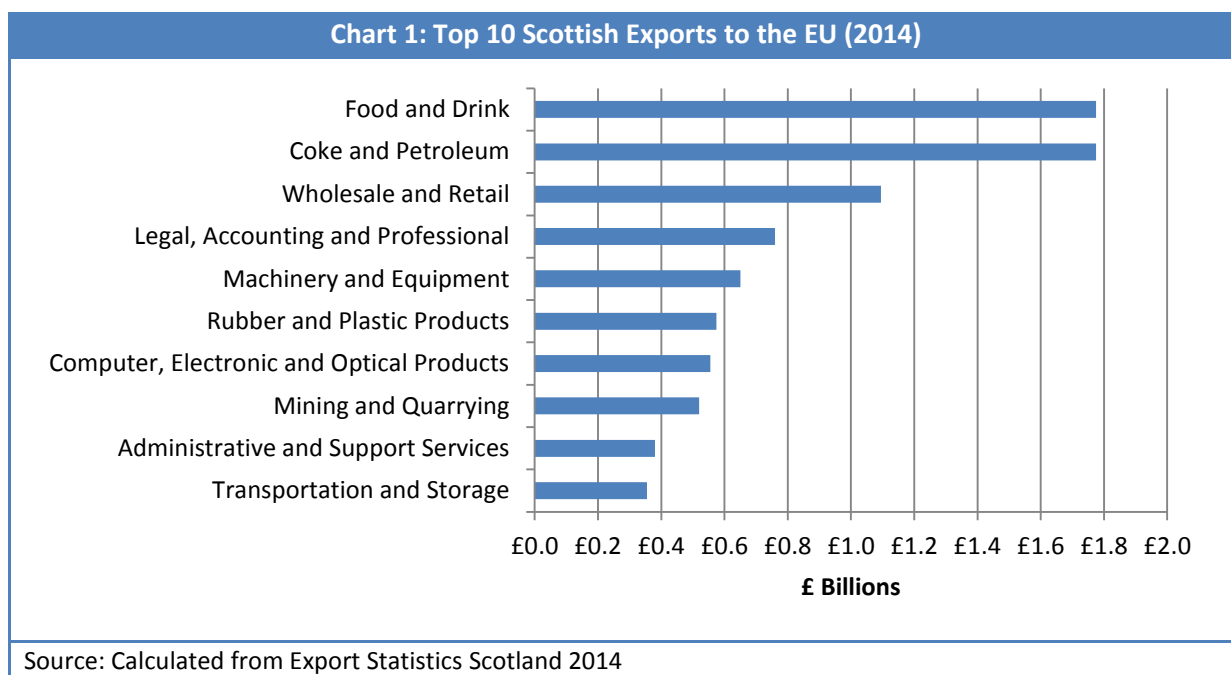
In the short term the referendum result has increased economic uncertainty. This in turn risks damaging consumer confidence and discouraging business investment and recruitment, all of which is projected to feed through to lower economic activity and employment over the next year. This is reflected in the latest forecasts of Scottish economic growth. For example, the Fraser of Allander Institute, an economic research body based at Strathclyde University, have revised down their forecasts of Scottish GDP growth in 2017 from 1.9% to 0.5% in light of the referendum result². A number of organisations have made similar downward revisions to their UK forecasts³.

In addition to generating a short term economic shock, the decision to leave the EU is projected to have implications for Scotland’s long term economic performance. This paper discusses the nature of this risk and draws on a range of published studies to illustrate the potential scale of the impact in Scotland. It is the first in a series of papers the Scottish Government plans to publish, discussing the implications that leaving the EU could have on different elements of the Scottish economy, alongside advice from the Scottish Government’s Standing Council on Europe on this issue.

2. Economic Benefits of EU Membership and Alternative Trade Options Outside

Membership of the EU has made an important contribution to the economic growth of both Scotland and the UK as a whole.

It has removed barriers to trade for Scottish based companies seeking to export to other EU members – a market of 500 million people. As a result, Scotland’s exports to the EU are now worth more than £11.6 billion a year – 42% of the country’s international exports⁴. EU membership also helps to facilitate some of Scotland’s trade with the rest of the world through the trade agreements that the EU has secured.



² Fraser of Allander Institute Economic Commentary July 2016

³ This can be seen in the monthly summary of independent forecasters published by HM Treasury

⁴ Calculated from Scottish Government – Exports Statistics Scotland 2014

EU membership is also important for attracting inward investment into Scotland as it allows companies easy access to European markets. There are nearly 1,000 EU-owned companies in Scotland employing over 115,000 people⁵. Scotland also secured more Foreign Direct Investment (FDI) projects than any part of the UK outside of London in 2015.⁶

The free movement of people that EU membership facilitates has also been a driver of economic growth. There are currently around 173,000 EU citizens living in Scotland, bringing new skills and expertise and in turn helping to underpin future productivity growth.

The UK Government's intention to take the UK out of the EU could therefore have implications for Scotland's future economic performance. It could potentially increase the cost of exporting to key European markets, reduce the country's attractiveness to overseas investors and impose new restriction on labour, increasing skills shortages and reducing productivity.

The scale of these impacts will depend on the extent to which the UK's future relationship with the EU retains access to the single market for goods, services, capital and people and maintains harmonisation of regulation. It also depends on the extent to which a future relationship allows the Scottish and UK governments to continue to shape EU economic policy to reflect the needs and preferences of Scottish and UK companies and individuals.

The Scottish Government has set out its commitment to protect Scotland's place in, and relationship with, the EU. A number of research institutes have, however, outlined possible options, short of full EU membership, which could be available to the UK. These can be broadly split into three groups, as summarised below.

- **European Economic Area membership** – This would see the UK retain access to the single market – and in turn the free movement of goods, services, capital and people. However, the UK would be outside the EU Customs Union which can be expected to increase the cost of trade. The UK would continue to make a contribution to the EU budget, and would have to adopt EU regulations but without the ability to influence them. The UK would not be party to any trade deals that the EU agreed with other countries.
- **Free Trade Agreement with the EU** - The UK could seek to negotiate a bilateral free-trade agreement with the EU as countries such as Switzerland and Canada have done.

Switzerland has a relationship with the EU based on a series of bilateral agreements. This gives Switzerland access to trade in goods though only partially on agricultural produce. However, there are constraints to Switzerland's access to trade in services such as professional services, including accountancy, auditing, and legal services. Switzerland has no general access to the EU market in financial services.

The EU Council will shortly consider the EU- Canada trade agreement agreed between negotiators in August 2014. The agreement provides for tariff free access to the EU for some

⁵ Source: Scottish Government: Businesses in Scotland, and ONS - Inter-Departmental Business Register

⁶ Source: EY - Attractiveness Survey 2016

goods and services and reduces other barriers to trade, but will still see barriers to trade and free movement of people relative to full EU membership

- **World Trade Organisation (WTO) Membership** - If no trade agreement is reached between the UK and the EU, the UK's trading relationship with the EU would revert to WTO rules.

Countries which have a relationship based on WTO terms alone have less favourable access to the EU Single Market. The EU imposes a common external tariff on countries outside, except those that have negotiated preferential access via bilateral trade agreements. Without a preferential trade deal, there would be no scope to vary these rates for the UK. The scale of such tariffs will vary by sector, but could have a material impact on the competitiveness of UK exports in certain sectors.

3. Economic Implications of Alternative Relationships with the EU

The UK Government has yet to set out its preferred model to underpin the UK's future relationship with the EU. Other EU members have also yet to collectively set out the relationship that they would wish the EU to have with the UK in the future. There is therefore uncertainty over which of the above options, or variation of, is the most likely outcome.

There is, however, a broad consensus amongst most economists that any of the above options would increase barriers to trade and result in lower economic growth than full membership of the EU over the longer term. This is expected to occur for a number of reasons.

- **Reduction in Trade with the EU** – Any relationship with the EU short of full membership risks reducing exports to the EU, due to the introduction of tariffs or other non-tariff trade barriers – for example, divergence in the harmonisation of regulations. All else being equal, such a decline in exports would lead to a depreciation in Sterling and therefore increase import prices. Taken together, these factors could lead to a fall in GDP, consumption and real wages compared to a scenario where the UK remained a full EU member⁷.
- **Lower Foreign Direct Investment** – The OECD estimates that the UK is currently the most attractive location for FDI investment in the EU⁸. They also note that *“If access to the Single Market was lost, lower FDI inflows would seem unavoidable, reducing the inflows of new ideas and knowledge into the UK”*⁹. EY make a similar point in their annual Attractiveness Survey. This found that 79% of investors listed access to the EU single market as an important element of the UK's attractiveness for investment.¹⁰ Such investment is an important source of employment. EY estimate that since 2006, FDI in Scotland has created nearly 40,000 jobs, as outlined in Chart 2. A lower inflow of investment would therefore have a direct impact on job creation. It can also be expected to damage wider drivers of economic growth. For example, FDI projects often introduce new technology, management

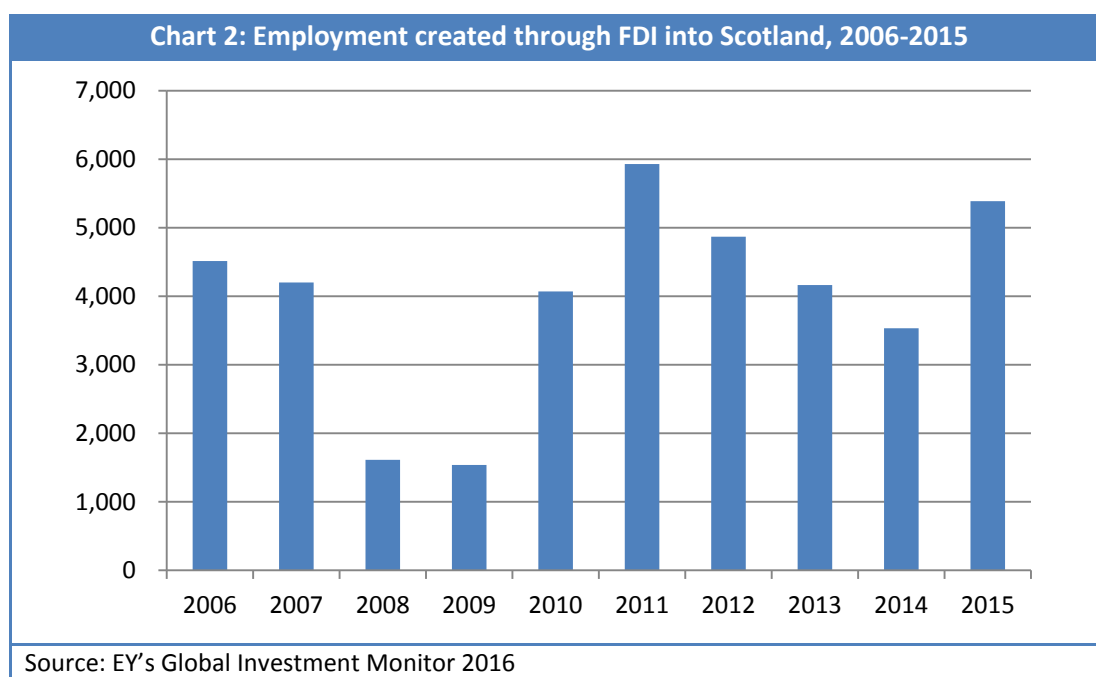
⁷ For a further discussion of this channel see National Institute of Economic and Social Research (2016) - Modelling the Long-run Economic Impact of Leaving the European Union

⁸ OECD (2016) - The Economic Consequences of Brexit - A Taxing Decision, Pg 24

⁹ OECD (2016) - The Economic Consequences of Brexit - A Taxing Decision, Pg 25

¹⁰ Source: EY - Attractiveness Survey 2016, Pg 5

techniques and innovations which, over time, can feed through the wider economy. This in turn can provide a boost to a country's overall productivity growth and prosperity.



- Lower Migration** – The UK Government has previously stated its desire to reduce net migration into the UK. If this occurred following the UK leaving the EU it would have implications for Scotland's economy. EU migrants are typically of working age and help to address skill and labour shortages in key sectors. Over the longer term, they can also help to offset the demographic pressures that both Scotland and the UK as a whole will face as a result of their populations aging. In Scotland, EU migrants account for approximately 5% of all those in employment.¹¹ However, this share varies across sectors and regions. For example, EU migrants account for around 8% of employees in the 'Distribution, hotels and restaurants' sector and around 7% of employees in the Manufacturing sector.
- Impact on the Public Finances** – There is a broad consensus that leaving the EU would have a negative net impact on the UK public finances. This is despite the UK currently making a net contribution to the EU budget (i.e. it pays in more than it receives back in EU funding). This is because the saving on the net contribution to the EU budget would be more than offset by the negative impact that lower economic growth would have on tax receipts, through the channels outlined above. As such, the funding available for public services would be lower than under a counterfactual where the UK remained part of the EU (see page 8).

4. Potential Scale of the Long Term Economic Impact

A number of organisations have estimated the potential impact on competitiveness that different trading relationships with the EU, short of full membership, could have on the UK's long-term economic performance.

¹¹ 2015 figure from Annual Population Survey, ONS

These estimates are summarised in the tables below¹². It is important to note that these forecasts use a range of different assumptions and modelling methodologies. This results in a range of potential outcomes, illustrating the uncertainty about the scale of the potential effect.

Whether Scotland succeeds in securing a relationship with the EU distinct from the UK will have a material impact on the implications of Brexit on Scotland. The Scottish Government has established a Standing Council on Europe – including specific expertise on the economy – who are working on possible options for Scotland’s relationship with the EU to support this process.

As an illustration, assuming that Scotland were to follow the path taken by the UK as a whole, the tables below summarise the indicative impact on Scotland implied by existing UK level analysis.

European Economic Area Membership

Membership of the European Economic Area (EEA) is likely to impose fewer barriers to trade than either a bilateral Free Trade Agreement or a WTO style agreement. Most analysts therefore suggest that the economic impact of this scenario, whilst material, would be lower than under the other two scenarios.

The analysis summarised below suggests that EEA membership could reduce UK GDP by around 1.3% to 7.9 % in the long term compared to a scenario where the UK remains a member of the EU¹³. Applying this impact to Scottish GDP for 2015 implies a long run impact of £1.8 billion to £11.2 billion – equivalent to £300 to £2,100 per person.

The potential effects could, however, be larger. For example, the Centre for Economic Performance (CEP), a research institute at the London School of Economics, calculates that the impact on the UK’s long term economic performance could be as high as 6.3% to 9.5% of GDP¹⁴. This is estimated by taking into account the fact that a significant drop in UK trade from leaving the EU could additionally result in lowered productivity growth, thereby further constraining future economic performance. The CEP highlight that such results are of a similar magnitude to the benefits that the UK has estimated to have gained since joining the EU in 1973¹⁵.

¹² The analysis underlying these tables is taken from the following reports.

CEP (2016) - The consequences of Brexit for UK trade and living standards

HM Treasury (2016) - The long-term economic impact of EU membership and the alternatives

NIESR (2016) - The Long-Term Economic Impact of Leaving the EU

PWC (2016) - Leaving the EU: Implications for the UK economy

OECD (2016) - The Economic Consequences of Brexit: A Taxing Decision

¹³ The ‘long-run’ implications of the EU referendum refers to the impact it is expected to have by 2030.

¹⁴ Centre for Economic Performance (2016) - The consequences of Brexit for UK trade and living standards

¹⁵ Centre for Economic Performance (2016) - The consequences of Brexit for UK trade and living standards, Pg 8

Table 1 - Estimated Long Term Impact of a European Economic Agreement on GDP

Organisation	Estimated Impact on UK GDP (%)	Implied Impact on Scottish GDP	Implied Impact on Scottish GDP Per Person
Centre for Economic Performance (dynamic analysis) – midpoint of estimates	-7.9%	-£11.2 billion	£2,100
HM Treasury	-3.8%	-£5.4 billion	£1,000
National Institute of Economic and Social Research (static analysis)	-1.8%	-£2.6 billion	£500
Centre for Economic Performance (static analysis)	-1.3%	-£1.8 billion	£300

Note: Estimates are relative to a counterfactual where Scotland/UK remains a member of the EU. CEP analysis reports impact on GDP per capita rather than total GDP. Scottish figures are expressed in terms of 2015 GDP and using 2015 population estimates for Scotland. Implied GDP impact on Scotland is assumed to be proportionate to the corresponding estimated impact on the UK.

Free Trade Agreement with the EU

Table 2 summarises the estimated impact that the UK securing a free trade agreement with the EU could have on the country's long term GDP, compared to a counterfactual where it remains a member of the EU. The implied impact on Scotland is also shown.

The results suggest a wide range of potential impacts. This partly reflects the fact that there is no single template for a bilateral free trade agreement. However, in general, the results suggest that a Free Trade Agreement with the EU could result in a bigger hit to GDP than membership of the EEA. This reflects the fact that such agreements typically do not provide unfettered access to the single market, and in turn can introduce additional barriers to trade.

The results would imply that at a Scotland level, a free trade agreement could reduce GDP by the equivalent of £1.7 billion to £8.8 billion a year in the long term. This is equivalent to £300 to £1,600 per person.

Table 2 - Estimated Long Term Impact of a Free Trade Agreement Scenario on GDP

Organisation	Impact on UK GDP (%)	Implied Impact on Scottish GDP	Implied Impact on Scottish GDP Per Person
HM Treasury	-6.2%	-£8.8 billion	-£1,600
OECD (central scenario)	-5.1%	-£7.3 billion	-£1,400
National Institute of Economic and Social Research (static)	-2.1%	-£3.0 billion	-£600
PWC	-1.2%	-£1.7 billion	-£300

Note: Estimates are relative to a counterfactual where Scotland/UK remains a member of the EU. Scottish figures are expressed in terms of 2015 GDP and the 2015 population estimates for Scotland. Implied GDP impact on Scotland is assumed to be proportionate to the corresponding estimated impact on the UK.

World Trade Organisation Membership

Table 3 summarises the estimated impact that reverting to WTO membership rules to underpin UK/EU trade could have on the UK's long term GDP, compared to a counterfactual where the UK remains a member of the EU. The implied impact on Scotland is also shown.

The results suggest that, in the long run, this outcome would have the greatest negative impact on future economic performance, compared to remaining in the EU. In a Scottish context, the implied impact of the shock could be up to £11.2 billion a year – equivalent to approximately £2,100 per person.

Table 3 - Estimated Long Term Impact of a World Trade Organisation Scenario on GDP			
Organisation	Impact on UK GDP (%)	Implied Impact on Scottish GDP	Implied Impact on Scottish GDP Per Person
Centre for Economic Performance (dynamic analysis) – midpoint of estimates	-7.9%	-£11.2 billion	-£2,100
National Institute of Economic and Social Research (dynamic analysis)	-7.8%	-£11.1 billion	-£2,100
HM Treasury	-7.5%	-£10.7 billion	-£2,000
OECD (central scenario)	-5.1%	-£7.3 billion	-£1,400
PWC	-3.5%	-£5.0 billion	-£900
National Institute of Economic and Social Research (static analysis)	-3.2%	-£4.6 billion	-£800
Centre for Economic Performance (static analysis)	-2.6%	-£3.7 billion	-£700

Note: Estimates are relative to a counterfactual where Scotland/UK remains a member of the EU. Scottish figures are expressed in terms of 2015 GDP and the 2015 population estimates for Scotland. Implied GDP impact on Scotland is assumed to be proportionate to the corresponding estimated impact on the UK.

Potential Scale of the Long Term Impact on the Public Finances

If the decision to leave the EU results in a permanent reduction in future economic growth, this would reduce the tax revenue which the UK was able to generate, and in turn the level of public spending that it could sustain.

The table below summarises the estimates produced by HM Treasury of the impact that the three alternatives to EU membership could have on UK tax receipts, relative to a scenario where the UK remains in the EU. This suggests that there could be a long run reduction in funding for public services of between £20 billion and £43 billion a year.

Alternative analysis by the Institute for Fiscal Studies, based on work by the National Institute of Economic and Social Research on the economic impact of leaving the EU, suggests that in the long

term it could lead to a reduction in the amount available for public spending of between £7 billion and £48 billion a year¹⁶.

Table 4 also shows the implied impact that these UK level shocks could have at a Scotland level – assuming a per capita impact of the corresponding UK total. The results suggest that in the long term leaving the EU could reduce Scottish tax revenues by between £1.7 billion and £3.7 billion a year. To put this into context, it is equivalent to a reduction in the Scottish Government budget of between 6% and 13%.

Table 4 - Estimates of Leaving the EU on UK Public Finances			
Scenario	Estimated Net Impact on UK Receipts	Per Capita Net Impact on Scottish Receipts	Equivalent reduction in Scottish Government budget
EEA	£20 billion	£1.7 billion	6%
FTA	£36 billion	£3.0 billion	10%
WTO	£43 billion	£3.7 billion	13%

UK level estimates taken from HM Treasury (2016) - The long-term economic impact of EU membership and the alternatives. Per capita impact is assumed for Scotland. Scottish Government budget refers to fiscal DEL budget for 2015-16

5. Conclusion

Membership of the EU has made an important contribution to Scotland’s economic performance.

A range of options have been proposed for the UK, short of full EU membership. These typically include European Economic Area membership, Free Trade Agreement with the EU and World Trade Organisation trading rules. There is a broad consensus that these options would damage UK economic growth in the long run, compared to full EU membership.

The impact that such outcomes could have on Scotland will depend on a range of factors including whether the Scottish Government is able to secure a relationship for Scotland with the EU, distinct from that of the UK.

The analysis above suggests that if the UK adopted one of these alternative trading relationships it is projected to have a material impact on Scottish GDP and public spending, compared to what it could be if Brexit does not take place.

¹⁶ IFS (2016) - Brexit and the UK’s Public Finances, Pg 64