Frictionless trade?
What Brexit means for cross-border trade in goods

Alex Stojanovic and Jill Rutter
About this paper

This paper looks at the integration of UK and European Union (EU) supply chains and the options for securing ‘frictionless trade’ after Brexit. It assesses the various ‘off-the-shelf’ options for the UK’s future relationship with the EU and what each means for the UK’s pan-European supply chains.

The paper sets the context for our upcoming Implementing Brexit: Customs paper, where we will explore the work required to prepare the UK’s borders for Brexit.

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<table>
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<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>BEIS</td>
<td>Department for Business, Energy &amp; Industrial Strategy</td>
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<tr>
<td>CETA</td>
<td>Comprehensive Economic and Trade Agreement</td>
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<td>Defra</td>
<td>Department for Environment, Food &amp; Rural Affairs</td>
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<tr>
<td>EEA</td>
<td>European Economic Area</td>
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<td>ENS</td>
<td>Entry Summary Declaration</td>
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<td>EU</td>
<td>European Union</td>
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<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
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<tr>
<td>ICT</td>
<td>Information and communication technology</td>
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<td>IT</td>
<td>Information technology</td>
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<tr>
<td>NCTS</td>
<td>New Computerised Transit System</td>
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<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
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<tr>
<td>R&amp;D</td>
<td>Research &amp; development</td>
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<td>SAD</td>
<td>Single Administrative Document</td>
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<tr>
<td>TiVA</td>
<td>Trade in Value Added</td>
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<td>TTIP</td>
<td>Transatlantic Trade and Investment Partnership</td>
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<tr>
<td>UK</td>
<td>United Kingdom</td>
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<tr>
<td>US</td>
<td>United States</td>
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<td>WTO</td>
<td>World Trade Organization</td>
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1. Summary

The UK imports and exports more to and from the EU now than at any other time in history. But this growth and increased integration of markets is not just about buying and selling finished products – two-thirds of growth in UK exports comes from exporting parts. And nearly a quarter of the value of UK exports comes from imports. In the automotive sector, this figure is much higher – 44% of its exports value comes from imports. It is increasingly the case that imports drive exports and the two are interlinked as parts of global and regional supply chains.

The UK’s trade in parts is more integrated with the EU than the rest of the world – for sectors such as food and beverages the EU accounts for close to 70% of the international supply chain. Membership of the EU has facilitated this integration. Exports can be shipped back and forth between the continent and Britain many times with few disruptions. This has led to efficiencies and specialisation but also to greater interdependence.

Leaving the EU threatens to disrupt those supply chains that depend on both tariff-free access and the absence of border checks. The Government recognises this risk and is seeking both a ‘deep and special trade partnership with the EU’ and a customs cooperation agreement to achieve its ambition of ‘frictionless trade’. Otherwise, leaving the EU will introduce new compliance requirements on firms that export, additional costs for those that import and delays on both sides of the border. Checks are potentially far more onerous for sectors such as agriculture – a big issue for the Irish border.

Brexit inevitably introduces friction to supply chains. There is no model of future relationship that can offer traders ‘the exact same benefits’ as EU membership. While there is no perfect solution, this paper explores each potential option and finds that they mitigate the introduction of new trade barriers in different ways:

• **A deep and comprehensive free trade deal** could, in theory, remove many obstacles if it went well beyond any agreement the EU has already concluded with another third country. Generally, the deeper the agreement, the greater the loss of control over laws and regulations. Without a softening of ‘red lines’ from either the UK or EU side, it is hard to see how a deal could prevent the introduction of any regulatory barriers. Even if it could, UK exporters would still have to prove that goods originated in the EU to qualify for preferential tariffs. A deal this comprehensive is unlikely to be concluded within the Article 50 window.

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• A **customs union agreement**, like the arrangement between the EU and Turkey, could help to avoid origin checks. But Turkey is obliged to levy the EU’s common external tariff, which impedes its ability to run an independent trade policy. And as its Customs Union only applies to industrial goods, it still faces border checks on agricultural goods and its trucks cannot circulate freely within the EU. This means long tailbacks at the Turkish–Bulgarian border. The UK might seek to include agricultural goods in a customs union agreement (to avoid checks at the Irish border) – but the price would likely be to keep following EU rules.

• **Staying in the Single Market**, like Norway, would allow the UK to have an independent trade policy, but at the price of origin checks and accepting EU rules, with no formal say over them. This option goes the furthest in maintaining frictionless trade in terms of services, but exporters would still need to prove origin for goods and agricultural and fisheries products (which are not covered by the Single Market and face border checks). All Single Market members accept the ‘four freedoms’\(^\text{a}\) and contribute to the EU budget.

• Membership of both the **Single Market and a customs union arrangement** comes the closest to minimising disruption. This may be needed as a transitional arrangement but as a permanent arrangement it is really just EU membership without the institutions or commitments and, crucially, without the political influence.

• Leaving with **no deal** is a recipe for maximum disruption. That no major trading partner trades with the EU on World Trade Organization (WTO) terms alone indicates the unattractiveness of this option. It would mean document checks, testing and inspection at the border. Tariffs would damage the competitiveness of many sectors.

In order to decide its stance in the negotiations on the UK’s future relationship with the EU, the Government needs fully to understand the costs to business from disrupting supply chains – and the sources of those costs (rules of origin, regulatory checks, potential border delays) – and weigh them against the benefits of, for example, more regulatory flexibility or the ability to negotiate new trade deals. It needs to be realistic about the speed of adjustment – both implementation by government and adaptation by business. Above all, it needs to publish its analysis of where the costs and benefits lie to allow the informed debate over negotiating priorities that has been lacking in the period since the EU Referendum in June 2016.

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\(^\text{a}\) The ‘four freedoms’ of the EU allow for free movement of goods, capital, services and labour.
The UK has become increasingly integrated into the European economy in its 44 years of membership of the EU, and the 24 years since the Single Market was established, the latter being comprised of members of the EU plus members of the European Economic Area (EEA).

Before the General Election in June 2017, the Government was clear in its intention to leave both the Single Market and the Customs Union. It is now seeking both a new free trade agreement and a customs agreement, with the aim of allowing ‘frictionless trade’ to continue. At the time of writing, despite being more than four months since the triggering of Article 50 of the Treaty on European Union, the Government has yet to produce concrete proposals on how to achieve this. Meanwhile, the General Election result has reinvigorated discussion of alternative options – either for a permanent new relationship with the EU or for a transition away from full membership and participation.

The UK is not an island factory. Most UK sectors – such as cars, electrics and pharmaceuticals – are one part of a regional or global supply chain. The aim of this paper is to look at the implications of exiting the EU for UK supply chains and to explore some possible options in this context. We focus on goods – and in particular on manufactured goods – as important pieces of the UK economy as a whole.

Yet it should be noted that exit from the Single Market also has potentially serious implications for the UK services sector as well. Although the Single Market in services is much less complete than that in goods, the sector (both financial and non-financial) is vital to the strength of the UK economy – with exports of services to the EU running at £94 billion compared with goods exports of £144 billion in 2016. The provision of services and goods is interconnected – as is clear from the analysis that follows – but the needs of the services sector are very different from those of the goods sector and we do not attempt to do justice to the complexities involved in this paper.

In the next section of the paper, we set out what is at stake: the nature of the UK’s integration into European supply chains. In subsequent sections, we look at what leaving the EU with no deal would mean for cross-border trade and explore the options for minimising disruption.

We do not deal with the issue of the UK’s border with the Republic of Ireland specifically in this paper. But it is here that the impacts we describe have the potential to be felt most acutely.
The UK and global value chains

Trade is important in the UK economy. Gross imports and exports were equivalent to just under 60% of the UK’s Gross Domestic Product (GDP) in 2015. This is more integrated into world trade than the United States (US) (30%), roughly in line with a country such as France, but substantially less open than Germany (85%) (see Figure 1).

**Figure 1: Trade as a percentage of GDP, 1960–2015**

Source: Institute for Government analysis of World Bank National Accounts Data

Between 2000 and 2011, one-third of the growth in UK exports came from an increase in ‘finished goods’ (see Figure 2). There is a tendency for ministers to talk as if these finished goods – for example, a package of Nissan cars, Brompton bicycles and innovative jams – are the entirety of the UK’s exports. But between 2000 and 2011, two-thirds of the growth in UK exports came from exporting parts, not the finished article – for example, exhaust pipes, bike chains and jam jars. These ‘intermediate goods’ are then worked in other countries, and might return to the UK as new parts or as finished goods. The UK is not an island factory, but one part of an international production line, known as a ‘global value chain’.

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*  This includes goods and services.
It is increasingly the case that, to export, the UK imports. In 2011, almost a quarter of the value of UK exports came from imports (up from 18% in 1995; see Figure 3). In those sectors where the UK is more closely integrated into a global value chain, the figure is significantly higher; 44% of the value of UK car exports comes from imported products.³ This integration in global supply chains reflects the fact that, in a globalised economy, individual countries specialise not just in particular industries, but also in particular parts of particular industries.

Source: Institute for Government analysis of Organisation for Economic Co-operation and Development (OECD) Trade in Value Added (TiVA) data

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Source: Institute for Government analysis of Organisation for Economic Co-operation and Development (OECD) Trade in Value Added (TiVA) data
Box 1: **The car sector**

The UK car sector added £15 billion of value to the UK economy in 2014. But as Figure 4 shows, this value was focused in specific stages of the manufacturing process.

The UK has a ‘revealed comparative advantage’ in finished cars, which make up 10% of UK exports compared with 4% of world exports. But while it has an advantage in bumpers, brakes and clutches, it is disadvantaged in radiators, suspension, gear boxes and airbags for example. The UK car industry is good at making some parts of a car, but not others, and is good at assembling a mix of UK and foreign parts into the finished vehicle.

**Figure 4: UK comparative advantage in cars and car parts, 2015**

This specialisation is reflected in the inputs and outputs of the UK car industry (see Figure 5). An input refers to what has gone into making a car; an output refers to what has been produced. Of the sector’s £64 billion total output (yellow), £12 billion is spent importing parts from the EU and £6 billion is spent importing from the rest of the world (green).

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* In the World Input–Output Database on which this analysis is largely based, the car sector is referred to as the ‘manufacture of motor vehicles, trailers and semi-trailers’.

** The ‘revealed comparative advantage’ is an index used in international economics for calculating the relative advantage or disadvantage of a certain country in a certain class of goods or services, as evidenced by trade flows. It is demonstrated by a comparison between the proportion of exports in a sector of the country in question with the proportion of global trade in that sector.
Foreign imports will also enter the UK car sector indirectly, through the consumption of parts from other UK sectors. In total, for every £1 that the UK car industry sells abroad, 44p is spent importing foreign parts. Almost half of the parts that the UK imports are then processed and re-exported as another part, for another country to make into a car.*

So although we might talk about making cars in Sunderland, for example, it is just one part of an international factory floor. Parts enter and leave multiple times on their journey towards coming together as a finished vehicle.

### Supply chain integration with the EU

As global trade has become increasingly important, so has trade with the EU. The UK is particularly integrated into European supply chains. While the EU accounts for around half of the UK’s total exports, it accounts for 60% of its exports of intermediate goods. Furthermore, the UK’s trade in parts (inputs to be used for further production) is more closely integrated with Europe than the rest of the world.

This integration – and the economic activity arising from it – is what is at stake when we describe the risk of introducing costs into UK–EU supply chains.

The UK’s integration into global supply chains flows in two directions:

- **downstream integration** – parts or inputs imported by the UK from other countries to be used for further production
- **upstream integration** – parts or inputs exported by the UK to other countries to be used for further production.

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So for a car bumper manufacturer in the UK, its downstream integration might be made up of imports of basic metals from the EU and its upstream integration might be car assembly at the factory in the EU country it exports to.

The UK’s level of integration with the EU varies significantly by industry. For the UK car sector, 24% of all its inputs are from the EU; the rest of the world contributes 13% of inputs and the remaining 63% come from other UK manufacturers (see Figure 6). For car parts manufactured in the UK, such as the car bumper, about 20% are exported to the EU for further production; the remaining parts either stay in the UK (67%) or are shipped to the rest of the world (14%).

For 14 UK sectors, at least 15% of their supply chain is dependent on imports from the EU. Of these, the top six import over 20%. Many of these sectors also export over 20% of their intermediate products to the EU. This means that, for sectors such as cars, chemicals, plastics and electricals, a high proportion of inputs is from the EU and a high proportion of their intermediate output is sold to the EU. This upstream and downstream dependency means that these sectors in particular are vulnerable to the disruption of their EU supply chain.

**Figure 6: Inputs to the UK supply chain and intermediate outputs from the UK (downstream and upstream integration), 2014**

<table>
<thead>
<tr>
<th>Inputs to UK supply chain (downstream integration)</th>
<th>UK intermediate outputs (upstream integration)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imported from ROW</td>
<td>Imported from EU</td>
</tr>
</tbody>
</table>

Source: Institute for Government analysis of the World Input–Output Database

Note: ICT = information and communication technology; R&D = research & development; ROW = rest of the world.
We have already seen that global trade is an important part of the UK economy. Focusing on the international supply chain of UK industries (so excluding UK inputs), we can identify the top 10 sectors whose supply chains are most integrated with the EU in comparison with the rest of the world (see Table 1). Focusing just on cross-border supply chains, some sectors' imports from or exports to the EU account for more than 70% of their international supply chain.

Table 1: The top 10 sectors whose trade is most integrated with the EU, 2014

<table>
<thead>
<tr>
<th>10 sectors that most depend on the EU for intermediate inputs</th>
<th>10 sectors that export most intermediate goods to the EU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper 71%</td>
<td>Food and beverages 75%</td>
</tr>
<tr>
<td>Rubber and plastics 69%</td>
<td>Farming 75%</td>
</tr>
<tr>
<td>Wood products 67%</td>
<td>Telecommunications 73%</td>
</tr>
<tr>
<td>Printing 67%</td>
<td>Science and technology 72%</td>
</tr>
<tr>
<td>Chemicals 66%</td>
<td>Fishing 71%</td>
</tr>
<tr>
<td>Car retail 66%</td>
<td>Administration 64%</td>
</tr>
<tr>
<td>Pharmaceuticals 66%</td>
<td>Forestry 61%</td>
</tr>
<tr>
<td>Food and beverages 65%</td>
<td>Wood products 60%</td>
</tr>
<tr>
<td>Cars 65%</td>
<td>Rubber and plastics 60%</td>
</tr>
<tr>
<td>Forestry 63%</td>
<td>Paper 58%</td>
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</tbody>
</table>

Source: Institute for Government analysis of the World Input–Output Database

Costs to supply chains

Given the level of integration of UK and EU supply chains, any introduction of ‘friction’ would increase costs in three ways.

Costs accumulate in a value chain

Supply chains that span the English Channel mean that any increase in the cost of moving things across the border will have an exponentially greater impact on the cost of the finished product – as parts bounce back and forth, the cost of the finished product goes up each time.*

This is particularly true of those goods that are manufactured without any warehousing, in which goods are delivered just in time for their use on the factory floor. Even if the UK’s departure from the EU only results in ‘spot checks’ at the border and is tariff-free, manufacturers may have to start using warehouses to build buffers into their plans, on the off-chance that they are pulled over for inspection.

For this reason, even minimal increases in the cost of moving individual parts back and forth across the EU–UK border could accumulate into significant overall increases in the cost of finished products. A study by Oxera in June 2016 found that around 8% of the cost of importing goods by sea arose from customs clearance. However, estimates of cost increases vary significantly between industries and the option the Government

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* For an illustration of the impact of tariffs on supply chains, see Campbell, P., ‘UK car industry fears effects of Brexit tariffs on supply chain’, Financial Times, 16 October 2016, https://www.ft.com/content/c39f174-9205-11e6-a72e-b428cb934b78
pursues. The Agriculture & Horticulture Development Board has estimated that the additional transactional costs would be ‘in the region of 8% to 10%, and perhaps a bit more than that’. Meanwhile, the Food & Drink Federation has estimated these costs at ‘a further eight per cent’, and added that the increase in transactional costs for ‘composite products’ is ‘likely to be higher’.

**Business models need to adapt**

Businesses will have to adapt the way they do business if delays disrupt supply chains. Nissan and Jaguar, two of the UK’s largest car makers, hold only two hours’ of stock of some items at their sites, in order to minimise inventories and save on costs. Even the threat of delays would mean the companies would have to invest in holding more inventory or localising suppliers. UK suppliers of parts face the risk of missing out on ‘just-in-time’ contracts if they cannot guarantee delivery on time.

**Specialised exports may struggle for new markets**

There have been suggestions that any decrease in trade with the EU as a result of Brexit could be offset by an increase in UK trade with other partners. There are many problems with this approach, not least that the sheer size of the EU market for UK exports means that a small percentage decrease in EU trade has to be offset by very large percentage increases in trade elsewhere.

But that pivoting strategy will be even more difficult for UK exports of intermediate products. A finished car can be sold to an Australian or to a German. But a car part can only be sold to countries that have car factories – which Australia doesn’t. As we have seen, cross-border supply chains often mean that countries specialise in particular parts of industries and the industry of another country may not be adapted or may have no need for specialised UK products.

In addition, customer demand for the specific produce of the UK may not exist in non-EU markets, either because it is produced domestically or because competitors may be already well established. In a paper on post-Brexit prospects for UK grains, Paul Temple notes that ‘[t]he staunch competition we’d face in new markets with bulk grain shipments is daunting’. Perishable products from the UK food and beverages sector pose a particular problem as produce can have a short shelf-life. This means that delays for export could lead to ruined produce.

For imports, although UK industry may supply the bulk of inputs to other UK industries, many cannot easily substitute their imports from the EU with UK products. These imports could be crucial inputs for production. To give one example, the UK no longer produces three of the major principal raw materials used by the chemicals industry. Delays and disruptions to the import of these products would lead to serious delays in production in the UK.

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Finally, some will suggest that these costs could be offset by the benefits to the UK economy derived from any potential onshoring. But where that onshoring leads to an increase in the cost of production, the cost will be passed on to consumers. And it is just as likely that onshoring results in the UK parts of the supply chain moving to the continent rather than the other way around.

Clearly, preventing the costs of disruption from accumulating in UK–EU supply chains will be vital post-Brexit. That is why the Government is putting a premium on achieving frictionless trade with the EU. However, it is worth examining what the current situation is before looking at possible scenarios. In the next section we look at how membership of the EU removes sources of friction, before considering, in Section 5, the potential impact if the UK leaves the EU with no deal.

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*Onshoring is the practice of transferring a business operation that was moved overseas, back to the country in which it was originally located.*
Friction in trade
There are many reasons why trade flows between states might increase. As a study on trade deals by the Organisation for Economic Co-operation and Development (OECD) notes, proximity and a similar culture can be two of the biggest defining factors. Yet in addition to these factors, removing barriers to trade, commonly referred to as ‘friction’, also plays a large part in increasing trade. Two barriers that most impact supply chains include tariffs and non-tariff barriers.

• **Tariffs or customs duties** are a state levy imposed on goods crossing from one customs territory to another. They require customs authorities to identify imports so that the correct applicable duties can be charged, which is already a source of potential delay and cost. The charges themselves make both imports and exports (because of duties on inputs) more expensive.

• **Non-tariff barriers** are any measures, other than a customs tariff, that act as a barrier to international trade. There are a large number of non-tariff barriers, but two major barriers are regulatory barriers and customs checks.
  o **Regulatory barriers** arise as long as different countries have different legal regulations on health, safety and environmental protection. As a result of pursuing legitimate regulatory objectives in these areas, countries may impose different product standards as conditions for the entry, sale and use of commodities. Countries with different regulatory regimes apply costly checks at the border when importing goods. These checks can range from inspections at the border to the testing of samples to ensure compliance.
  o **Customs checks** are any other paperwork required at the border, which can cause delays and costs, such as ‘rules-of-origin’ paperwork and customs declarations.

Friction in supply chains can be removed in three main ways: eliminating tariffs, minimising regulatory barriers, and customs cooperation. The EU’s Customs Union and Single Market aim to provide for the free movement of goods between member states, while customs cooperation is underpinned by customs regulation in the Union Customs Code.

The UK’s integration into the European economy
The UK’s integration into the European economy is facilitated by the Customs Union, the internal market and customs cooperation.

**The Customs Union removes tariffs between member states**
The Customs Union prohibits member states from charging tariffs on, or restricting the quantity (through quotas) of, goods traded within the EU. It does this by establishing a ‘common external tariff’ – a common set of duties charged to goods coming from third countries (countries outside of the EU) while abolishing those same duties inside the union. This means that all intra-EU trade is tariff-free.
The Single Market removes many regulatory barriers between member states

The Single Market is a ‘regulatory union’. It removes regulatory barriers in three main ways, through harmonisation, mutual recognition and market surveillance.

- **Harmonisation** replaces national legislation with common rules across the EU. These rules provide a predictable legal framework for businesses. If manufacturers follow the rules, their products can be sold freely in the market. In most sectors, this is limited to health and safety rules and technical specifications. In others, such as chemicals, the rules are stringent. But there are also more general single market rules designed to prevent countries from engaging in social or environmental dumping and thus ensuring a level playing field for firms competing within the Single Market.

- **Mutual recognition** applies to sectors where the rules are not harmonised. To prevent barriers to trade, it guarantees that any product lawfully sold in one EU country can be sold in another, even if the product does not fully comply with the technical rules of the other. As such, member states recognise the equivalence of national authorities’ domestic regulations.

- **Market surveillance** is achieved through a combination of three elements: a supranational court for resolving disputes on the basis of common rules; member states’ own domestic regulatory bodies and departments ensuring that EU rules are followed; and surveillance of member state compliance by the European Commission and European regulatory agencies. Their role can include visits to sites of manufacturers, providing support and training materials for domestic regulators and providing evidence of member state non-compliance to the court.

*Customs cooperation is underpinned by the Union Customs Code*

One of the founding treaties of the EU – *The Treaty on the Functioning of the European Union* – states that measures will be taken to strengthen customs cooperation between member states and the European Commission. The Union Customs Code is the framework regulation through which this is achieved. It defines all the formalities that must take place in the movement of goods between the EU member states and third countries, including import–export procedures, data requirements and common risk criteria. It also mandates greater use of information technology (IT) systems between member states’ customs authorities to allow for real-time information sharing.

*Taken together, these three elements remove much of the friction to trade within the EU in comparison with trade with third countries*

There is no need to collect tariffs or try to secure preferential tariff rates. Because of the trust in this EU-wide system that the same regulations and standards are being upheld, regulatory checks at the border are also kept to a minimum. Finally, member states are part of a network of customs authorities and public bodies that are connected by EU-wide IT systems.

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These institutions largely remove friction for trade between member states. The Government’s 2013 *Trade and Investment Balance of Competency Review* finds that, although the Single Market is not completely successful in removing non-tariff barriers, ‘intra-EU NTBs [non-tariff barriers] are shown to be substantially lower than NTBs reported by non-EU firms when operating in those same EU markets’. The report also finds that the greatest differences for reported non-tariff barriers in terms of goods are apparent in aerospace, chemicals (including drugs and cosmetics) and motor vehicles – unsurprisingly some of the sectors with the most integrated supply chains with the EU. To see why, we turn now to considering how leaving the EU with no deal would create friction and disrupt supply chains.
5. Maximum friction: the consequences of no deal

The EU institutions ensure that there are very few barriers to trade in goods within the EU. Leaving the EU with no agreement would mean introducing friction into UK–EU trade. The UK Government has said (although less so since the General Election in June) that it would be prepared to walk away with no deal with the EU in March 2019 and to trade on WTO terms alone. No deal is also a possibility if negotiations run out of time with no extension.

Whatever the cause of no deal, it would maximise friction and potential disruption to UK–EU supply chains.

**Tariffs would have to be applied to all UK imports from and exports to the EU**

No deal would mean trading with the EU on WTO terms, with no preferential access. This means that the UK would have to apply the same tariffs on imports from the EU as it did on imports from any other country with whom it did not have a free trade agreement – and the EU would have to apply its tariffs to the UK. This is what is referred to as trading with ‘most favoured nation’ status.

In general, EU tariffs are low, at around 2 to 3% of the value of the good. However, in some critical sectors of the UK, such as cars, they are significant (see Table 2) and in some areas, such as agricultural products, they can exceed 100%.

**Table 2: Examples of EU tariffs**

<table>
<thead>
<tr>
<th>Category</th>
<th>Average of EU duties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bicycles</td>
<td>14.5%</td>
</tr>
<tr>
<td>Cars</td>
<td>9.7%</td>
</tr>
<tr>
<td>Dairy produce</td>
<td>5.3%</td>
</tr>
<tr>
<td>Inorganic chemicals</td>
<td>4.5%</td>
</tr>
<tr>
<td>Aircraft</td>
<td>3.3%</td>
</tr>
<tr>
<td>Electrical machinery</td>
<td>2.8%</td>
</tr>
<tr>
<td>Article of iron or steel</td>
<td>1.7%</td>
</tr>
</tbody>
</table>


Some industries would be hit particularly hard by tariffs

Some industries will not be significantly affected by the imposition of tariffs because the EU’s tariff on their industry is low. However, the House of Lords inquiry into trade in goods heard from key UK export sectors that they would be damaged by the
imposition of tariffs. The Chemical Industries Association told the inquiry that tariffs ‘would have a significant impact on the competitiveness of the UK to continue to deliver into EU markets’.22

In the automotive sector, finished cars would suffer a 10% tariff in addition to car components’ tariffs ranging from 2.5 to 4.5%. But the automotive sector also depends on intermediate inputs that cross borders many times – and so costs accumulate in the supply chain. Evidence to the House of Lords from the Society of Motor Manufacturers and Traders stated that this would put the sector at an ‘immediate competitive disadvantage’.23

The Agriculture & Horticulture Development Board meanwhile told the inquiry that EU tariffs in the agricultural sector ‘differ significantly by product, being as high as 87% for frozen beef down to 3.8% on whole, fresh sweet potatoes’. Tariffs would therefore have a significant impact in some sectors of agriculture.24

The EU would have to treat the UK as a third country under the Union Customs Code
While particular industries would be more affected than others by tariffs, all UK exporters to the EU would be affected to a degree by the change in customs requirements. The Union Customs Code requires member states to apply import–export procedures for third-country goods that are far more onerous than those for member states.

UK exporters would face a step change in the documentation required
Currently, anyone who exports from the UK to the EU needs simply to register with HM Revenue & Customs and then attach a commodity code to their export. With no customs deal, all exporters would need to complete both a Single Administrative Document (SAD) and an Entry Summary Declaration (ENS), with additional specialist documentation required for highly regulated goods, transport permits and insurance certificates.25 The SAD alone consists of 54 boxes with eight parts, which must be completed and submitted for every declaration.26 These would all be additional burdens on exporters.

The UK would lose access to import customs IT systems designed for cooperation between member states
No deal would mean no access to current EU-wide e-customs systems that reduce the need for lengthy paper-based procedures for declaring goods. Of those e-customs systems, one of the most important is the New Computerised Transit System (NCTS). The UK would not be party to the agreement, which allows all EU member states and the signatories of the Common Transit Convention – member states of the European Free Trade Association (Iceland, Lichtenstein, Norway and Switzerland), Macedonia, Serbia and Turkey – to submit transit declarations and proof of guarantee (bond money) electronically, with the capability of tracking the consignment across member states.

The agreement allows a faster flow of goods, paperless customs clearance and shorter queues of trucks at border crossings and reduces the cost of customs procedures.27 One study on the NCTS in the EU showed that it had obtained a productivity gain of about 30 minutes per shipment.28
With no deal, UK exports would face the full battery of EU regulatory checks at the border

Tariffs and customs formalities are not the only barriers the UK would face if it left the EU with no deal. UK firms would also face regulatory barriers to doing business with the EU – even if the UK had, as it intends, transferred EU laws into UK law. The EU would still be required by its own laws to treat the UK as a third country and impose checks equivalent to any other third country with no deal.

At the moment, UK goods are assumed to meet EU regulatory standards, and checks by UK authorities are recognised by other EU authorities. With no deal this would no longer be the case. Exporters from the UK would have to be able to prove that goods meet EU standards – and this could involve border inspections.

Some goods would face additional regulatory controls

The new regime would be particularly onerous for goods that are ‘controlled’, such as animal products, nuclear material and chemicals. At the moment, government authorities such as the Department for Environment, Food & Rural Affairs (Defra) or the Department for Business, Energy & Industrial Strategy (BEIS) certify manufacturers and exporters with licences to trade in those goods domestically. These licences and certificates are valid across the EU and an assumption of conformity means that they do not face checks at the border. However, once the UK leaves the EU they would no longer be valid because the rules for third-country goods laid down in the Union Customs Code mean that, without agreement, only EU licences and certificates certifying conformity with EU regulations are valid.

Former Permanent Representative to the EU, Sir Ivan Rogers, told the House of Commons Select Committee on Exiting the European Union:

"In a no deal scenario the UK’s legal basis would change overnight. The EU would say you have not signed any other agreement with us, and unless there is a legal agreement between the two of us, we no longer recognise your accreditation, conformity assessment bodies, abattoirs or slaughterhouses. We do not recognise any of it."

A ‘conformity assessment’ procedure – which involves testing, inspection and certification – would then be required at the border before a good can be placed on the EU market. In many sectors, product conformity can be self-certified: manufacturers affix the ‘CE’ marking to their product, attesting to the necessary checks, and certifying the good as compliant with EU legislation. But they may nonetheless be stopped at customs and asked to provide technical documents to prove this.

In contrast, highly regulated sectors, such as the automotive and chemical sectors, need accredited certification. A conformity assessment body (known as a ‘notified body’) undertakes the relevant inspections and issues certification of technical compliance. UK-based companies may no longer be able to rely on UK accreditations from Defra, BEIS or other agencies and would therefore face checks at the border.

This could mean week-long delays while they are physically inspected and samples are obtained to be sent to an approved testing house. There are also costs involved.
For example, the cost of physical examination and testing from Port Health (which is responsible for the enforcement of environmental, public and animal health controls at ports) can range from £106 to £600 per container, depending on the testing requirements. Some goods are required to be transported to specific locations for testing and this carries an extra £30 for every two containers. On top of this, rent is charged for storage, depending on the mode of transport and the port itself.

Box 2: Regulated industries

A number of sectors that would be subject to stringent checks for conformity and compliance at the border have a substantial proportion of their exports market in the EU (see Figure 7). Many of these have specific regimes of control that must be complied with before goods can be sold in the EU.

Figure 7: Regulated UK industries that export to the EU

With no deal, there is a real danger that exports will dry up if the UK were to be subjected to the full force of EU regulatory regimes at the border. At risk are over half of the total exports from the chemicals, food and beverages and textiles sectors and at least a quarter of the total exports from other sectors.

If exports did not cease due to the practicalities of implementing the checks, then the costs of compliance could still damage sectors. According to estimates from studies carried out by the research company Ecorys and the Centre for Economic Policy Research, non-tariff barriers for access to the Single Market are the highest for food and beverage products, with imports from North America, for example, facing a 56.8% tariff equivalent.

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Taking the food and beverages sector as an example, the steps that third countries have to take to export to the EU are significantly more complex than the steps that member states have to take. The UK’s Food Standards Agency has produced a diagram illustrating the process for a third country exporting animal products to the EU (see Figure 8). At the moment, the UK’s Animal & Plant Health Agency can carry out all the required checks in the UK and exports can then cross frontiers wherever makes sense. Post-Brexit, a key pinchpoint will be the need to export via a ‘border inspection post’. There is a real capacity issue here, as this has not been needed for intra-EU trade.

**Figure 8: The process of exporting food from a third country to the EU**

The competent authority in the despatching country contacts the European Commission to request approval

The Commission visits the country and establishments to check hygiene standards are equivalent to those in the EU

Approval is proposed, accepted or rejected. An updated list of approved countries is published and member states are notified electronically.

Products of animal origin must be imported into the EU through border inspection posts (BIPs)

The competent authority in the country of despatch issues and stamps the health certificate as for the Commission Decision

A Commission Decision is drawn up giving the format for health certification and a list of approved establishments

The Official Veterinary Surgeon or Official Fish Inspector (for fishery products) carry out A) document check B) identity check C) physical check

If checks are satisfactory, a Common Veterinary Entry Document (CVED) is issued for that consignment of goods. It can then be imported into the EU.

The importer must notify the border inspection post of the arrival of consignments

If the consignment fails the checks then it must be either re-exported or destroyed

Source: Institute for Government adaptation of a Food Standards Agency diagram

Michel Barnier, European Chief Negotiator for Brexit, has suggested that 100% of animal exports (live or products of animal origin) would face border checks – a massive issue at the Irish border. The same would apply in the other direction, with the UK’s Animal & Plant Health Agency having to decide whether to check EU imports if the UK copies the Union Customs Code.

* The original is available at: https://www.food.gov.uk/sites/default/files/multimedia/pdfs/import_poao.pdf

© Food Standards Agency.
Summary: no deal

Table 3 summarises the no deal option. No deal would mean substantial disruption to supply chains across sectors, with tariffs, regulatory checks and customs checks applying on day one of Brexit. That no major trading partner trades with the EU on WTO terms alone indicates the unattractiveness of this option.\(^{39}\)

Table 3: A summary of the key issues involved in a no deal

<table>
<thead>
<tr>
<th>Issue</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tariffs</td>
<td>• WTO terms could mean tariffs ranging from 2% to over 100% in a few cases.</td>
</tr>
<tr>
<td>Customs</td>
<td>• The UK would experience third-country treatment with no provision for streamlined processes.</td>
</tr>
<tr>
<td>Regulatory checks</td>
<td>• Checks would take place on both sides of the border.</td>
</tr>
<tr>
<td></td>
<td>• These would be particularly onerous for heavily regulated goods such as chemicals and animal products.</td>
</tr>
<tr>
<td>Negotiability</td>
<td>• Not applicable.</td>
</tr>
<tr>
<td>Business ‘hassle factor’</td>
<td>• There would be a very high hassle factor.</td>
</tr>
<tr>
<td></td>
<td>• There would need to be substantial investment in extra capacity and infrastructure at the border and adjustment to supply chains.</td>
</tr>
</tbody>
</table>

Source: Institute for Government analysis
6. Reducing friction

The disruptive consequences of no deal for both goods and services trade with the EU is one reason why the Government is keen to negotiate a deep and comprehensive free trade agreement with the EU in parallel with withdrawal from the EU. However, since the General Election in June, a number of other options have come back into discussion: EEA membership either in the long run or as a transitional arrangement; a customs union with the EU again, as either a permanent or transitional arrangement; or indeed a Swiss-style arrangement of multiple agreements.

The options floated are summarised in Table 4, which sets them alongside the Prime Minister’s political objectives.

Table 4: How do the off-the-shelf Brexit options stack up against the Prime Minister’s objectives?

<table>
<thead>
<tr>
<th>Prime Minister’s Lancaster House speech</th>
<th>Stay in the Single Market but leave the Customs Union</th>
<th>Leave the Single Market but negotiate a customs Union</th>
<th>Leave the Single Market and Customs Union, but negotiate a bilateral trade agreement</th>
<th>Leave the Single Market and Customs Union with no deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norway</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Turkey</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Switzerland</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Ukraine</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Canada</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>WTO option</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
</tbody>
</table>

Although other options may be back on the table, the Prime Minister has said that her aim is to negotiate an ‘ambitious and comprehensive ‘Free Trade Agreement and a new customs agreement’ as a means of securing ‘as frictionless and seamless [cross-border trade] as possible’. The mission for UK negotiators is to find a practical way of delivering that while achieving the UK’s political objectives.
A new free trade agreement

**Examples of EU free trade deals**

Switzerland replicates many of the features of the Single Market through over 120 bilateral deals (including 20 major ones) between Switzerland and the EU. Other countries have bespoke free trade arrangements in the shape of free trade agreements. The most recently concluded was the Comprehensive Economic and Trade Agreement (CETA) with Canada. Ukraine has a deep and comprehensive free trade agreement, paving the way to closer cooperation with the EU.

Securing ‘frictionless and seamless trade’ would require an extensive agreement that covered regulatory barriers, tariffs and customs checks. Ministers have suggested that they might seek to ensure special treatment for the sectors with the most integrated supply chains. There are two problems with this approach.

First, the EU’s negotiating guidelines rule out such ‘cherry-picking’ and WTO rules require coverage of ‘substantially all’ goods. Second, a shallow agreement that only dealt with some barriers such as tariffs or did not provide in-depth agreement across sectors would still mean large-scale disruption to supply chains, because supply chains cross sectors.

**Box 3: The car sector is heavily interlinked with other sectors across the EU**

The car sector is just one sector that would be affected if barriers caused an increase in cost or disrupted its inputs. Earlier in this paper we saw that £12 billion worth of intermediate parts from the EU were consumed as inputs for the UK car sector. This is a third of the sector’s total inputs, demonstrating the importance of EU imports to the UK car industry. Of the EU intermediate parts used in the UK car sector, the biggest single contributor was the EU car sector, at 47% of the total. However, this still leaves more than half of the EU contributions to the UK car industry to other sectors that would not be covered by a sectoral carve-out.

For the UK car sector, a range of other European sectors are interlinked with the finished product (see Figure 9). Of particular importance are the contributions of machinery, basic metals, chemicals and rubber and plastics. These account for over three billion contributions – a quarter of the total EU contributions. If it became more expensive or more difficult to buy a range of intermediaries from the EU, there would be a knock-on effect on buying cars. A special deal for cars would not avoid supply-chain disruption for car manufacturers.

* At least in the short term, unless a supplier could be found for the same price on day one of Brexit, which, as we have already argued, would be difficult.
Intermediaries such as chemicals, plastics and machinery are some of the most widely used in many other UK industries and some of the most integrated with EU supply chains. They are also themselves vulnerable to regulatory barriers and tariffs, as we have seen. A disruption in supply chains for industries such as these could have ripple effects across other sectors that use them as inputs. In mitigating disruption, an agreement must look to deal with impact across sectors that are interlinked.

**Existing EU free trade agreements, like CETA, would not come close to achieving the breadth and depth required to avoid barriers to trade**

The Secretary of State for Exiting the European Union, David Davis, has previously suggested that the EU’s recently concluded agreement with Canada (CETA) could provide a good starting point for the UK’s future relationship with the EU.43 While this agreement may deal with some barriers to trade, it would fall far short of achieving the ease of trade made possible as a member of the Customs Union and the internal market.

**A conventional free trade agreement would eliminate most tariffs (at least on industrial goods)**

Eliminating tariffs on manufactures is relatively straightforward (the EU’s free trade agreement with South Korea eliminates tariffs on 98.7% of manufactures). In the case of the UK, since there are currently no tariffs on trade with the EU, there would be no need for phasing.\* The EU has traditionally been more protectionist on agriculture, so there is a risk that tariff-free access for agriculture and fish would be harder to negotiate.

\* Agriculture may be an exception to this but that depends on whether the UK and the EU would wish to accept the high tariffs on average.
But, even for tariff-free goods, that does not remove the need for customs checks
One of the big downsides of a free trade agreement compared with current arrangements would be the need for UK exporters to prove origin if they want to benefit from preferential tariffs. This is hugely complicated.

All free trade agreements include rules of origin. Rules-of-origin requirements state that a good is only eligible for tariff-free access if enough of the good originates from a list of pre-approved countries. For example, in the EU–South Korea free trade agreement, a car arriving in the EU from South Korea must be 55% ‘made in Korea’ to qualify for tariff-free access.

These rules can differ by product so manufacturers have to keep track of the sources where value has been added. In general, the origin of the final product will be determined by the location of the ‘last substantial transformation’. This means that for products with components that have been partly processed in multiple countries, origin is defined where the last processing defined as ‘significant’ or ‘substantial’ occurred.

In order to meet the criteria, free trade agreements can contain additional provisions to allow ‘cumulation’ – so that value added from one country can count towards another country’s value added to meet the criteria.

Rules of origin can pose significant barriers to trade – particularly for those sectors with complex supply chains. Steve Elliott, Chief Executive of the Chemical Industries Association, has stated that ‘the cost of providing the technical proof that a chemical or any other manufactured product originates from the EU or the UK, bearing in mind that in our case there could be several stages of synthesis involved … would clearly outweigh the benefit of duty-free sales’.44

The costs of rules of origin come from both administrative requirements and the cost of complying with regulations linked to rules of origin. A range of estimates collected in the Trade and Investment Balance of Competence Review shows that ‘British firms would be exposed to a combination of administrative and compliance costs linked to rules of origin, ranging (based on existing estimates) from 4 percent to perhaps 15 percent of the cost of goods sold’.45 As the review notes, currently British firms are saved these potential costs through UK membership of the Customs Union. Outside the Customs Union, there would be origin checks.

A deal like CETA does not go very far in removing regulatory barriers
Many of the sectors contributing to the UK car sector are also industries that the UK exports to the EU. We have already seen that these sectors would face at least document checks, and possibly inspection and testing, under no deal. If CETA were taken as a model for the UK’s future relationship with the EU then it would only achieve a limited form of mutual recognition.

CETA only provides for the mutual recognition of conformity inspection. This means that conformity assessment bodies in Canada can certify that a product for export to the EU complies with EU standards and vice versa. This avoids duplications of conformity inspection at the border that would apply under no deal. However, there is still a document check for the correct certificates at the border where currently there
are no such checks for the UK. Moreover, CETA does not cover the breadth of UK sectors such as chemicals and food and beverages. Wherever it did not apply, testing for regulated sectors would.

**The UK would need a deal that goes much further than CETA in removing regulatory barriers**

The most ambitious attempt to remove non-tariff barriers and establish future regulatory cooperation has been the (now-dormant) EU–US negotiations referred to as the Transatlantic Trade and Investment Partnership (TTIP).

TTIP aimed to go further than CETA in that it tried to establish equivalence rather than just conformity inspection.* Equivalence is the kind of mutual recognition used for the functioning of the Single Market in areas where there is not harmonisation.** It means that parties agree that even where their regulations technically differ, those regulations achieve the ‘equivalent’ outcome. As a result, if a product or service can be sold lawfully in one party’s jurisdiction, it can be sold lawfully in the other party’s jurisdiction.

However, as De Ville and Siles-Brügge argue in their book on TTIP, in many cases equivalence has been difficult to establish because the US and the EU have substantial differences in the ways they regulate, which neither were prepared to change.\(^46\) It also had the potential to have a ‘regulatory chill’ effect whereby unilateral decisions on more ambitious future regulation would be constrained and affected by the regulations of the other partner.\(^47\)

For the UK, the former obviously does not apply since it currently maintains the EU’s approach as a member state – but its decision to leave the EU implies an intention to diverge. So while convergence at the point of exit is less an issue, the management and oversight of future divergence would be. As Michel Barnier states in giving evidence to the European Economic and Social Committee, the EU could not ‘have an influence or a right of veto on the drawing-up of the rules that apply in the Union ... the level playing field must exist and accompany our future partnership’.\(^48\)

Barnier’s mention of a ‘level playing field’ implies a degree of future regulatory alignment that goes well beyond that of CETA. But questions remain about how that would be achieved and how it would be enforced – and whether it is possible to meet the EU’s concerns without transgressing the UK’s ‘red lines’. How those questions are answered will determine the depth of any future free trade agreement. The Institute for Government will deal with these questions in more depth in a forthcoming paper on dispute resolution.

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** However, it is underpinned by market surveillance and a supranational court.
An agreement could mean a simplification of customs requirements
Any free trade agreement can include specific provisions on customs cooperation that could streamline the process. There are three common ways in which customs cooperation provisions in a future free trade agreement between the EU and the UK could streamline the process and ease customs pressures:

- **data sharing and information exchange**, which allow customs authorities to process declarations in advance of shipment, leading to reduced delays and duplications – this needs to be underpinned by agreements on data sharing to ensure confidentiality
- **e-customs systems** – the UK may want to negotiate access to EU-wide e-customs systems (including the NCTS but also covering excised goods such as alcohol and tobacco, animal health notifications and provisions for the return of defective goods)
- **mutual recognition of authorised economic operators**, which allows certified trustworthy traders to benefit from streamlined processes – including minimised documentary requirements, fewer physical inspections and faster clearance times – and enables customs authorities to concentrate on higher-risk traders.

In the past, the authorised economic operator accreditation process has taken many months to complete and has involved close scrutiny of financial records and supply chains. To reach this status, the UK would need to maintain similar requirements as the EU, to enable mutual recognition, but that may mean it is too burdensome for some small- and medium-sized enterprises.

**Summary: a free trade agreement**
Table 5 summarises the free trade agreement option. It is clear that a trade deal like CETA would still disrupt supply chains through requirements for rules of origin and regulatory checks. A more ambitious trade deal that recognised the starting point of convergence and covered the breadth of UK sectors would be much more difficult to negotiate but could deliver a significant reduction in disruption. But there are big question marks over its negotiability both within the Article 50 window and in general. In the longer run, if the UK sticks to its existing ‘red lines’ and the EU makes it clear that it is not prepared to grant the benefits of the Single Market without the obligations, a deal like this becomes less viable.

Table 5: **A summary of the key issues involved in a free trade agreement**

<table>
<thead>
<tr>
<th>Issue</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tariffs</strong></td>
<td>• Tariffs would be up for negotiation.</td>
</tr>
<tr>
<td></td>
<td>• Tariff-free access for industrial goods would be likely.</td>
</tr>
<tr>
<td></td>
<td>• Potentially this would be more difficult for agricultural goods.</td>
</tr>
<tr>
<td><strong>Customs</strong></td>
<td>• Streamlining would be possible – but exporters would still need to prove that they met rules of origin to qualify for preferential access.</td>
</tr>
<tr>
<td><strong>Regulatory checks</strong></td>
<td>• Checks could be reduced through harmonisation or mutual recognition, if they can be negotiated.</td>
</tr>
<tr>
<td></td>
<td>• It is unlikely that mutual recognition could be agreed across the breadth of sectors necessary to mitigate impact.</td>
</tr>
</tbody>
</table>
Negotiability

- We would need to go beyond any agreement seen so far to deliver UK objectives.
- It would depend on the EU’s willingness to negotiate and the UK’s willingness to accept limitations on the ability to diverge from the EU acquis (body of law) and acceptance of agreed enforcement mechanisms.

Business hassle factor

- The hassle factor would be dependent on the depth and breadth of agreement.
- Rules of origin are a hassle but others can be reduced significantly.

Source: Institute for Government analysis

Agreeing a new customs union

Examples of customs union agreements

Turkey, Andorra and some other small countries have created bespoke customs union agreements with the EU. Turkey’s only applies to manufactured goods, not agricultural produce; Andorra’s adds in agricultural produce. None of the customs union arrangements covers services.

If a new free trade agreement would take too long to negotiate, there are other existing models the UK could try to adopt. Leaving the EU means leaving the EU Customs Union, which is embedded in the EU treaties. However, the EU has other customs union arrangements – and so forming a new customs union with the EU is a possibility.

A customs union removes tariffs on goods that are covered and removes the need for rules of origin

Creating a new customs union with the EU would remove tariffs on trade with the EU on all goods covered. If a customs union is to help reduce the Irish border issue, agriculture would need to be included.

One of the conditions of a customs union agreement with the EU is applying the common external tariff to goods covered. Unlike under a free trade agreement where businesses would face the need to prove origin, the benefit of a customs union is that it removes the need for this for goods circulating inside the customs border, removing a significant source of disruption.

Reduction in regulatory checks depends, as in a free trade agreement, on accepting harmonisation or mutual recognition

As part of its Customs Union, Turkey has accepted significant harmonisation in order to reduce non-tariff barriers. It has adopted EU regulations on products and commercial policy (including competition and state aid policy). In those sectors where there has not been harmonisation, Turkey faces significant barriers to trade.

The difficulties with achieving regulatory equivalence would be similar to that in a free trade agreement, still requiring a mechanism for resolving disputes and a robust means of market surveillance if the agreement were to achieve equivalence.
Box 4: The Turkey–Bulgaria border

The main border crossing between Turkey and Bulgaria is located at Kapıkule. It is reportedly the busiest border crossing in Europe and routinely suffers traffic congestion, with trucks backed up as far as 17 kilometres from the border.\(^{51,52}\) There are still (substantial) delays at the border, which shows that a customs union does not eliminate all sources of border friction.

The EU–Turkey Customs Union does not cover transport, which is regarded as a ‘service’. In the absence of an EU road transport agreement with Turkey, member states continue to apply their bilateral agreements.\(^{53}\) Under these agreements, Turkish hauliers have to apply for transport permits for each member state they travel through. These are allotted through quotas, which limit the number of trucks that can pass through. In 2014, the quota system led to a dispute, which resulted in Turkish and Bulgarian authorities refusing to let trucks through the border.

And being in a customs union impedes the ability to conduct an independent trade policy

The big downside of a customs union arrangement is that it reduces the scope for an independent trade policy. The Turkish agreement allows countries the EU negotiates free trade agreements with access on preferential terms to the Turkish market – but without reciprocal access for Turkish goods. Turkey can no longer use tariffs on goods covered by the customs union as a bargaining chip since it is forced to apply the common external tariff.

If the UK entered into a customs union with the EU, it would face similar difficulties. It is difficult to see how a lack of origin checks could be compatible with the UK running its own tariff schedule and EU negotiators would be concerned about countries exploiting the UK as a back route into Europe.

The UK would still be free to use non-covered items – services or potentially agriculture – as levers to get free trade deals with other countries. But service liberalisation is notoriously difficult to achieve through free trade agreements. If agriculture were covered – to reduce friction – this would remove a major bargaining chip in any trade negotiations with countries such as Australia and New Zealand.

Summary: a customs union agreement

Table 6 summarises the customs union agreement option. A customs union agreement is the only option that removes rules-of-origin requirements. This is a significant factor in terms of simplification. However, on its own it does not remove regulatory barriers per se and still leaves other checks at the border in place. These could be dealt with through a separate free trade agreement. A customs union agreement reduces the scope to run an independent trade policy.
Table 6: A summary of the key issues involved in a customs union agreement

<table>
<thead>
<tr>
<th>Issue</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tariffs</td>
<td>• Tariffs are eliminated on goods covered within the customs union. • Tariffs would still be applied to goods not covered. • The UK would have to apply the EU’s common external tariff to third countries.</td>
</tr>
<tr>
<td>Customs</td>
<td>• There would be no need to prove origin – but there would still be some residual border processes and potential delays if no deal is done on transport.</td>
</tr>
<tr>
<td>Regulatory checks</td>
<td>• Checks could be reduced through mutual recognition or harmonisation, as with a free trade agreement – but they are not a necessary consequence of a customs union.</td>
</tr>
<tr>
<td>Negotiability</td>
<td>• A new customs union arrangement would have to be negotiated – and to reduce regulatory checks would need to be accompanied by a free trade agreement.</td>
</tr>
<tr>
<td>Business ‘hassle factor’</td>
<td>• A customs union per se removes the need for rules of origin. • Avoidance of other complexities would be dependent on what else was agreed.</td>
</tr>
</tbody>
</table>

Source: Institute for Government analysis

Staying in the Single Market – the EEA option

EEA membership

EEA member states (Iceland, Lichtenstein and Norway) participate in the internal market for goods and services – creating the Single Market. This does not extend to agricultural products or fish so they are not part of the common agricultural policy or common fisheries policy. But they have to accept EU regulations, the ‘four freedoms’ including freedom of movement, and make a budget contribution. Lichtenstein has been allowed an emergency-brake exception to freedom of movement.

EEA membership comes closest to maintaining the status quo – and as such has been assessed as causing the least disruption to trade. But it does not remove friction entirely.

Evidence from the Centre for European Policy Studies to the House of Lords European Union Committee on options for trade stated that the advantage of the EEA option was that:

"It is a system that exists, offers legal clarity and actually works. It is closest among other options to sticking to the status quo in economic terms and it would avoid uncertainty and thereby minimise damage to the UK as a destination for foreign investment aimed at the EU market."  

**The EEA agreement has a unique institutional structure**

EEA institutions enforce and interpret the agreement. They are composed of a separate court that follows the European Court of Justice and a surveillance authority that mirrors the European Commission. EEA member states are part of what is referred to as a ‘two-pillar institutional structure’. This involves the separate EEA institutions, and joint EEA committees that act as mediators that govern the functioning of the agreement and the EEA institutions.

With its own court and surveillance authority, the EEA has more robust mechanisms for the enforcement of the agreement than most free trade deals. This is one reason why economic integration is so deep; a level playing field is ensured by an actual institution dedicated to ensuring that the rules are observed. In practice, in interpreting the rules, the court adheres to a ‘principle of homogeneity’. That is, in general and as noted above, it follows the rulings of the European Court of Justice so that there is as little divergence as possible from EU law.

The EEA agreement incorporates EU laws and regulations through the EEA joint committees, which agree on whether EU law has EEA relevance or not. In practice, most single market regulations are adopted by the EEA.

**The EEA agreement removes regulatory barriers and tariffs for trade in goods in the areas it covers**

The surveillance and enforcement regime means that most goods are not checked for compliance with EU technical rules at the border, nor do they go through conformity assessment.

Given that the most impactful non-tariff barriers for exporters are often technical requirements and conformity assessments (even more so than rules of origin), this represents a huge mitigation of some of the most severe causes of friction. For those sectors included in the agreement that are heavily regulated, such as chemicals and pharmaceuticals, this is especially true.

However, agriculture and fisheries are excluded from the EEA agreement and still face regulatory checks at the border, as well as some tariffs and quotas. This could potentially pose difficulties for the UK, as 64% of the UK’s fish and 73% of its vegetable exports go to the EU. It also has serious implications for the UK’s border with the Republic of Ireland, where agricultural supply chains are very important.

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Businesses in EEA countries still have to face complying with rules of origin
If a good arriving in Norway from the US pays a Norwegian tariff, and Norway then attempts to move this good into Sweden, it must pay the EU’s common external tariff as it crosses the border.

In practice, this means that border checks are required across the Norway–Sweden border, since the EU has to know whether a good that is crossing is Norwegian (in which case it can enter tariff-free) or is from a third party (in which case a tariff may apply and the product must be checked to ensure that it complies with EU regulations). Norway and the EU have taken steps to streamline these checks. But they have not been eliminated.

Box 5: The Norway–Sweden border
A 2004 agreement on customs cooperation has meant that Norway and Sweden have fully merged their systems for customs cooperation, authorised traders, risk management, pre-arrival processing and post-clearance audit.57

These are managed by a single unified IT system, which handles every stage of the customs process for goods moving in either direction. The system is designed to be a ‘non-stop shop’ where all customs activities are synchronised and performed in advance of the border so that goods can pass without interruption. The system tracks shipments using the location of special SIM (subscriber identity module) cards in freight forwarders’ mobile phones. This reduces costs by utilising existing infrastructure and equipment.58

Norway and Sweden have also established ‘joint control zones’ up to 15 kilometres on both sides of the border. Customs officials from either country are able to carry out any checks and controls within these shared zones.59

Summary: EEA membership
Table 7 summarises the EEA membership option. The EEA provides a ready-made option that provides significant market access to trade in goods in the areas it covers. It does not cover agriculture and fisheries and still offers control over trade policy. However, for supply chains, rules-of-origin checks and regulatory checks where equivalence is not established would still cause some disruption. In addition, EEA membership comes with obligations as well as rights – and those cross the UK Government’s existing ‘red lines’.
Table 7: A summary of the key issues involved in EEA membership

<table>
<thead>
<tr>
<th>Issue</th>
<th>Implications</th>
</tr>
</thead>
</table>
| Tariffs          | • There is tariff-free access for goods – but third-country goods imported by an EEA member and then exported to the EU still need to pay the common external tariff.  
• EEA members can set their own third-country tariffs.  
• Tariffs are still payable on some agricultural goods.                                                                                       |
| Customs          | • Checks are still needed to prove origin and check tariffs on third-country goods.                                                                                                                                 |
| Regulatory checks| • Acceptance of the EU acquis means no regulatory checks at the border for goods and fewer restrictions for services.                                                                                           |
| Negotiability    | • As currently constructed, EEA membership violates a significant number of the UK Government’s ‘red lines’.  
• Arguably, it would need the agreement of existing EEA members – and there may be a legal dispute about whether leaving the EU automatically takes the UK out of the EEA. |
| Business hassle factor | • EEA membership removes regulatory duplication but still requires some frontier formalities that would need increased capacity at the border.                                                                 |

Source: Institute for Government analysis

**Staying in the Single Market and a customs union**

A defeated amendment to the Queen’s Speech proposed that the UK could remain in the Single Market and the Customs Union. In this scenario, the UK would agree to a new customs union agreement in addition to joining the EEA.

This would remove regulatory barriers and rules of origin for trade in goods covered. That would lead to the least additional friction on UK–EU supply chains as it most closely resembles the status quo. Regulatory barriers would not be introduced as the UK would be part of an agreement that maintained a level regulatory playing field and rules of origin would not apply because the UK would not be a back door into the EU. However, it would come with the obligations of EEA membership outlined above and the restrictions from being a member of a customs arrangement. Together this would be tantamount to remaining in the EU without participating in its political institutions.

In addition, the proposal may not even be technically possible. Dr Holmes from the UK Trade Policy Observatory points out that joining the European Free Trade Association (EFTA) requires the UK to become a party to EFTA free trade agreements. That means adjusting its tariffs in line with those agreements rather than the EU’s common external tariff. So there would be a contradiction between being in EFTA (necessary for being in the EEA if a country is not in the EU) and being in a customs union with the EU.

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* The EEA and the Turkish Customs Union still do not include agriculture. For the Irish border and for the establishment of the necessary capacity to carry out animal inspections at the border, the UK might (if it was going for status-quo replication) seek to bring agriculture within any arrangement.
Summary: staying in the Single Market and a customs union
Table 8 summarises the option of staying in the Single Market and a customs union. This option would deal with the major sources of friction for trade in goods. However, it would come with many obligations and looks both technically and politically difficult.

Table 8: A summary of the key issues involved in staying in the Single Market and a customs union

<table>
<thead>
<tr>
<th>Issue</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tariffs</td>
<td>• There would be tariff-free access for goods covered.</td>
</tr>
<tr>
<td>Customs</td>
<td>• It removes the need for customs checks on goods covered.</td>
</tr>
<tr>
<td>Regulatory checks</td>
<td>• Acceptance of the EU acquis would mean no regulatory checks at the border.</td>
</tr>
<tr>
<td>Negotiability</td>
<td>• A long-term arrangement violates current Government ‘red lines’.</td>
</tr>
<tr>
<td></td>
<td>• A short-term transitional arrangement would have to be acceptable to both the EU and EEA member states.</td>
</tr>
<tr>
<td>Business hassle factor</td>
<td>• The arrangement would keep the status quo in the areas it covered.</td>
</tr>
</tbody>
</table>

Source: Institute for Government analysis
None of the options considered in this paper would mean complete avoidance of disruption to supply chains and all would require trade-offs that are dependent on negotiations between the EU and the UK Government. The only option that preserves the status quo is the status quo.

The option to remain in the Single Market is the option that would lead to the least impact on supply chains, even with the rules-of-origin requirements. It would remove the barriers that countries such as Turkey face, including the need for transport permits. Yet it still requires negotiation or disruption for sectors not covered by the agreement. In addition, the acceptance of the ‘four freedoms’ would most likely violate the UK Government’s stated positions as a result of the Referendum on EU membership in June 2016.

Unique to the customs union option is the removal of the rules of origin. But like the free trade agreement option, there would still be significant barriers that would be the subject of negotiation. The customs union option only removes friction in so far as it achieves a satisfactory agreement on regulation, complies with the requirements of the Union Customs Code and includes services (especially transport) as part of the agreement. This comes at the cost of an impaired trade policy and the inability to set tariffs and has the same challenges of accessing the Single Market as a free trade agreement.

The free trade agreement option would need to be of sufficient breadth and depth to ensure that supply chains are not impacted. A shallow free trade agreement that only deals with tariffs faces rules of origin, regulatory barriers and customs checks. A deeper free trade agreement that either accepts harmonisation or achieves deep forms of mutual recognition would be harder to negotiate and would be unlikely to cover the breadth of the Single Market due to political imperatives.

**Long-term or transitional arrangement?**

It has been suggested that the options set out here could soften the transition out of the EU for businesses currently dependent on trading with the EU.

It is clear that the UK needs to ensure, at a minimum, that it has sufficient agreements in place as it leaves the EU to minimise regulatory checks and to streamline and minimise customs formalities, allowing data sharing and rapid transit. Other third countries that trade with the EU have these in place, even if they do not have a comprehensive free trade agreement – and none has anything like the level of supply chain integration or dependence on the EU market that the UK has. Leaving with no deal and simply trading on WTO terms with no side agreements would introduce disruption well in excess of the costs of tariffs on manufactures.
In the short run, at least, agriculture looks to be a specific problem, catered for by neither the current models of EEA membership nor the Turkish Customs Union agreement. This suggests that the UK would need some sort of transitional deal that came as close as possible to replicating the status quo while systems were put in place, capacity built and long-term details agreed. We will be looking at the extent of preparations necessary in our forthcoming paper, Implementing Brexit: Customs.

But in order to decide its negotiating stance, the Government needs to fully understand the costs to business from disrupting supply chains – and the sources of those costs (rules of origin, regulatory checks, potential border delays) – and weigh them against the benefits of, for example, more regulatory flexibility or the ability to negotiate new trade deals. It needs to be realistic about the speed of adjustment – in terms of both implementation by government and adaptation by business. And it needs to publish its analysis of where the costs and benefits lie to allow an informed debate about negotiating priorities, which has been lacking since the Referendum.
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