



The economic impact on services from the UK losing Single Market access

A Cebr report for Open Britain

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Cebr

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1. Executive Summary

- **When considering the single market, many of the nuances relating to services are often lost as part of the ongoing focus on Brexit.** This report specifically addresses the **implications of leaving the single market in services and why maintaining deep access is important.** The single market in services is important to the UK. This is especially so given the UK's leading position as an exporter of services. This report also discusses the **indirect and non-tariff impacts on goods of leaving the single market and customs union.**
- Our economic modelling work on the impact of service access restrictions to the EU produces different scenarios. **The upside scenario entails a 1.4% loss in GDP versus a 2% loss as part of a downside scenario. This results in an approx. £25-36bn range of GDP losses within the two scenarios.** We've not considered the costs of the UK missing out on single market deepening, or 3rd round economic impacts. We've also made some robust assumptions on the resilience of certain export segments.
- A withdrawal from the single market with **little/no preferential access in services would result in significant negative impacts on financial services, telecoms/IT¹ and transport** – all of which will register export losses of 15% or more based on the official figures. **Unless these losses are offset** through new trade relationships, we could see a 9.5-14% decline in total UK service exports, representing approx. £21-30.5bn in UK export revenue. The service sector where the single market has the **biggest impact in absolute terms is financial services.** About a third of the losses from single market withdrawal result from lost business in financial services.
- **The biggest proportional reduction in trade using our methodology would be in the estimated figures for trade in IT and telecoms.** However, we think that much of the IT and telecoms trade with the EU is under-recorded. We doubt if this trade would be directly reduced much if we left the single market and so suspect that the high apparent proportionate reduction needs to be understood in this context. Given the understated and unregulated level of exports, the absolute decline recorded may however still be relevant given that in actual terms it represents a significantly smaller relative decline.
- **The total losses could however be a less than 1.4% of GDP if we assume robust new free trade relationships** with service access pillars to the EU and 3rd countries. Losses could therefore be mitigated if we move away from the simple **goods-only FTA assumption with the EU and include some more substantial access for services in a CETA+ or Swiss scenario.**
- Access to the single market for services is therefore important to the UK as it is to the remaining members of the EU. Even outside the formal EEA single market the **UK should still be able to avoid many of these costs by negotiating a deal that maximises access.** Service access is not just about avoiding World Trade Organisation terms - there is a variety of options that can be looked at that would allow an agreement that covers more than just goods. Reaching such an agreement may however require certain compromises to be made on "red-line" issues.

¹ We have expressed this as a percentage of registered exports. We do however think that trade is understated within this sector given the nature of the "Flat White Economy". We have therefore built in the assumption that the actual absolute projected losses could still serve as an assumption, because these losses are coming from an understated activity and export figure. This assumption has been made in order to reflect the implicit resilience of certain tech exports to Brexit. Consequently, the real relative losses for the sector are less than the 16-32% detailed in Figure 3. We have reported the losses relative to officially published figures so as to avoid misinterpretation though.

2. Overview & Introduction

2.1. Overview

This report examines the economic implications of a post-Brexit Free Trade Agreement (FTA) between the UK and the EU compared to Britain's current market access. We will consider the impact on service exports through an **economic impact scenario analysis**. To complement our work on services, we will also consider the indirect implications of an FTA on goods trade with the EU by evaluating prior research in this area.

The report also extends Cebr's previous research on the UK's links with the EU single market², and where appropriate we've leveraged some of that insight. This research **should also not be seen as an attempt to forecast Brexit impacts**. Rather, the analysis discusses various economic scenarios, specifically relating to how the impacts of Brexit might be transmitted into the UK real economy. The value of the output is therefore analytical rather than being necessarily predictive.

2.2. Introduction

It is important to clarify the terminology used – so that the terms of reference don't get muddled.

- The term **"current market access"** is used to refer to the present economic relationship with the EU by virtue of the UK's EU membership. It includes full single market access, as well as membership of the EU customs union and trade access in specific areas like agriculture.
- We use the terms **"single market"** and **"single market membership"** interchangeably with **"EEA membership"** to refer to relationships like those of Norway, Iceland and Lichtenstein, which are all members of the European Economic Area (EEA) without being members of the EU. These countries enjoy de-facto "full" access to the EU internal market, but they are not part of the customs union, nor do they participate in specific areas like fisheries and agriculture.

One also needs to disentangle the terminology used over recent months to refer to the UK's Brexit stance. While **formal membership of the EU single market and the customs union has been ruled out by the UK**³ – this is not as much of a binary decision as it might appear.

- The UK could still attempt to replicate an **extensive and deep relationship with the EU like Switzerland has done**, coming very close to the single market though outside the formal EEA.
- Conversely, **leaving the single market could also entail a much looser relationship with the EU** through a shallow FTA or even WTO terms.

Therefore, even within the parameters of the current debate the scope of possible outcomes is still very large. The issue of formal single market membership is often one of form, **whereas much more of this focus should be directed towards substance**. This report thus deals with the substance of Britain's future relationship with the EU.

² November 2016 Cebr report – "How the UK economy's key sectors link to the EU's Single Market"

³ <https://www.gov.uk/government/speeches/the-governments-negotiating-objectives-for-exiting-the-eu-pm-speech>

3. What is the single market in services?

3.1. Conceptual overview

The single market ensures more total trade **access than a typical FTA** as it relates to a **deeper level of access in services**. Service access within the single market is supported by EU legislation guaranteeing certain mobility rights for individuals^{4 5} and firms as well as rules that restrict discrimination on the basis of national origin^{6 7}. Access is also directly and indirectly facilitated through common regulatory frameworks and oversight mechanisms that monitor and enforce the rules and regulate disputes⁸.

These common features **prevent countries from inserting barriers to trade within the single market**, ensuring that firms and individuals from other member states face fewer direct and indirect frictions. Furthermore, exporters aren't faced with having to export different services to meet different standards, thus lowering their cost overheads.

The common rules also allow **deep access to certain regulated markets**⁹ such as financial services and air travel, since the rules and oversight mechanisms are the same or are substantially harmonized. Furthermore, the single market's free movement of labour/people provisions intersect with services where self-employed individuals **choose to exercise their mobility rights across the market**.

It is also important to emphasize that the barriers to service trade, where these exist, tend to be regulatory. Therefore, a desire to have **complete control or effective autonomy over domestic economic regulations is incompatible with the free movement of many regulated services** as the countries where these exports are going will not accept the provision of such services subject to different rules.

However, unregulated services such as many creative and tech industries, consultancies and research providers may continue to operate **under similar terms even without formal service access**. These **could still be affected indirectly by the single market** through the free movement of labour, but they could be seen as being **more resilient to a withdrawal of current access**.

3.2. Comparison of service exports to EU vs non-EU countries

To better illustrate the **scope and scale of the single market in services**, we've compared the volumes of exports going to EU versus non-EU destinations below on a GDP scaled basis. While one must be careful to not mix up causality with association, it is significant to note that regulated areas such as transportation and financial services achieve much higher export volumes than non-EU geographies. Equally, in other areas such as travel the impacts are mixed given that the free movement of people and close geographic proximity to Europe will be key drivers.

⁴ Insert ref – <http://ec.europa.eu/social/main.jsp?catId=457>

⁵ http://www.europarl.europa.eu/atyourservice/en/displayFtu.html?ftuld=FTU_3.1.4.html

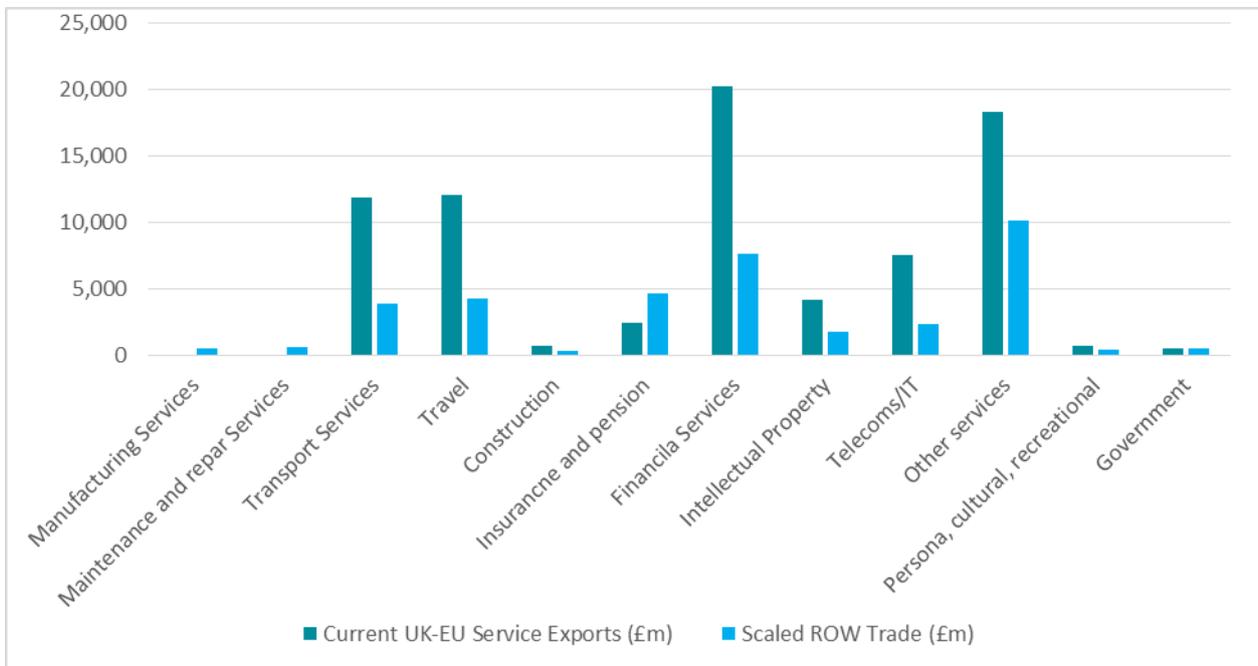
⁶ http://ec.europa.eu/competition/consumers/what_en.html

⁷ http://www.europarl.europa.eu/atyourservice/en/displayFtu.html?ftuld=FTU_3.2.2.html

⁸ For instance, the European Commission, the European Court of Justice, the EFTA Court etc

⁹ <http://www.bankofengland.co.uk/pru/Pages/authorisations/passporting/default.aspx>

Figure 1: Trade between the UK and the EU, compared with trade between the UK and the rest of the world



Source: ONS Pink Book

Looking at the specific sectors, a number of observations are worth noting:

- We notice the **very high value of financial service exports to the EU compared to the rest of the world**. This is also an area consisting of regulated service flows that rely on the financial passporting¹⁰ that exists as part of the current EU relationship. Outside of the single market it is difficult to imagine that the current arrangement will continue as before, at least as part of the **long term free trade relationship between the EU and UK that may emerge**.
- One does however need to point out **offsetting developments that may limit the impact of leaving the single market for financial services**. Upcoming EU financial rules entail more comprehensive equivalence measures where the **EU may allow some access provided that UK regulations are judged to be equivalent to EU standards**¹¹. The equivalence granting process could however turn out to be lengthy and may even be subject to political dynamics, making it far from certain. The granting of equivalence **would also still not provide the same level of access for financial services (as footnoted below) that the UK presently enjoys**. The granting of equivalence may also be revoked if compatibility is not maintained. Moreover, the granting of such recognition will again be up to the EU, and could become contingent on many framework constraints.
- Financial firms in London may choose to react to Brexit by complementing their existing operations with **subsidiaries in other EU countries**. While ECB regulations may require such firms to actually have a substantive capital and employee presence in those particular counties¹², this could still

¹⁰ <http://www.bankofengland.co.uk/pr/Pages/authorisations/passporting/default.aspx>

¹¹ MIFIR/MIFID 2 Overview -

[http://www.europarl.europa.eu/RegData/etudes/BRIE/2016/587369/IPOL_BRI\(2016\)587369_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/BRIE/2016/587369/IPOL_BRI(2016)587369_EN.pdf)

¹² <https://www.bankingsupervision.europa.eu/banking/tasks/authorisation/html/index.en.html>

perhaps allow some London operations being able to continue offering services in conjunction/support of new subsidiary operations as part of a wider network. Ultimately, any such decision will depend on underlying strategic and economic considerations of the individual firms as well as the continuing advantages offered by London/the UK, in addition to the specific EU regulations for these services.

- The **insurance and pension industry has higher apparent exports outside of the EU**, although this sector too is also regulated. The result is analytically interesting given the **strong links this sector has with financial services**. Some of this could **be causal if EU rules/regulations/jurisdiction are somehow affecting the export relationship or it could be unrelated to the EU though – if for instance taxation is causing the relocation of certain funds and firms to be in specific jurisdictions**. While a full investigation of the underlying causes falls outside the scope of this report, it will be encouraging for the UK to note that such large export volumes appear to be taking place outside of the single market.
- Transportation services are three times larger within the EU single market than they are with the rest of the world. Some of this outperformance is understandable when one considers **the impact of single market rules on areas like aviation**, where the industry has undergone deregulation under the EU single market¹³. These transportation developments will also be aided by **the relative ease of movement of people**. Large EU workforce populations in the UK and large UK populations in the rest of the EU result in a steadier demand for air travel. Furthermore, free movement rules also allow to large numbers of people to travel seamlessly within the EU and EEA with very few frictions. Many of the observations relating to transport may also touch upon the travel sector, which includes domestic services as sold to non-residents.
- We noted that high levels of relative EU exports occur with telecoms compared to the rest of the world. Although pan-European telecoms integration still remains **relatively underdeveloped, the market is undergoing market deepening measures**¹⁴, seen though recent action on eliminating roaming tariffs for instance. Common **EU standards may also be providing a boost in terms of exporting UK telecoms expertise to the rest of the continent**. This industry however also covers the **audio-visual sector, where issues may arise over national preferences and cultural exceptions**¹⁵. To this effect there are EU wide rules dealing with the free circulation of such works within the single market¹⁶.

3.3. The symmetry of services and labour

There is also a degree of symmetry to consider between the free movement of services and the free movement of labour.

- This firstly comes about in terms of **precedent**¹⁷ when looking at recent free trade deals struck between the EU and countries like Canada and South Korea, where access to services is more

¹³ http://www.europarl.europa.eu/atyourservice/en/displayFtu.html?ftuid=FTU_5.6.7.html

¹⁴ <https://ec.europa.eu/digital-single-market/en/telecoms>

¹⁵ As seen with France's position on excluding audio-visual works from negotiations <http://www.euractiv.com/section/trade-society/news/eu-us-trade-talks-falter-with-france-audiovisual-spat/>

¹⁶ https://europa.eu/european-union/topics/audiovisual-media_en

¹⁷ While the EU has generally excluded deep single market style access for services as part of free trade deals with 3rd countries, a deep level of potential service access was inserted in the DCFTA agreements struck with Georgia, Ukraine and Moldova. Although

restricted compared to what is available within the single market¹⁸. These free trade agreements also don't entail deep free movement provisions for workers.

- Secondly, the free movement of services can also be seen to directly touch on immigration if people are coming to the UK to offer their **services as self-employed individuals or if firms exercise their mobility rights while wanting to carry their workforce over**. A regime that practically tries to draw a distinction between labour and services is likely to encounter difficulties in sometimes distinguishing between a service provider and an employee. This problem may escalate in future given the growth of self-employment in the UK over recent years¹⁹.

Views around labour mobility are also supported by economic efficiency arguments in addition to more social views on the mobility balance between capital and labour. Nonetheless, the EU's **insistence on the four freedoms** (free movement of services, people, goods and capital) **for full market access** and the **UK's desire to obtain greater control of immigration, regulations and budget contributions**²⁰ may be accommodated within a framework that respects all these (UK and EU) constraints. This would imply finding an acceptable compromise on the application of these constraints versus depth of market access granted for the UK.

3.4. Future single market developments

As it currently stands, the **EU single market is incomplete**. Out of the four pillars (free movement of services, people, goods and capital), progress is required in all areas for complete integration to be achieved. New legislation, rules and economic/political institutions will need to be developed in order to break down remaining national barriers. However, the **most underdeveloped pillar at present is the market for services**.

Given that barriers to trade in services tend to be regulatory, new EU legislation will be required. This will also be a function of the pan-European architecture that gets adopted – which could include:

- New EU-level regulators for key sectors to replace national authorities.
- Maintaining national regulators as part of a European passporting framework whereby a license granted in one country is tantamount to full access across the single market, as is already the case in many financial services.

As far as our modelling exercise is concerned though, it is important to note that if the UK no longer has full access to the single market, many of the benefits of these market-deepening measures could be foregone.

much of this access remains untested and hypothetical in the case of these three countries, it should also be noted that these EU agreements may also reflect highly political considerations as part of an effort to bring these countries closer to the EU and set the stage for future integration and perhaps eventual membership. The UK's geopolitical constraints differ, whilst at the same time Britain is moving away from EU political structures – thus there is a justifiable degree of doubt over how applicable such a framework would be to a post Brexit setting.

¹⁸ <https://www.ifs.org.uk/uploads/publications/comms/R119%20-%20The%20EU%20Single%20market%20-%20Final.pdf>

¹⁹ <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/articles/trendsinselfemploymentintheuk/2001to2015>

²⁰ Otherwise known as “red-lines” or “constraints” in this report – these broad themes were outlined as part of Theresa May's January 2017 speech

4. Methodology

Below we discuss **the methodology used to compute the potential economic impacts of Brexit on service exports**. The scenarios we outline all essentially consider the impact of the UK moving from current access to goods only **FTA-like terms with few provisions for services**. Therefore, if the EU and UK strike an FTA relationship that still includes substantial access for services, the **impacts will be less pronounced than what the methodology below produces**. Furthermore, EEA and EU membership terms of access for services are similar, so as far as services are concerned we will treat the two as being interchangeable²¹ even though there are areas outside of services where important differences emerge.

4.1. Relevance of the global benchmark

We previously compared the UK's service exports to the EU with those that go to the rest of the world. This particular research report is helped by the fact that the **current level of actual service access to the EU is in substance unmatched by any other trade relationship the UK currently has access to**. We've therefore based this analysis on an initial assumption that after Brexit, outside of the EU single market, the UK's terms of trade with the EU in services **could go as far as to resemble the service terms with the rest of the world**. There are however a number of caveats that should to be considered as part of any such mapping exercise:

- We are well aware of distance impacts within trade, so for the purposes of this report the **initial trade difference numbers** can be **thought of as a pessimistic lower-bound**, in that geographic proximity to Europe may be argued to support higher post-Brexit trade volumes.
- The explicit and automatic inclusion of distance would though introduce a number of additional inputs to the analysis that **we feel would make the overall output too fragile** and sensitive to controversial and wide ranging assumptions. We will thus deal with distance impacts in a different manner later on in the report.
- Service trade in itself is also rather **conceptually different to trade in goods and geography can be argued to count for less than in the former case**. Since the logistics of services are quite different to goods and work can be provided remotely/electronically, the notion of a geographic premium is different.
- Even if one accepts the notion of a geographic premium in services, there are further questions arising on the distance applied and distance impact on trade. **We've found wide-ranging coefficients on the sensitivity of trade to distance**. Various studies have suggested that the impact of distance on trade could be as low as 0.4²² (a 10% increase in distance decreases trade by 4%), or as high as 1.17²³ just from a cursory literature review.
- We could combine a coefficient of 0.4 with a distance differential of 2.5, to produce a premium of 100% versus the rest of the world. This would suggest that, even under an FTA or WTO with minimum service sector provisions the volume of trade with the EU could up to 100% higher than is the case with the rest of the world.

²¹ http://www.europarl.europa.eu/atyourservice/en/displayFtu.html?ftuid=FTU_6.5.3.html

²² <https://www.imf.org/external/pubs/ft/scr/2016/cr16169.pdf>

²³ <http://www.d.umn.edu/~btadesse/Research/Literature/Variety-distance.pdf>

- The impact of leaving the unique single market relationship will however also make certain **trade flows binary (in the sense that they are either allowed or not allowed to happen)**, particularly in areas where regulatory restrictions will no longer allow UK firms to continue to provide exports in the current form. This type of binary regulatory outcome will not therefore necessarily be contingent on distance.
- Therefore, even if one accepts the notion of a geographic premium in service trade, the impacts are likely to be **less than 100%**.

For these reasons we've chosen to **not explicitly include distance considerations at this initial stage. We will however include changes for the sectors where this could come through** and implicitly include distance impacts later in the analysis.

It is also important to stress that this study looks at **gross impacts**. It does not consider the offsetting impacts that would come through service import changes that might offset some of the headwinds. Aside from the loss of current service sector access, we've also **not made any aggressive assumptions regarding new service sector trade relationships that the UK might be able to reach with other geographies around the world.**

4.2. Supply chain transmissions

The next step involves calculating the economic impacts of the differences between EU service sector exports and those going to the rest of the world. We computed these **transmissions throughout the UK real economy based on ONS data**²⁴. Exports represent foreign demand for goods produced by UK firms, thus helping to sustain higher levels of domestic production. An uncompensated decline in exports would **entail a number of potential economic headwinds for the UK.**

- A reduced ability to **export services to the European Union will affect the effective volumes sold.** These restrictions might come through extra trading frictions and expenses, while in other cases they may just come through regulatory prohibitions.
- The fewer units being sold will **entail three apparent impacts.** The lower revenues **will dent the profits of the firms exporting.** Secondly, the lower revenues **will dent the compensation of workers exporting.** Thirdly, there would be an additional supply chain transmission to the intermediate sectors, where **demand would decline for the inputs provided in the production of export goods.** Therefore, the firm profit, labour and intermediate sector impact can all be seen to represent the supply chain transmission. The intermediate sectors will have their own profit, wage and intermediate components though.
- This total supply chain transmission will **be bounded by the revenue figure of exports lost.** Under certain restrictive conditions, the overall supply chain impact can be as much as the total export revenue lost if we assume that the revenue itself represents the **cumulative amount of all value added within the UK.** This is unlikely to be the case though. Instead, by simulating **a generic three-stage supply chain, while also looking at the presence of imports versus domestic production,** we put together estimates of UK value added as a percentage of the total revenue of exports sold.

²⁴ ONS Supply-Use tables

We derived a service export value added proportion of **80% on an import/export basis compared to an overall proportion of 88% derived from a generic three stage simulated supply chain.**

The supply chain economics of service industries are different to that of goods in a number of ways. **The production of a service can be assumed to take fewer stages than is the case with manufactured goods that rely on well-defined upstream, intermediate and finished goods segments.** A disproportionate amount of the value added within a services value chain can end up taking place at the final stage. This makes sense within the context of a service intensive product like specialist consulting, where the human resource involved in the final stage of the value chain will end up creating a large of the value added due to the nature of the work involved.

Therefore, on a qualitative basis **service transmissions will likely entail a higher degree of economic impact taking place at the final stage and fewer intermediate impacts.** If one assumes that the service workers delivering the final product are also sharing in the overall value added equitably, there could also be a higher transmission coming through wages.

4.3. Expenditure transmissions

It is also important to look at the **expenditure impacts involved.** At a maximum, the consumption and investment impact of lost exports could, in theory, be as high as the proportion of value added lost though the supply chain. Nonetheless, this is offset by a couple of developments.

- Many large companies operating in the UK **transfer some of their earnings abroad.** For some financial firms these profit transfers can exceed 30% of profits. While these transfers in themselves do constitute a withdrawal of wealth from the UK, in this case it simply means that less value added is ploughed back into the economy through expenditure than was created, **it does not necessarily mean that the respective firms are withdrawing value from the UK on a net basis.**
- Profits and wages made are both taxable, so in a sense the GVA lost though **lower exports will represent a decline in funding for the Treasury.** A strict adherence to balance budgets can result in the withdrawal of UK government expenditure to offset these impacts, though in practice such an assumption may not necessarily come though. Faced with the withdrawal of fiscal funding the UK may instead opt to obtain taxes from elsewhere, though this would just be shifting the economic withdrawal to other parts of the economy. The UK could also **offset this impact though by running a higher deficit, which should in principle be sustainable as long as the deficit stays below the rate of long run economic growth.**
- Furthermore, **expenditure in the UK by firms and workers will also include a certain proportion of imports,** so not all of the net generated after tax wealth gets ploughed back into the UK economy.

The expenditure impacts that come through (after tax) wages and company profits will be quite tangible.

- We can assume that **company profits will either be channelled into reinvestment, distributed to workers or put into savings or reserves.** Moreover, **a functioning financial system will achieve a degree of equivalence between domestic investment and domestic savings,** such that the excess reserves that companies don't want to physically invest themselves can be channelled through to other parts of the real economy for investment.
- This is achieved either though the banking system that turns savings into lending or otherwise though capital markets where firms buy financial assets or invest their excess cash into bond funds

or money market funds. Therefore, the firm level decision of whether to **save or invest reserves produces the same net result**. Thus, a withdrawal of exports, such as the one we're considering, can result in a considerable investment decline through the reduced profits that firms make within the sector.

- Employee compensation can be channelled into the real economy either through consumer spending **or savings/investment**. Workers will intuitively channel most of their income into **consumption, with only a fraction of it geared towards investment**. These individual agent level impacts can be further extrapolated if one assumes that firms distribute some of their profits to shareholders or to workers through higher wages. For the purposes of this analysis however we've **simply assumed that the net profits after taxes and offshore transfers by firms are channelled directly into investment or into reserves/savings, hence indirectly into investment**.

5. Modelling results

5.1. Initial baseline

On the basis of the methodology employed, **we initially computed the impacts of leaving the single market assuming that there would be largescale convergence with service exports going to the rest of the world.** These figures are provided in the appendix to this report. We simply did this as a starting point in order to create a baseline, which would then serve as a floor **on top of which we worked in assumptions on the actual resilience and “stickiness” of UK service exports to the EU.**

Even under a very pessimistic world view through, one cannot assume that after leaving the single market UK exports to the EU would simply completely revert to the current non-EU benchmark. We explained previously that proximity to the EU will in itself uplift some trade levels, in addition to the legacy impacts of existing infrastructure, networking impacts with financial centres remaining in the EU etc. The next section will describe in detail the offsets applied to the different sectors in order to reflect these impacts as a way of developing two credible scenarios.

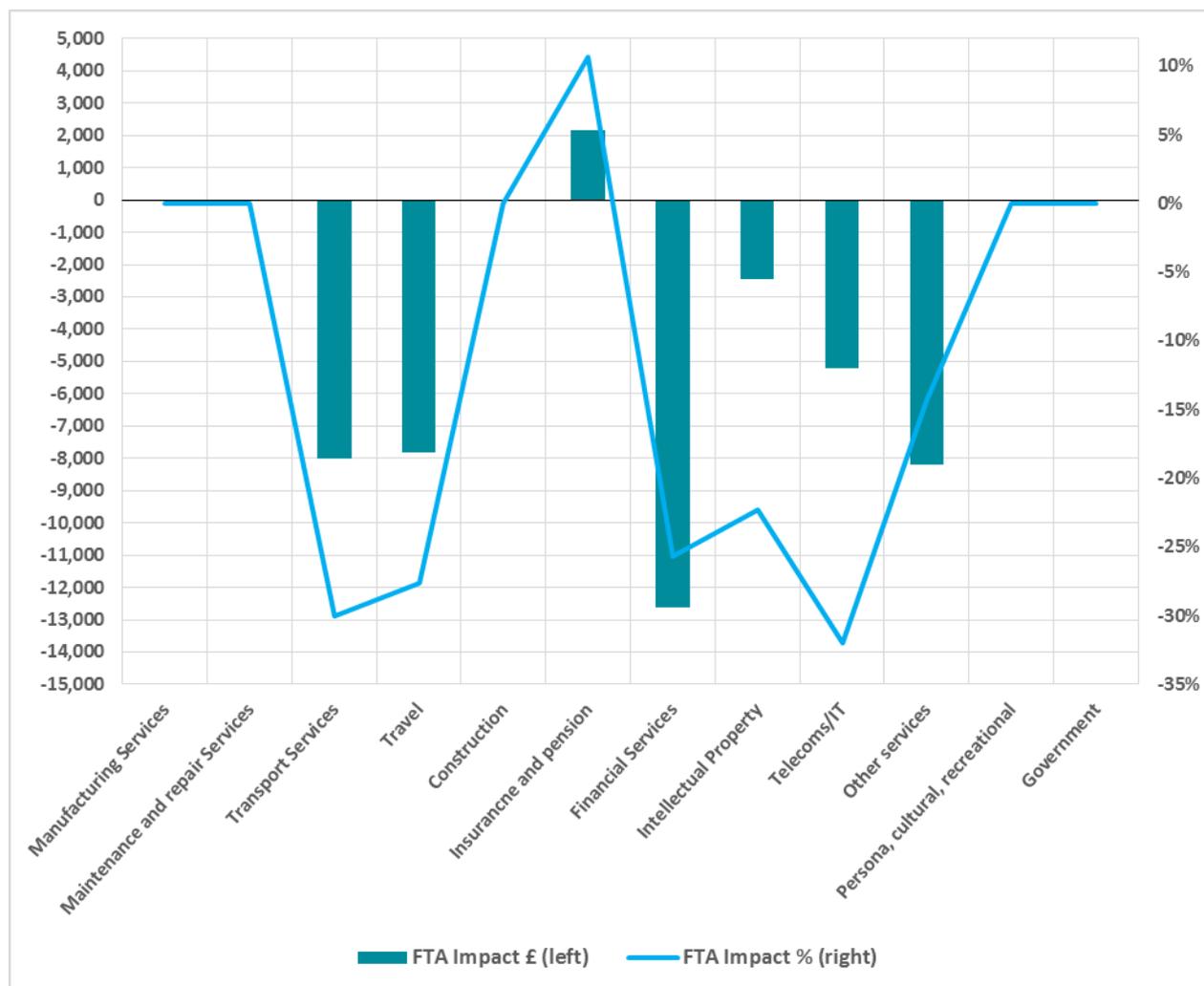
Therefore, the baseline results need to be understood as representing a **severe outlook that will be subject to certain adjustments in the next section.** What we’ve outlined in the baseline though is a £45bn impact on service export revenues. Due to the nature of the economic value chain, this represents a £36.7bn total supply chain impact, representing approximately 2% of GDP.²⁵

This total “baseline” economic impact could approach £52bn, or approximately 2.94% of GDP, assuming that the government does not pursue a deficit neutral approach which offsets tax income reductions with spending declines. The more aggressive assumption of government spending being offset to counter the decreasing tax inflows would result in a considerably larger GDP impact of almost 3.5%, this being severe on top of already severe assumptions.

²⁵ In computing the tax impact we’ve primarily considered income and corporate taxes. There could be further tax impacts by considering addition taxes on production.

5.2. Extending the analysis to balanced scenarios

Figure 2: Service export declines under “severe” total convergence benchmark



In order to extend the analysis into credible scenarios, we need to explore how individual sectors are projected to decline under the previous non-EU baseline, which is shown in Figure 2 above. This will allow us to move beyond the aforementioned severe outlook. The concept of “**revenue loss**” used below simply refers to the lost export sales from UK businesses having more difficulty exporting. However, not all of that revenue loss represents economic value added within the UK, for instance it includes a proportion of imported production inputs.

- **Within financial services we have made an assumption that 20-30% of current EU specific access will continue in some shape or equivalent form, which would mitigate approximately £2.5-3.8bn of export revenue losses compared to what is shown in Figure 2. When we net this out against the numbers in Figure 2 above, it results in £8.8-10.1bn of export revenue losses. Consequently, on a net basis this represents an 18-25% decline in the sector’s overall exports. We provide the justification for this in the next bullet.**
- Based on the pre-adjustment numbers shown in Figure 2 above, the largest absolute decline shown above takes place in financial services with approximately 25% of the total current exports

being at risk representing over £12bn of export revenue. Some of this is unavoidable if we assume the current level of regulatory access will not continue. If certain financial exports are essentially no longer allowed, then geography is unlikely to make a difference. There could however be a certain amount of legacy stickiness, as discussed in previous sections, which would help to mitigate certain losses, hence we do expect some access to continue.

- In building up the scenarios we are also going to assume that 20-50% of the Figure 2 export losses could be offset in transport. This will result in transportation potentially clawing back £1.6-£4bn of revenue compared to the numbers shown in Figure 2. When this is netted out the total export revenue decline for transport is set to reach £4-6.4bn. On a net relative basis this represents a 15-24% decline in export revenues. We could be more generous to travel and assume 55-75% of the Figure 2 losses will be offset. This means that within travel the possible revenue offset will be £4.3-£5.9bn compared to what is shown in Figure 2. The net impact of this is that the total travel revenue decline is expected to reach £2-3.5bn. Overall these net changes result in the travel sector experiencing a 7-12.5% total export revenue decline. Our justification for these assumptions is given in the next two bullet points below.**
- We note in Figure 2 a negative impact on transportation and travel, each reaching around 20% of current export revenues. Certain losses in this area too could be unavoidable. Leaving the single market will have implications for aviation access, as it is not certain how much of the current aviation single market the UK could still have access to. The Open Skies agreement with the US sets a precedent in terms of certain aviation single market features being available to 3rd countries, but on the other hand much of this will also be subject to political and process/timing uncertainties. As with banking, some UK airlines seem to have responded to the current uncertainty by looking at setting up new subsidiaries outside of the UK²⁶, which may help to offset the losses if those subsidiary channels can still complement the UK business.
- Travel and transport are facilitated by the free movement of people. Tourists and workers are core demand drivers. If free movement rules substantially drop away this could have impacts on the transport and travel segments. Even if tourism remains visa-free, there have been suggestions of an e-visa for non-EU countries entering the Schengen area²⁷ even where these currently enjoy visa free travel today. If this happens, along with possible UK retaliatory measures, it would result in more frictions. Transport demand also comes from migrant populations continuing to travel back and forth to their home countries. Demand for business travel may also suffer as a by-product of the UK being outside the single market and thus less integrated with the EU economy in other industries. When we consider these developments, the global benchmark with non-EU countries has some relevance. It is also worth pointing out that Europe is obviously much closer to the UK than other geographies, in addition to offsets like the Common Travel Area with Ireland being likely to remain in place even after Brexit.
- Within telecoms and IT, our assumption is that 0-50% of the losses computed in Figure 2 could be kept. In reality though, the proportion of surviving exports may be higher when considering unrecorded trade. If we simply assume that the unrecorded flows survive anyway (partly because they are also unregulated), then the absolute figures extracted are still fine and for consistency we've expressed the declines as a percentage of recorded figures, not as a**

²⁶ <http://news.sky.com/story/low-cost-airline-easyjet-close-to-landing-post-brexiteu-base-10814831>

²⁷ <https://www.theguardian.com/politics/2016/sep/09/britons-may-have-to-apply-to-visit-europe-under-eu-visa-scheme>

percentage of the actual figures. This offset results in £0-2.6bn of the Figure 2 losses being kept. The overall sector losses reach £2.6-£5.2bn, which represents a net export loss for the sector of 16-32% out of total sector exports. We've provided a justification for these changes below in the next two bullets.

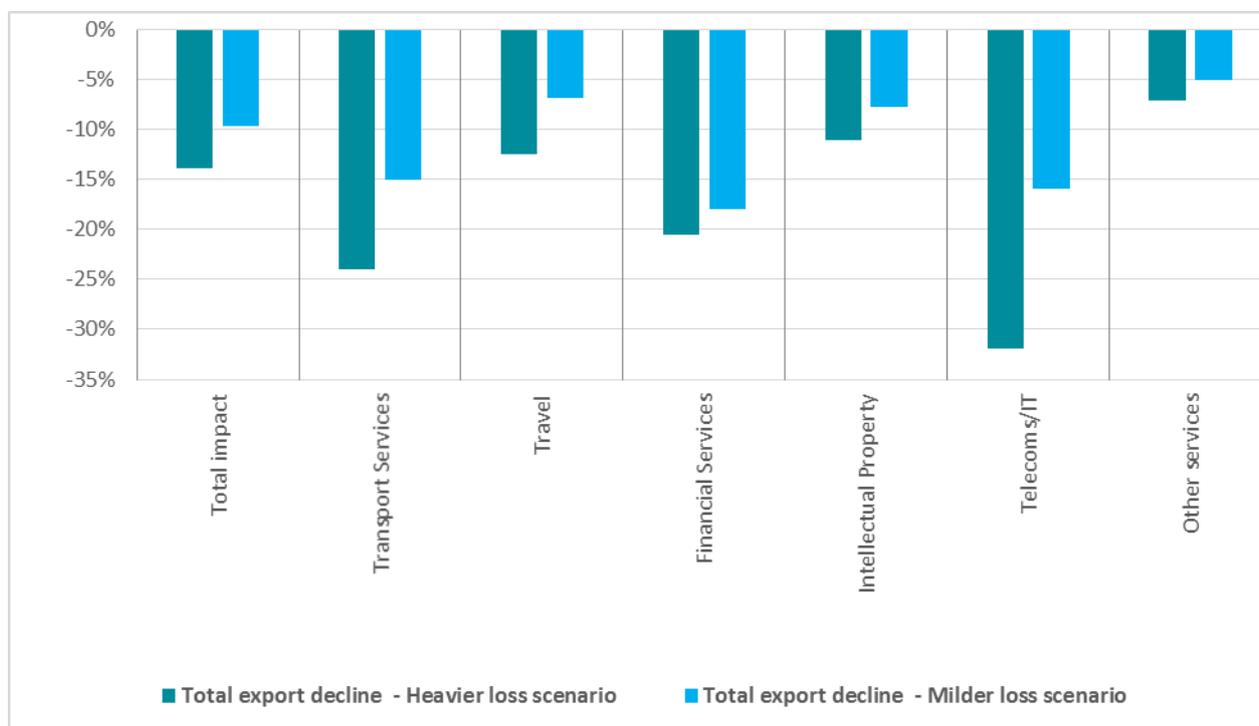
- Within Figure 2 the largest relative decline of around 32% is computed to take place within telecoms and IT. This industry itself will be subject to a number of different dynamics. On the one hand there are certain EU rules/regulations that come through the provision of regulated audio-visual segments. For instance, the EU has an Audio-visual and Media Policy²⁸ entailing framework rules, broadcasting standards, copyright rules and one must also consider the cultural exceptions sometimes demanded. For instance, trade negotiations with the EU may run into the same barriers that recently emerged with France regarding TTIP negotiations and the cultural exception sought²⁹.
- Nonetheless, it is also worth noting that much of the IT and tech industry is unregulated and many services within this may continue to flow unhindered, as with London's "Flat-White" economy. Here the free movement of people is the critical raw input required. In light of this, we projected the offsets slightly differently. While it is true that many of the UK's exports in this area will carry on relatively unhindered by the direct impacts of leaving the single market, many of these exports may be understated in the first place.
- **In other services, we've allowed for 50-65% of Figure 2 losses to be averted. This means that around £4.1-5.3bn of the prior export revenue losses may be avoided. On a net basis the export revenue losses therefore reach £2.8-4.1bn, representing 5-7.2% decline in overall sector exports. The justification for these changes is given below.**
- Other services include a myriad of activities. Some of these are not currently affected by single market regulations such as many professional services, while others are services that support services that rely on the flow of goods in addition to services that rely on the flow of agriculture. The industry does however also include areas like management consulting, in addition to regulated pillars such as legal. The heterogeneous nature of these makes it very difficult to gauge the possible offset, though the unregulated nature of many services there may mean that the sector could be relatively robust.
- On insurance and pensions, this report has not established a clear link between these activities and being in the EU. We may simply be picking up an **association that has little to do with the UK's single market membership**. To be prudent, we'll apply a 100% negative offset to this so that it has a zero impact in all scenarios.

The end result of these adjustments is illustrated below under "heavy" and "mild" scenarios. Even after offsetting many of the initial losses we still note that the **UK could stand to lose between 9.62% and 13.92% of its total service exports outside of the single market.**

²⁸ http://www.europarl.europa.eu/atyourservice/en/displayFtu.html?ftuld=FTU_5.13.2.html

²⁹ <http://www.politico.eu/article/france-wants-cultural-exception-kept-out-of-eu-us-trade-talks/>

Figure 3: Service export declines (expressed as a percentage of total exports) after scenario adjustment have been made



We've also included the export revenue losses in nominal terms below to complement the relative changes in Figure 3 above.

	Export Loss - Heavy (£m)	Export Loss - Mild (£m)
Transport Services	-6,420	-4,013
Travel	-3,524	-1,958
Financial Services	-10,109	-8,846
Intellectual Property	-1,220	-854
Telecoms/IT	-5,217	-2,608
Other services	-4,101	-2,871
Total Loss	-30,591	-21,149

The next table summarises total GDP losses to the UK of withdrawal from the single market in services and shows how the different sectors contribute to it. It only includes sectors where we've modelled an impact³⁰. **By far the most important is financial services, where the loss could be about a third in the pessimistic scenario. The more pessimistic scenario below sees a GDP loss of 2% while the "mild" scenario sees an approx. 1.4% loss in GDP. In absolute terms the GDP losses range from £24.8bn to £35.9bn. GDP can be thought of as the total value added within the UK over the course of a year.**

³⁰ Manufacturing services, Maintenance and Repair services, Construction, Insurance and pension, Personal, cultural, recreational and Government are modelled as having a zero impact and are hence not included in this breakdown.

	GDP Impact - Heavy Losses	GDP Impact - Mild Losses
Transport Services	-0.42%	-0.26%
Travel	-0.23%	-0.13%
Financial Services	-0.66%	-0.58%
Intellectual Property	-0.08%	-0.06%
Telecoms/IT	-0.34%	-0.17%
Other services	-0.27%	-0.19%
Total Loss	-2.00%	-1.38%

Losses could be mitigated beyond the mild scenario above if we assume robust new relationships with service access pillars. Some sort of “CETA+” or Swiss scenario would also help to limit the damage in terms of lost EU trade. Moreover, the assumptions around distance impacts could also be scaled upward to offset more of the projected trade declines than we’ve done.

However, we’ve also not considered dynamic single market deepening, or 3rd round economic impacts. We have also made some assumptions on the resilience of certain export segments. **Under more pessimistic assumptions losses could exceed the range outlined above.**

Notwithstanding all the aforementioned assumptions, **access to the EU market for services is lucrative**, running to tens of billions of pounds each year in export revenues and GDP contributions. The cumulative impacts of this can conceivably run to hundreds of billions of pounds over a decade. Therefore, the costs of not securing at least some access to the single market for services is considerable. **Even within a framework that is outside the formal single market the UK can still avoid many of these costs by negotiating a deal that keeps it as close as possible to the single market.** Service access is not just about avoiding WTO terms, but certain trade-offs need to be made on “red-line” issues so that a deep agreement can be struck that covers more than just goods.

6. Indirect impacts on goods trade

6.1. Key Concepts

As far as goods are concerned, even a simple FTA would likely offset some of the economic pain associated with a WTO scenario due to goods being tradable without tariffs under a preferential regime. However, such an arrangement would still entail certain indirect impacts through **non-tariff barriers**.

6.1.1. Market rules and regulations

Much depends on the UK's future approach to EU standards:

- The British Government has however already signalled its intention to **incorporate EU rules into domestic legislation** as part of the Great Repeal Bill³¹.
- Over the short and medium term, this should **help UK goods exporters to deal with UK and EU standards** since they would still initially only be using a single rulebook, thus continuing current practice.
- This would end up being **useful whether or not the UK actually secures preferential access in goods**, as even under WTO access the domestic adoption of EU rules would still ease the regulatory burden on goods exporters and reduce this non-tariff barrier.
- A unilateral approach to **standard adoption alone also has certain limitations**. While UK standards may initially be the same as EU standards, if these are not formally recognised as being equivalent by the EU, goods may still end up having to undergo formal certification³² or compliance procedures. This should be a mere formality if EU and UK standards are the same, but the **added operational complexity may be costly**. If the UK negotiates a deep agreement with the EU that at least **formally recognises equivalence** that would be more beneficial.

Although a unilateral adoption of EU standards would solve some problems associated with leaving the single market and customs union, the long-term view is subject to more uncertainty. Unless some sort of mechanism was agreed to keep UK rules in line with EU rules, over time the **standards would drift apart**. This would happen as domestic political and economic needs start to shape rules compared to the initial EU templates. EU rules would themselves also change.

Moreover, both the UK and EU may change their **internal market rules depending on other 3rd party trade relationships pursued**. In the case of the UK, deep future trade agreements outside of Europe may require domestic rules to be changed so they can achieve **equivalence with other markets**. Again, such a long-term drift would potentially gradually result in exporters having to produce goods to different standards, which would increase production costs

In dealing with this, it would again help if the UK managed to **negotiate regulatory equivalence measures with the EU as part of a post Brexit deal**. This would potentially allow UK divergences from existing EU rule templates to still be recognised as compliant with future EU rules as long as certain outcome

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https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/604516/Great_repeal_bill_white_paper_accessible.pdf

³² <http://2016.export.gov/europeanunion/eustandardsandcertification/index.asp>

thresholds are met. Nonetheless, achieving such equivalence could also effectively limit the UK's regulatory autonomy.

6.1.2. Customs and rules of origin

Even if we assume that regulatory barriers can be mitigated over the short term, the UK still has to manage the process of **leaving the EU customs union in a way that minimises economic frictions**. Given that the EU negotiates trade deals and market access as a bloc, the union has applied a common **external tariff for third countries**³³. Therefore, all EU members have the same trade policy as far as 3rd countries are concerned. When goods come into an EU member state from a third country, they can be passed onto any other EU member state in full confidence because that good has complied with the common external tariff, or otherwise that third country enjoys **harmonised preferential access to all EU countries**. While a goods free trade agreement between the EU and the UK would **cover goods originating from the UK**, the UK's desire to leave the EU customs union will also conceptually result in UK exports being subject **to rules of origin used to determine the national source of various products**, requiring goods to go through customs.

Leaving the customs union will therefore entail a gross economic cost. The time and resource spent in bringing goods through a customs process adds to cost, such as incurring costs for certification. There are also opportunity costs to consider for industries where integrated supply chains rely on timely delivery and minimal delays. Tariffs may also end up being paid on goods that have a sizeable proportion of their value added coming from 3rd countries depending on the rules of origin applied.

It is however important to point out that the **primary rationale for leaving the customs union ties into the UK's ability to run an independent trade policy outside of the EU**. Although leaving the customs union will likely entail some significant costs, this has to also be considered alongside the economic gains associated with less restricted 3rd party trade:

- Outside of the EU's trade policy the UK will potentially have **more flexibility** in terms of being able to negotiate free trade deals given that 27 other (sometimes diverging) interests won't have to be satisfied.
- However, the **smaller size of the UK market** could also mean that it has less clout in terms of being able to secure deep access to large economies. In the end, the trade-off will come down to agility versus scale.

The costs of leaving the customs union also depend on the **underlying assumptions made on the sort of follow up arrangement the UK is able to secure with the EU**. If simplified and streamlined rules of origin are agreed with the EU as part of an FTA, **that may offset some of the costs**. Many of these assumptions need to also be qualified by practical difficulties as well as the EU's willingness to cooperate.

One could also envisage a **Virtual Customs Union**, though this will again depend on the EU's cooperation. As part of this approach, the UK could essentially try to run a **dual track trade policy**. Part of the UK's trade policy would be geared **towards replicating as far as possible EU free trade arrangements** with other countries to ensure that, as a minimum, the UK has similar FTAs with all countries that the EU has agreements with. Additionally, the UK could also have a separate trade policy that attempts to gain **supplementary access to 3rd countries** over and above what the EU has done.

³³ https://ec.europa.eu/taxation_customs/business/calculation-customs-duties/what-is-common-customs-tariff_en

- This could mean that the UK ends up operating a de-facto “EU+” trade policy. All goods coming from abroad into the UK can either be marked/labelled as **EU compliant where they originate from the standard EU free trade partners**, or they could be marked as **non-compliant where they originate from other 3rd countries**.
- This labelling would **then potentially leapfrog the customs process**, as companies that want to be exempt from rules of origin and other formalities could simply choose to constrain their supply chain inputs to products that are marked as being EU compliant, thus falling in a virtual EU customs union operating within the UK economy.
- Other firms **that wish to pursue other inputs** in exchange for going through customs formalities would then take on that burden voluntarily.

This approach would however require a **substantial buy-in from the EU**, in that the UK would need to get them to recognise the UK tagging process such that fully EU compliant value chains could proceed unhindered. It would also require a sizeable capital and **technology investment by the UK** for goods to be appropriately tagged at the border or marked in some form.

6.2. Quantifying of non-tariff barriers

We have also considered some prior research touching on the **rules of origin frictions of leaving the single market and customs union**. There is a considerable amount of literature available on the cost of non-tariff barriers such as rules of origin.

- For instance the UK Government’s 2013 Review of Competencies between the UK and the EU³⁴ included a reference to **rules of origin compliance accounting for 4%-15% of trade costs** based on a Centre for Economic Policy Research (CEPR) literature review done in support of the government report.
- A 2009 paper by Kee, Nicita and Olareaga on trade restrictiveness showed that non-tariff barriers added 87% to the restrictions normally imposed by tariffs³⁵.
- A 2013 summary report by the OECD on trade costs estimated that customs compliance, administrative procedures and delays can increase **transaction costs by 2-24% of the value of traded goods**³⁶.
- A 2005 report by Francis, Hoekman and Manchin found that preferential tariffs must be **4-4.5% below MFN tariffs for traders to request preferences**, implying this is the amount taken up by administration and technical requirements such as rules of origin³⁷.

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https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/279322/bis_14_591_balance_of_competence_s_review_Trade_and_investment_government_response_to_the_call_for_evidence.pdf

³⁵ <http://siteresources.worldbank.org/INTRES/Resources/OTRIpaper.pdf>

³⁶ [http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=TAD/TC/WP\(2013\)3/FINAL&docLanguage=En](http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=TAD/TC/WP(2013)3/FINAL&docLanguage=En)

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<https://openknowledge.worldbank.org/bitstream/handle/10986/16423/775190JRN02006000Preference0Erosion.pdf?sequence=1&isAllowed=y>

- A 2002 study by Cadot et al³⁸ estimated that even within a comprehensive free trade area like NAFTA, an approximation of combined rules of origin and administrative costs come to **5.06% utilising an indirect reveal preference index based on utilisation rates.**

This reveals that focusing too narrowly on tariffs could be problematic. Some non-tariff barriers, such as compliance costs with different rules and regulations, can be partly offset through unilateral measures currently being implemented by the UK. However, this still leaves the customs issue discussed above as well as mutual regulatory recognition achievable through a deep agreement³⁹.

6.3. Agriculture

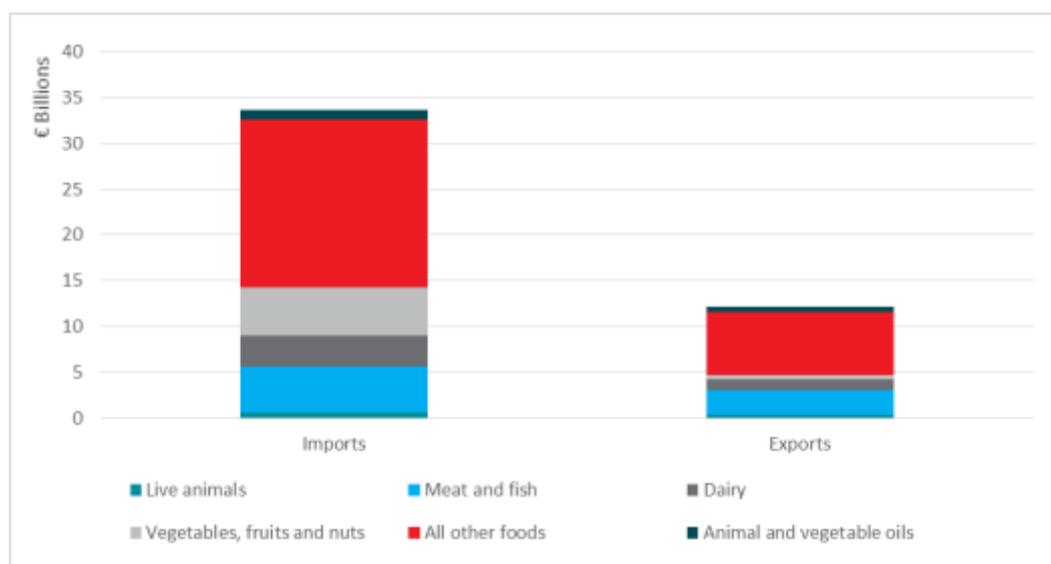
An FTA between the EU and the UK may also run into **difficulties on agriculture**, hence affecting food supply. We've briefly addressed some of the main concerns.

6.3.1. The UK's food trade balance

The UK runs a sizeable food trade deficit with the European Union of approximately £18 billion a year. While trade deficits themselves may be quite abstract for many goods, the **deficit in food does potentially touch on a basic and tangible issue for UK consumers.**

Given the free trade in agriculture that currently exists within the EU⁴⁰, a **post-Brexit deal that provides for trade barriers in food products would have a very direct and noticeable impact on people's immediate welfare.** Agricultural trade barriers between the UK and EU would potentially increase the cost of supplying these imports, which would raise aggregate cost of food in the UK, while also posing barriers for UK exporters. If these trade barriers end up being very hard, that would increase the cost of imported products.

Figure 4: Composition of UK trade with the EU in food goods, 2015



³⁸ http://web.worldbank.org/archive/website00894A/WEB/PDF/CADOT_RU.PDF

³⁹ The CETA deal with Canada is an example of a "deep" agreement with provisions for equivalence

⁴⁰ Notably not the EEA as this broader agreement excludes agriculture, which is handled separately between the EU and those countries

Notwithstanding that the UK's agricultural self-sufficiency is only around 60%⁴¹, more **restricted trade in agriculture between the UK and the EU would not necessarily lead to national UK shortages**.

Firstly, the UK could still take a unilateral approach:

- This would uniformly lower the MFN (Most Favoured Nation) tariff on food imports in line with WTO tariffs, thus protecting UK consumers from the prospect of higher tariffs being transmitted to prices. This approach may thus deal with the immediate issue of higher prices, but it would potentially also complicate matters for UK agriculture and food producers as the unilateral approach to lowering MFN tariffs has to apply across all countries, not just the EU.
- UK producers could therefore face increased competition from multiple countries that currently don't enjoy preferential British market access.
- A unilateral UK approach would also not necessarily see these gestures reciprocated by the EU or other countries, so UK food exports might still be hampered, providing some economic drag on top of increased domestic competition for UK producers.
- UK consumers may however benefit from lower prices on 3rd country imports that had previously been subject to a higher EU MFN rate.

An economic framework would also suggest that even with higher tariffs **the UK is unlikely to simply “run out of food”**. Constrained imports will raise aggregate market prices, which in itself would rein in consumption. Over the long-term higher prices would themselves attract **more investment the food sector and more domestic UK food production**. Nonetheless, without a trade deal that sees continuing access in agriculture, this overall **adjustment process would not be easy or painless**.

6.3.2. Problems in securing access

One difficulty in securing continued free trade in agriculture with the EU ties into the **UK's associated exit from the Common Agricultural Policy (CAP)**. Given that the CAP provides a common subsidy mechanism across the EU, this makes it **easier for free trade in agriculture to be maintained in the union**. Agricultural lobbies in different countries will have difficulty arguing that other EU member states enjoy unfair advantages since everyone essentially has access to the same system.

Outside of the EU's CAP two complications may emerge:

- Agricultural producers in the remaining EU might argue that a **new British support/subsidy mechanism is incompatible with the CAP**, hence there should be (tariff or quota) restrictions in trade because the UK and EU would no longer be operating from a common support base.
- If the UK adopts a less generous regime than the EU, **pressure could come from UK agricultural producers** arguing EU exports enjoy special tariff protections.

Some of these problems may however be (conceptually) mitigated if the UK seeks to strike some sort of **equivalence or coordination regime with the EU, whereby Britain's new subsidy mechanism for agriculture ends up being recognised by the EU as being equivalent to its domestic support**.

⁴¹ <https://www.theguardian.com/environment/2014/aug/07/britain-food-self-sufficiency-decline-imports-nfu>

In terms of precedent, even comprehensive FTAs contain restrictions on agriculture compared to the current EU flows. For instance, within the Ceta deal between the EU and Canada the EU will remove 92.2% of agricultural tariffs.⁴² This is accompanied by **Tariff Free Quota's (TRQs) that only allow tariff free trade below a volume threshold**. Some categories of agriculture are **excluded a since they are classified as sensitive products**. Even the deep trade deals struck with Ukraine, Moldova and Georgia included cheese and butter TRQs⁴³.

Additionally, the food industry may also be vulnerable to rules of origin given the presence of cross border production and retail supply chains. The issues around access for agriculture even extend to the formal single market as the EEA does not cover this sector and agricultural is subject to certain restrictions⁴⁴.

⁴² EU Commission - http://trade.ec.europa.eu/doclib/docs/2014/december/tradoc_152982.pdf

⁴³ EU-Ukraine Deep and Comprehensive Trade Agreement [Full Text](#)

⁴⁴ <https://www.regjeringen.no/en/topics/european-policy/areas-cooperation/agriculture/id686224/>

7. Appendix – Baseline Impacts

NB: THIS IS NOT THE ACTUAL IMPACT OF LEAVING THE SINGLE MARKET FOR SERVICES, IT IS JUST A BASELINE NEEDED IN OUR STUDY FOR METHDOLOGICAL REASONS

GDP Impacts	Nominal Amount (£m)	% of GDP
Standard FTA Service Export Impact	-44,988	-2.51%
Standard FTA Direct GVA Impact	-23,743	-1.32%
Standard FTA Total Supply Chain Impact	-36,787	-2.05%
Standard FTA Gov Revenue Impact	-8,519	-0.48%
Standard FTA Investment Spending Impact	-22,134	-1.23%
Standard FTA Related Consumption Impact	-13,417	-0.75%
Total Impact	-61,296	-3.42%
Total Impact (excl Gov)	-52,777	-2.94%

Within the table above we summarised the initial baseline results of our **economic scenario analysis**. This has mostly been computed using the **“rest of world” benchmark which assumes that outside of the single market the UK’s service exports to the EU will come to completely resemble those that go to the rest of the world**. We have not yet made distance and other discretionary adjustments to account for things like stickiness and non-regulated services, **which is required as part of a balanced analysis**.