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#### The Brexit Trade Disruption Revisited

Andreas Hatzigeorgiou

Chief Economist, Stockholm Chamber of Commerce, and Research Fellow, Ratio Institute, Sweden

Magnus Lodefalk

Research Fellow, Department of Economics, Örebro University, Sweden

The UK leaving the European Union, a 'Brexit,' would have economic and political implications. One of the most profound economic impacts would be on trade—the EU is the UK's most important trade partner, with approximately half of UK total trade. A Brexit would imply looser economic integration between the UK and EU. In addition to the trade barriers that would arise from leaving the single market, there would also be negative trade policy effects. Previous analyses of the cost of a Brexit to the UK economy in terms of trade have probably underestimated the impact because they overlook the trade-enhancing role of migration. A Brexit would be likely to limit migration, which, in turn, would aggravate the exit's trade-disruptive effect.

Keywords: Brexit, migration, trade, trade policy

#### Introduction

Most economists agree that trade is the main channel through which the economic cost of a Brexit would be realized.

Several studies have attempted to estimate the economic implications of a Brexit, for the UK and other countries (e.g., Buiter, Rahbari, and Schultz, 2016; Dhingra et al., 2016, 2016b, 2016c; Hatzigeorgiou, 2016). The conclusion is that a Brexit would have negative economic effects—not least on the UK—many of which would appear through reduced trade.<sup>1</sup>

The concerns presented in the literature on the potential trade implications of a Brexit can be divided into two categories. First, 'direct effects' stem from the UK departing from the EU single market.<sup>2</sup> Losing access to the EU single market, the destination of almost half of UK exports, would undoubtedly have implications for the UK economy, not least because of the sheer size of the market, with its 513 million consumers and 21 million small and medium-sized enterprises.

Second, 'indirect effects' relate to trade policy implications. We identify three main concerns pertaining to trade policy:

(1) In addition to removing itself from the EU single market, the UK would no longer be party to the EU's free trade agreements (FTAs) that currently bring European companies privileged access to many important markets.<sup>3</sup> The UK would need to replace the FTAs the EU has with third countries with its own agreements. As an economically and politically weaker player, the UK might find it difficult to woo countries to start negotiations, and securing deals that correspond to the market access provided to the EU may prove impossible.

(2) The UK would need to enter several parallel negotiating processes, requiring substantial time and resources. Having to invest in building the competence and power necessary to succeed in these highly technical negotiations would be costly and time consuming, and could put British companies at a competitive disadvantage.

(3) Trade policy is covered by the EU's exclusive competence, which means the UK has not had an autonomous trade policy since it became a member of the European Economic Community, the EU's predecessor, in 1973. While a Brexit would reintroduce an autonomous trade policy in the UK, the return of national sovereignty in this context would imply greater risk. A post-Brexit British government would be exposed to heightened protectionist pressures from special interests. British policymakers in a post-Brexit world would need to address the greater protectionist pressures inherent in sovereignty over trade policy.

In this article, we review Brexit concerns pertaining to trade. We conclude that these concerns have merit, and that leaving the EU would risk a negative impact on trade.

In the event of a Brexit, the UK would probably be required to leave the EU single market, and subsequently relinquish free access to the market of its most important trade partner. Only outside the single market could Britain avoid having to contribute to the EU budget, comply with Brussels' regulation, and accept the free movement of people.

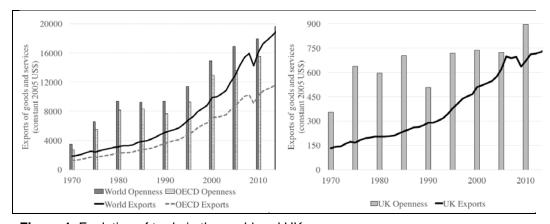
Having said this, we conclude that the negative economic effect, derived from adverse trade conditions, has probably been underestimated. We explain why this is the case by emphasizing that a Brexit would probably limit migration, not least because one major argument of the 'Leave' (pro-Brexit) campaign would allow greater control over immigration (Wadsworth et al., 2016). This must be accounted for in the framework of analyzing possible trade effects.

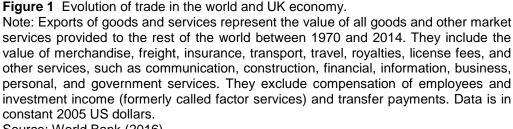
Economic research has demonstrated that migration facilitates foreign trade, and new empirical evidence indicates that companies hiring immigrants may increase their foreign trade. Accordingly, we argue that decreased migration as the result of a Brexit would disrupt trade even more than previously thought.

In the next section we outline the changing landscape of production and trade in the global economy. We elaborate on why the changing landscape has raised the trade policy costs of leaving the EU, and how this influences the possible trade implications of a Brexit.

#### The Changing Landscape of Production and Trade

International trade has increased drastically in the past few decades. As shown in figure 1, the 2014 value of exports of goods and services, in OECD countries as for the global economy as a whole, was ten times its 1970 value (World Bank, 2016). Furthermore, examining a conventional measure of economic openness—the ratio of trade to gross domestic product (GDP)—clearly indicates that economies have become more economically interdependent and more dependent on foreign trade overall. Economic openness doubled between 1970 and 2014. The UK economy has followed a similar trend towards increasing trade and economic integration with the world economy.





Source: World Bank (2016).

More open trade policies, in addition to technological advances and decreased costs of transportation, explain why trade has significantly outgrown GDP in recent decades (e.g., Hummels, 2007; Hoekman and Kostecki, 2001). As a result, 'natural trade barriers,' determined by geography, have diminished in importance. With this background, one might have expected a situation where a majority of firms would trade with foreign markets. Nevertheless, a relatively low share of businesses has internationalized, and the changing landscape of trade and production is one explanation for this.

The fragmentation of supply chains, companies' division of different aspects of production between countries, together with the increasing role of services in the economy, are two trends that have altered the framework of current trade policy. Fragmentation implies that goods and services are often traded within corporations or production networks, which implies that trade barriers no longer impede merely the final link of trade transactions, but rather the whole process from production to delivery. Progress towards global value change is blurring the distinction between exports and imports.<sup>4</sup>

Furthermore, the developed economies are increasingly being classified as service economies due to the growing overall importance of services and, in contemporary manufacturing, what is termed 'servicification' (De Backer, Desnoyers-James, and Moussiegt, 2015; Falk and Peng, 2012; Lanz and Maurer, 2015; Lodefalk, 2013,

2016; USITC, 2013). This is especially true for the UK economy: separating the economy of the UK by sector of origin reveals that nearly 80 percent of GDP is derived from services, which is above the EU average (CIA World Factbook, 2016).

Therefore, 'fragmentization' and 'servicification' have altered how the global economy operates, which, in turn, has had profound effects on trade policy (e.g., Lodefalk, 2016b). In essence, factors such as trust, risk, standards, and regulation have become more significant in the context of trade (e.g., Schneider, 1988; Elsass and Veiga, 1994; Hofstede, 2001; Handley, 2012). These 'informal' trade barriers are now regarded as dominant over conventional trade barriers as drivers of trade costs (Anderson and van Wincoop, 2004). For UK firms, these types of informal trade barrier appear particularly burdensome (Kneller and Pisu, 2011). As we will return to, this changing landscape of barriers to production and trade in the global economy is relevant to the analysis of the economic implications of a Brexit.

#### Trade Policy Implications of the UK Leaving the EU

We identify four ways in which a Brexit would hurt UK foreign trade through the trade policy channel. The changing landscape of production and trade has increased the costs of each of these trade policy changes, relating to appeal, capacity, clout, and protectionism.

#### Appeal

There is a real risk that if the UK decides to leave the EU it would not be able to retain the level of market access to third countries that British companies enjoy today. Beyond being excluded from existing agreements, the UK would be excluded from future comprehensive agreements that the EU is currently negotiating with several strategically and economically important countries, such as Japan and the United States.

The argument that the UK would be able to negotiate new FTAs once it is outside the EU is conditional on several external factors. What, probably, would be the most attractive agreement for the UK, besides reaching a new comprehensive deal with the EU, would be one with the United States. A potential Transatlantic Trade and Investment Partnership (TTIP) could lift UK GDP over a ten-year period by an estimated 0.14-0.35 percent (CEPR, 2013).

However, Barack Obama, the U.S. president, recently reiterated statements by U.S. trade diplomats that the UK can expect no special treatment and would be 'at the back of the queue' if it decided to leave the EU (Ashtana and Mason, 2016).

Accordingly, it seems likely that a Brexit would diminish the trade policy *appeal* of the UK.

#### Capacity

Even if the UK was not discriminated against in the matching market of international trade deals, it would most probably be unable to restore the market access lost to British firms due to a Brexit, at least not quickly enough to avoid a competitive disadvantage.

Modern trade agreements are complex, and they are complex because they are so comprehensive. They need to be comprehensive in order to be relevant in the modern economy.

As explained, internationalization is now much more than countries producing goods at home and shipping them abroad to have them sold in a foreign market. The most recent of the FTAs finalized by the EU was with Canada, and that agreement had more than 5,000 pages. This explains why the deal that is currently being negotiated between the EU and the United States is not even referred to as a trade agreement, but an economic partnership.

The complexity of modern trade agreements follows the increased complexity of the global economy. Production is fragmented and split across national borders in global value chains. Firms combine manufacturing with buying and selling services (Lodefalk, 2014, 2016). This has increased the level of expertise and experience necessary for succeeding in finalizing trade agreements that provide real market access for firms.

This complexity explains why the average time for the EU to reach a new FTA is seven years. This is despite the extraordinary number of staff—consisting of trade diplomats, lawyers, and other experts—available to the European Commission. Not to mention the pooled resources of all the member states that provide substantial support when the EU is negotiating trade deals. Accordingly, a Brexit would probably erode the trade policy *capacity* of the UK.

#### Clout

Trade negotiations, like all negotiations, involve compromises. Naturally, however, compromises tend to be more substantial in negotiations where the parties are on an equal footing in terms of power and influence.

The EU is the world's second largest economy measured in terms of purchasing power-adjusted GDP, after China and ahead of the United States. The EU's population is 513 million, which makes it the world's third most populous 'country.' Only China and India have larger populations, and the United States, which has the fourth largest population, does not even come close with its 321 million inhabitants. Even in the event of a Brexit, the EU would still be among the top three largest and most populous economies in the world. In a trade policy context, breaking away from the EU means the UK loses the ability to leverage the clout of the most powerful economy in the world, having to rely instead on its own size, which would mean dropping to position nine in terms of GDP, and position twenty in terms of population.

On these grounds, it is logically convincing to think that the EU will be more successful in reaching trade deals with third countries that are more aligned to its own agenda, than what the UK would be on its own. By the same token, since all EU member states act as one nation within the framework of a multilateral trade system, it is reasonable to assume that the UK would face an uphill struggle in the WTO, relative to being a member of the EU. For instance, the decreased leverage within the WTO could translate into lower probability of resolving trade disputes in a manner conducive to UK interests. Consequently, a Brexit would probably reduce the trade policy *clout* of the UK.

#### Protectionism

Finally, there is a potential risk that protectionist pressures would rise as the result of a Brexit. These pressures could also be more difficult to keep at bay outside the EU. Trade policy, being part of the EU's exclusive competence, has likely contributed to limiting the influence of special national interests. That is not to say that EU trade policy is immune to the lobbying efforts of businesses and sectors seeking protection from what is usually described as 'unfair' foreign competition. In the EU, such efforts are frequently expressed in antidumping measures (e.g., Nielsen and Svendsen, 2012; Ketterer, 2016).

But, governments do tend to find their national interests more convincing for choosing to impose special measures, than for making the same case to a large number of foreign governments.<sup>5</sup> In this sense, the EU can be viewed as a straightjacket to protectionism.

It should be noted that the straightjacket principle could mean that some of the regulations that will change as a result of a Brexit—derived from greater potential for lobbying activities—could correspondingly improve some business conditions. In other words, potential exists for better and worse overall business conditions in the case of a Brexit. If the UK can cut the level of red tape outside the EU, while keeping protectionist pressures at bay, there might be a net positive impact of a Brexit on

overall conditions for UK businesses. However, since the UK has already opted out of a substantial part of the EU rule book, and the EU is itself striving to reduce regulation, and because red tape tends to be a result of home-grown regulation rather than Brussels-imposed rules, we doubt the net effect on UK business conditions would be positive.

Overall, apart from the risk of increased protectionism, a Brexit would probably mean the UK would become a less appealing, effective, and powerful trade policy player. This could mean reduced access to markets for British companies relative to firms in other EU countries, not least markets that are party to the new type of modern (comprehensive) trade agreement, such as South Korea and Canada, but also economically and politically powerful nations, such as the United States and Japan.

#### What Migration Means for UK Trade

Both trade and migration are central themes of globalization, and have increased in parallel over time (table 1). In this sense, the UK is a paragon of a globalized economy, since it is very open to both foreign trade—as previously discussed—and also to migration.

	Exports (billion US\$)	Imports (billion US\$)	Migrants (million)
2010	13,272	12,780	213
2005	10,613	10,584	195
2000	7,993	7,993	178
1995	5,480	5,369	166
1990	4,053	4,127	155
1985	3,034	2,986	105
1980	2,481	2,570	94
1975	1,817	1,948	83
1970	1,378	1,521	78

#### Table 1 International Trade and Migration

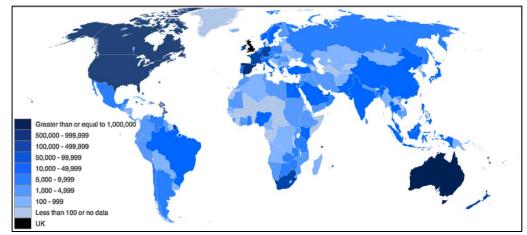
Notes: Trade values are calculated in constant 2000 billion US\$. Exports and imports include trade in goods and services.

Sources: Hatzigeorgiou (2013); World Bank (2016).

In fact, the UK is one of the world's most important migration countries, as a destination for migrants (immigration), and as a source of migrants (emigration). Approximately eight million immigrants reside in the UK, which corresponds to around 12 percent of the total population, slightly above the EU average (Eurostat, 2016).

An estimated 5.5 million British people live outside the UK.<sup>6</sup> Although Australia, the United States, and Canada are among the most popular destinations for British expatriates, other EU countries host a substantial share of the total number of British people living abroad. Spain is the second-largest host of British people living outside the UK.

Of the 30 most popular British emigrant destinations, 11 belong to the EU (figure 2). These 30 countries host the bulk of British expatriates, around 5.1 million, or nearly one in three of every British person living abroad.



**Figure 2** Distribution and concentration of British expatriates. Notes: Data from Finch and Andrew (2010). The vector image was created by 'TastyCakes' on English Wikipedia.

The parallel increase in trade and migration apparent globally is also reflected in the UK. Between 1970 and 2010, a period of rapid growth in UK foreign trade, the stock of international migrants living in the UK as a share of the total population doubled (figure 3).

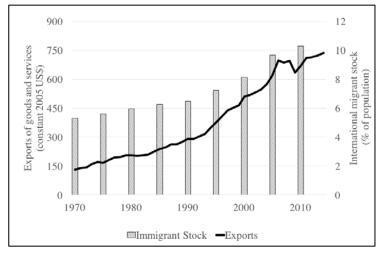


Figure 3 UK exports and immigration.

Notes: Exports of goods and services represent the value of all goods and other market services provided to the rest of the world between 1970 and 2014. Data are in constant 2005 US\$. International migrant stock is the number of people born outside the UK.

Source: World Bank (2016).

Although the neoclassical theories of international trade have postulated that trade and migration are substitutes, it is possible that trade and migration are complements.<sup>7</sup> For instance, migrants are likely to have a good understanding of the culture, politics, language—and other traits important for business—of their countries of origin. They are also likely to have access to networks that provide opportunities for stimulating trade with their former home countries. This potential trade-migration nexus is of special interest to the UK due to its reliance on trade and its considerable stock of immigrants and emigrants.

There is a large bulk of research investigating the links between migration and trade. The theoretical literature outlines three main channels through which migration influences businesses' decisions to export and import via lower trade costs.

First, migrants may lower trade costs and increase trade through abundant and unique information on their countries of birth, including the ability to communicate in foreign languages. Migrants may also help firms adapt their products and marketing approaches to foreign settings, both when entering a foreign market and subsequently (e.g., Casella and Rauch, 2002).

Second, migrants who have contacts and access to social and business networks in their countries of birth can help promote trust between sellers and buyers from different countries. Migrants may also facilitate the enforcement of contracts by providing input to their drafting and by limiting opportunistic behaviour via participation in cross-national networks (e.g., Greif, 1989; Herander and Saavedra, 2005).

Third, migrants may affect trade through their taste and demand preferences for products from their country of origin. This was noted in the literature on taste discrimination (Becker, 1957; Phelps, 1972), and was what White (2007) illustratively called the 'transplanted home bias.' In previous studies, researchers have typically assumed that this bias only has an impact on imports, and therefore have often chosen to study exports.

These three theoretically postulated impact channels of migration emphasize that both emigration and immigration have the possibility of raising a country's foreign trade. In other words, both Britons living abroad, as well as foreign nationals living in the UK, may contribute to increased trade.

Numerous empirical studies have confirmed the hypothesis that migration facilitates trade.<sup>8</sup> Egger et al. (2012) reviewed the empirical literature on the trademigration nexus. Overall, the link has been found to be stronger for trade with dissimilar countries, trade with countries with weak institutions, and the trade in differentiated products. Genç et al. (2011) conducted a meta-analysis based on 48 studies and found that, according to the existing research, a 10 percent increase in a country's immigrant stock was associated with a 1 to 2 percent increase in foreign trade.

A handful of studies that have emerged recently have attempted to utilize firmlevel data to analyze the trade-migration nexus. For instance, Koenig (2009) examined the relationship between a measure of regional immigrant stock in 1982 and the export propensity of French firms vis-à-vis 61 countries in the period 1986-1992, and found a positive and statistically significant association between regional immigrant stock and firm export propensity, especially for immigrant groups with a higher average age and level of education. Bastos and Silva (2012) studied the relationship between total emigrant stock and exports for a cross section of firms in Portugal in 2005. Hiller (2013) analyzed the role of immigrant employees and regional immigrant communities in export intensity and two-digit product margins of exporting Danish manufacturers with respect to 168 countries during the 1995–2005 period. This study found a positive but weakly significant association between immigrant workers and companies' export sales. And, in a recent study, Hatzigeorgiou and Lodefalk (2016b) exploited an employer-employee panel for Sweden, which encompassed nearly 600,000 full-time employees, approximately 12,000 firms and data for 176 countries for the period 1998–2007, finding that foreign-born workers did have a positive association with firm exports.<sup>9</sup>

To summarize, most studies have found a positive and statistically significant relationship between immigration and trade with source countries. Therefore, the literature on the trade-migration nexus suggests that a Brexit could disrupt trade not only by leaving the single market and altered trade policy conditions, but through the migration squeeze that would be likely to follow. Hence, a complete map of the potential impact channels of a Brexit on the UK's foreign trade needs to include migration. We present such a map in figure 4.

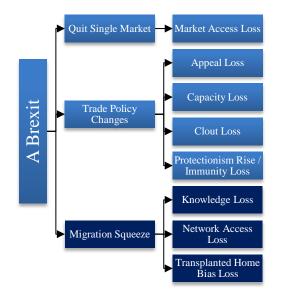


Figure 4 The new Brexit trade disruption map

#### Concluding Remarks: A Brexit Could Disrupt Trade More Than Previously Feared

This article has discussed how a Brexit could have a negative impact on the UK economy through negative trade effects. Leaving the single market would deteriorate trade relationships with other EU countries. A Brexit could render the UK a less appealing, effective, and powerful trade policy player. Protectionist pressures on the post-Brexit UK government would likely increase, and as a result of weaker 'immunity' against protectionism, trade would become less open.

The UK is an open and modern economy, whose businesses are highly dependent on open and predictable market conditions. Ways of lowering informal trade barriers are especially important for the UK economy, in part due to its orientation towards services and its firms' reliance on global value chains. Migration, both immigration and emigration, could increase trade and enhance companies' internationalization. 52 Hence, the implications of a Brexit do not stop at deteriorated market access to the UK's most important trade partner, and changes to UK's trade policy. A Brexit would probably imply a squeeze on migration, which, in turn, could have negative trade implications.

The issue of migration in the Brexit discussion has focused on what migration means for the welfare system of the UK, security, and the overall economic influence of migration on the labour market, as well as public finances. While immigration to the UK has benefits to the economy, not least through the ability of British firms to hire labour from the rest of the EU, migration also has a positive influence on trade. This means that the potentially trade-disruptive effect of a Brexit may have been underestimated. Specifically, since migration has the potential to stimulate the trade of British firms, and the country as a whole, reduced migration resulting from a Brexit could disrupt trade more than previously feared.

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#### Endnotes

<sup>4</sup> One example concerns the company Husqvarna, an industrial machinery manufacturer in Sweden. It produces, among other things, chain saws. One of their typical models contains components from approximately 250 different suppliers in 30 different countries. It is estimated that these components cross national borders about 80 times during the entire production process (ECIPE, 2010).

<sup>5</sup> This tendency has already become apparent during the campaign over whether the UK should leave the EU, or remain as a member. The problems of the British steel industry have been blamed on the EU, and leading voices in the Brexit camp have portrayed the restraints placed on the UK to subsidize its industries as a reason the country should leave the EU (Livingston, 2016). <sup>6</sup> Estimates vary depending on the source. The World Bank estimated that in the year 2000, approximately four million British people lived abroad. The Institute for Public Policy Research (IPPR), a British think-tank, released a report in 2006 which estimated that the number of British people permanently living abroad was approximately 5.5 million (Finch and Andrew, 2010). The numbers we refer to here are from the IPPR study.

<sup>7</sup> For example, in the Heckscher-Ohlin model, trade is driven by differences in relative endowments in capital and labour across countries. These differences determine domestic wage levels. Allowing for international labour mobility, higher wages in capital-abundant countries encourage workers in labour-abundant countries to migrate, thus expanding the labour supply in high-income countries, which in turn suppresses wages in the receiving country. The opposite

<sup>&</sup>lt;sup>1</sup> There are other potential negative impact channels as well. For instance, Dhingra et al. (2016d) and Hatzigeorgiou (2016b) analyze potential implications of a Brexit on foreign direct investment. Barnard and Ludow (2016) discuss possible economic costs in terms of reduced freedom of movement of services and migration from leaving the EU.

<sup>&</sup>lt;sup>2</sup> Justice Secretary Mr. Michael Gove, also the Leave campaign's most senior representative, recently confirmed that Britain would quit EU's single market if the country votes to leave the EU (Cadman and Mance, 2016).

<sup>&</sup>lt;sup>3</sup> The EU has around 50 FTAs in place, and several more are under negotiation. The European Commission's aims with FTAs are (1) 'Opening new markets for goods and services,' (2) 'Increasing investment opportunities,' (3) 'Making trade cheaper by eliminating substantially all customs duties,' (4) 'Making trade faster by facilitating goods' transit through customs and setting common rules on technical and sanitary standards,' and (5) 'Making the policy environment more predictable by taking joint commitments on areas that affect trade such as intellectual property rights, competition rules, and the framework for public purchasing decisions.' (European Commission, 2016).

occurs in the source country. As prices equalize across countries, the motive to trade decreases. Migration, therefore, is a substitute for trade (e.g., Mundell, 1957; Massey et al., 1993).

<sup>8</sup> For individual countries, these studies include evidence from the United States (e.g., Gould, 1994; Dunlevy and Hutchinson, 1999; White, 2007; Bandyopadhyay, Coughlin, and Wall, 2008; Jansen and Piermartini, 2009), from Canada (e.g., Head and Ries, 1998; Partridge and Furtan, 2008), from the UK (Girma and Yu, 2002), from France (Combes et al., 2005), from Spain (e.g., Blanes, 2005; Peri and Requena-Silvente, 2010), from Sweden (e.g., Hatzigeorgiou and Lodefalk, 2015). Evidence is also available for groups of countries (for the OECD, e.g., Lewer, 2006; and for a global cross-section of countries, Hatzigeorgiou, 2010).

<sup>9</sup> Lodefalk (2016) provides evidence on the role of temporary expats for firms' internationalisation using Swedish data.