EU BRIEFING NOTE

Five facts about how economies work and what they mean for the UK's membership of the EU

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Overview

Despite being mired in political controversy, EU membership generally wins consistent support from business leaders. The analysis in this briefing paper considers what economics might have to say about this debate. In particular, it highlights five facts about how economies work and uses them to suggest why EU exit could be bad for the UK – the reason is because exit would increase trade barriers and trade barriers are bad for a key group of UK firms, namely exporters.

Introduction

There is currently a fierce debate in political circles on the benefits of the UK's continued membership of the European Union (EU). In contrast, there is a high degree of consensus amongst the business community that continued membership of the EU is in the best interests of the UK economy – in polls typically 8 out of 10 business leaders respond in favour of continued membership.[1] One reason for this is that when it comes to companies that trade, the backbone of both the UK's economy and its key trade associations, none of the alternatives to full EU membership look as good. In the financial sector, for example, 88% of those questioned felt that leaving both the EU and the Single Market would lead to a deterioration in the UK's overall competitive position as a financial centre, and 65% felt this would deteriorate if the UK left the EU, even if it remained a member of the Single Market.[2] This briefing note contributes to this debate, by considering five facts about how economies work and what they mean for the UK's membership of the EU. The results suggest that EU membership brings significant benefits to a key segment of the UK's economy – exporters.

Five facts about how economies work

In recent years there has been a significant improvement in the data that are available to allow economists to understand firm behaviour. What has emerged from this is a realisation that not all firms are created equal and their differences have important implications for how economies work. From the perspective of the EU debate, five facts stand out:

[1] See CBI (2013), EEF (2013) and TheCityUK (2013).
[2] See TheCityUK (2013)

Fact 1: There are big differences in the productivity achieved by high productivity and low productivity firms in all industries and in all countries. To give a sense of scale, in the US high productivity firms are twice as productive as low productivity firms. This gap rises to five times for China and India.[3]

Fact 2: High productivity firms are key to growth in the economy. Allocative efficiency alone says that the more resources you can give to high productivity firms, the higher the productivity of an economy will be. However, high productivity firms also play an important role in convergence, particularly as firms converge to national, not international leaders. [4]

Fact 3: Crossing a border is expensive. To explain the reduction in trade that occurs once firms need to cross a border, estimates suggest that for trade between industrialised countries the impact of the border for trade in manufactured goods is equivalent to a 74% ad valorem tax. [5] Barriers for trade in services are up to seven times higher. [6]

Fact 4: Only high productivity firms can afford to trade. In the UK, only around 11% of UK firms trade, although there are big differences between the manufactured sector (where 38.7% of firms trade) and the service sector (where only 8.7% of firms trade). Traders are also much more prevalent amongst large firms, who tend to have deeper pockets. In UK manufacturing, around 75% of firms with over 250 employees trade, but only around 15% of those with fewer than 10 employees do. [7]

Fact 5: Firms that trade prioritise the markets they enter - preferring large, geographically close markets, with strong institutions and developed financial markets. This finding has been the backbone of the trade literature for a long time – ever since gravity models were first tested. The empirical evidence for this finding remains robust and has been reinforced by the findings on firm behaviour. In a world where only a few firms can afford to trade, it makes sense that they will prioritise the markets where their risks are lowest and where the likely returns are highest. [8] From a UK perspective, these findings would suggest that the EU should be a key market for exporters, a fact borne out by experience – over 80% of UK exporters do business in Europe and the EU accounts for around 50% of UK trade. [9]

Taken together these facts imply that exporters play an important role in economic success – while they may only account for a small proportion of firms, exporters matter for economic outcomes. In the UK, for example, analysis of exporters' contribution to growth shows that between 1996 and 2004 productivity growth for exporting firms was on average 1.3% p.a., compared to 0.8% p.a.

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3 Syverson (2011).
4 Syverson (2011).
5 Anderson and van Wincoop (2004).
6 Anderson, Milot and Yotov (2012).
7 Harris and Li (2007). Estimates for 2004 based on the FAME database. In the case of firms in the US only 18% of manufacturing firm export, in Japan the number is 20% and in France 17.4%, see WTO (2008), Section II.C, Table 5.
8 See, for example, the discussion in Helpman (2011) and Melitz and Trefler (2012).
9 See, for example, the discussion in Driver (2014) and UKTI (2013).

for non-exporting firms, and that 60% of aggregate UK productivity growth over the period is attributable to exporting firms. [10] Damaging exporters could therefore damage the wider economy.

Why might exporters be damaged by EU exit?

One of the things that stand out from the trade literature, is the impact of reducing trade barriers. A key example here of the potential benefits is the 1989 US-Canadian Free Trade Agreement [11] - by reducing trade barriers for the manufacturing sector, and so boosting market size and competition, it led to a 13.8% increase in Canadian manufacturing productivity caused by: improved allocative efficiency (8.4%); improved incentives to innovate, again the result of market size and competition (4.9%); and better access to imported inputs (0.5%).[12] Reducing barriers to trade improves productivity within a country, by causing more productive firms to expand and less productive firms to exit. Therefore overall the economy becomes more efficient, by shifting labour and capital away from low-productivity firms towards high-productivity firms. This can be thought of as between firm, or allocative efficiency. There are two key mechanisms behind this insight:

- Firstly, increased competition from abroad makes it harder for low productivity firms to survive, causing an exit of low-productivity firms.
- Secondly, reducing the up-front fixed costs associated with trade increases the potential market size and allows more productive firms to increase their output.

In the case of the 1989 Canadian-US Free Trade Agreement the increase of 8.4% in Canadian manufacturing productivity from improved allocative efficiency was split relatively evenly across these two sources of improved efficiency: with 4.1% coming from the increase in exports by high-productivity firms and 4.3% coming from the shift in domestic market shares away from low-productivity and towards high-productivity firms.[13] This shift did not come from an increase in productivity at a plant level. Instead it came from shifting resources towards more productive firms. In addition, the results show is that in those Canadian plants that started exporting as a result of the tariff cut, the tariff cut caused the productivity of new exporters to rise by 15.3%, which raised overall Canadian manufacturing productivity by 3.5%. These productivity improvements can be linked back to investment, as innovation activity was higher amongst new exporters than the remaining non-exporters.[14]

The Canadian-US Free Trade Agreement is a powerful example of the benefits of reducing trade barriers. Unfortunately for exporters, EU exit would involve going through this process in reverse.

In the case of potential UK exit from the EU, analysis suggests that the costs facing this key group of firms would increase under all the potential alternatives to EU membership. As Table A

[10] Harris and Li (2007).

[11] This trade agreement is particularly useful for researchers investigating the impact of trade barriers, both because it did not include any of the macroeconomic measures that are often included in trade deals and because it was largely unanticipated, meaning firms would not have changed their behaviour in advance. See the discussion in Melitz and Trefler (2012). It also helps that there is high quality, plant level data available on the performance of Canadian firms, both in the run up to the deal and in subsequent years.

[12] See the discussion in Lileeva and Trefler (2010), and Melitz and Trefler (2012), as well as Driver (2014) and Helpman (2011).

[13] See the discussion in Melitz and Trefler (2012). They note that studies have also found that almost half the increase in US productivity between 1983 and 1992 came from a reallocation of resources towards exporters.

[14] Lileeva and Trefler (2010).

highlights, there are many ways in which costs could increase, particularly for exporters, following an EU exit, with how the costs are spread depending on the option chosen. One example of how costs could rise under EU exit is Rule of Origin regulations, which would apply if the UK had an agreement with the EU, but was not part of the EU Customs Union. Rule of Origin regulations for EU preferential trade agreements (PTAs) are estimated to increase compliance costs by 8% and administration costs by 6.8%.[15]

Table A: Summary of impact for businesses of alternative EU/UK relationships

	EU Member	Customs Union and Single Market	Customs Union only	Single Market only	Free Trade Agreement	No preferential trade agreement
Extent of sectors covered by deal?	Full	Full or partial	Full or partial	Full or partial	Full or partial	None
Automatic adjustment in EU agreement to cover changes in markets or regulation?	Yes	No	No	No	No	n/a
Freedom of movement of goods, services, labour and capital across EU?	Yes	Yes	No	Yes	No	No
Automatically benefit from EU trade deals?	Yes	No	No	No	No	No
UK free to negotiate trade deals with third countries and to set its own tariff levels?	No	No	No	Yes	Yes	Yes
Automatic protection from third countries with trade deals with the EU gaining access to UK markets, without the need to give the UK reciprocal access to their markets?	Yes	No	No	n/a	n/a	n/a
Trade with EU free from country of origin rules?	Yes	Yes	Yes	No	No	Yes
Influence over domestic regulation of firms?	Some	No	Yes	No	Yes	Yes
Influence over EU regulation of firms?	Yes	No	No	No	No	No
Single set of regulations needed for firms exporting to the EU?	Yes	Yes	No	Yes	No	No
Exempt from contributing to the EU budget?	No	No	Yes	No	Yes	Yes

Note: The Yes/No questions are worded so that "Yes" signifies a positive outcome for businesses. For the first question on market coverage, except for full EU membership, the UK or EU would have the option of leaving some sectors out of any deal. For example, Turkey's Customs Union with the EU excludes services, non-processed agricultural products, coal and steel. The outcome for sectors not covered by the deal would then be the same as the final column, but with added uncertainty in all sectors over whether they were covered by the deal. There is currently no country that is a member of the Single Market and the Customs Union, but this option could be thought of as EU-lite; Turkey is an example of a country that is a member of the EU Customs Union, but not the EU; Norway is an example of a country with membership of the Single Market, but not the EU; and Switzerland is an example of a country with an EU free trade agreement.

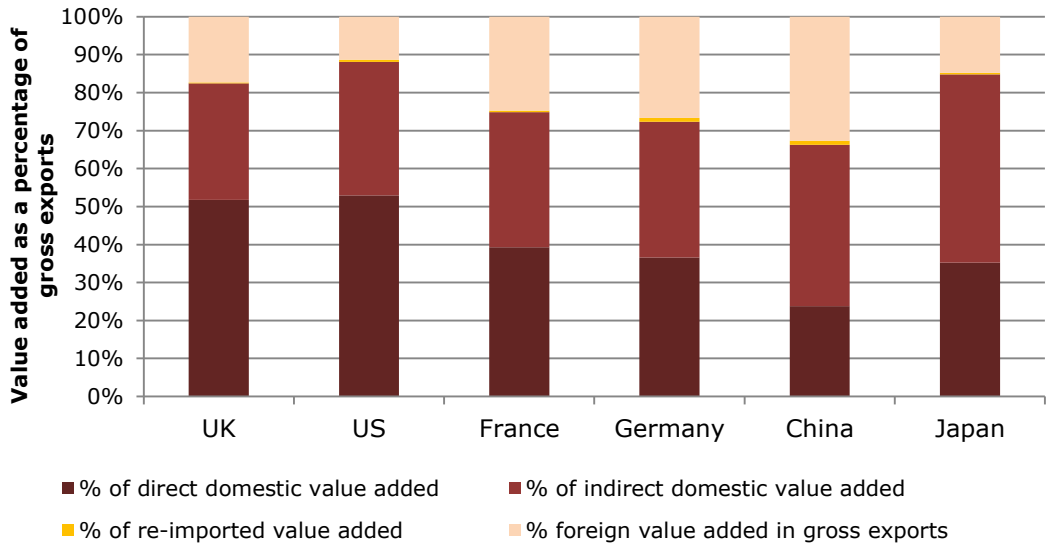
Source: Analytically Driven Ltd

[15] See discussion in Brenton (2011) and Cadot et al (2006).

While the balance of costs will depend on the option, it is clear that the balance of positive responses is greatest in the case of EU membership. The main problems with EU membership are that: it means the UK is not free to negotiate its own trade deals, although the balance of opinion amongst the business community is firmly that the EU is better placed to do this anyway; [16] and that the UK must contribute to the EU budget, a cost that in 2012 was equivalent to 0.6% of UK GDP and 1.5% of UK central government current expenditure[17].

The other issue that is often raised in the context of EU membership is that the UK cedes some control over UK regulation. This is, of course, better than the situation that the Norwegians find themselves in, as a non-EU member of the Single Market, and in many areas, such as finance, the UK has demonstrated considerable influence over EU regulatory outcomes. Furthermore, while analysis of the 100 most costly EU regulations suggest that they cost the UK economy £27.4bn p.a. (or 1.75% of GDP), the benefits that these same regulations bring is calculated to be £57.1bn p.a.. [18] This suggests that there would be limited scope for reducing the regulatory burden for non-exporting firms, even in the event of an exit, while for the 80% or more of exporting firms that trade with the EU, the costs of doing business in Europe will definitely rise. Overall, analysis suggests that these impacts could be significant. For example under even a modern trade agreement, like the proposed EU-US TTIP, EU exit is estimated to cause a fall in exports equivalent to 1.24% of GDP per annum. If no trade agreement is put in place to replace EU membership, the resulting fall in exports is calculated to be up to 1.77% of GDP. [19]

Figure 1: Decomposition of the components of value added for gross exports of selected countries, 2009



Note: Author calculations based on OECD-WTO Trade in Value Added data for 2009. See OECD-WTO (2013) for a description of the data.

Source: Analytically Driven Ltd.

16 See the discussion in HM Government (2014).
17 See the discussion in Driver (2014).
18 See the discussion in Open Europe (2013) and Driver (2014).
19 See CEPR (2013).

Furthermore, the impact of these falls will not just be felt by UK exporters. In a world of ever more complicated supply chains, the value added from exports provided by the firm doing the exporting is often significantly below half of the total, see Figure 1. Indeed, the results suggest that the ripple effects from any EU exit could be felt far beyond the UK's export sector, not to mention beyond its borders.

Appendix 1: References

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