

Chapter 4

The UK Economy and Brexit



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Abstract This paper reviews some important literature on the likely implications of Brexit on the UK economy, including that from some of the large forecasting organisations in the UK. Most of these forecasts suggest that the economy will be smaller than it would have been had the UK remained in the EU going forward, though the extent will depend on the trading arrangements which are put in place following Brexit. The paper also reviews research on the implications of Brexit on different household types and areas within the UK. Implications for foreign direct investment (FDI), emerging markets as well as SMEs are discussed, including the potential to damage important supply chains and just-in-time production methods.

Keywords Brexit · Emerging Markets · EU · Impact · UK

Brexit is likely to involve dramatic adjustment costs for the UK economy, but these costs may still not be fully understood, despite many attempts to estimate them. During the referendum campaign, the cost of the UK contribution to the EU played an important role including the claim that the UK could save around £350 m a week if it left the EU that could be used in other areas such as the NHS. However, this claim was shown, though perhaps not accepted by many, to be false. As revealed in Table 4.1, after the UK receives its rebate, the UK pays £275 m a week into the EU budget; however, much of this comes back to the UK through programmes such as agricultural support and structural fund spending to support poorer areas, and the final contribution is estimated at around £150 m per week. However, it wasn't clear that this contribution figure to the EU (from one of the EU's richest countries) got through clearly to the electorate during campaigning at the time of the referendum.

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Table 4.1 UK EU financial contribution (2013–2014) (gross and net effect)

	Per annum	Per week
Ignoring UK's rebate	£18.8bn	£350 m
With rebate	£14.4bn	£275 m
Taking out money that comes back through programmes	£8bn	£150 m

Source: Emmerson, Johnson, Mitchell, and Phillips (2016)

Table 4.2 Assessment of 2030 economic impact of Brexit

Organisation	Scenario	Estimated GDP (%)	Range
HM Treasury	EEA	-3.8	(-3.4 to -4.3)
	FTA	-6.2	(-4.6 to -7.8)
	WTO	-7.5	(-5.4 to -9.5)
NIESR	EEA	-1.8	(-1.5 to -2.1)
	FTA	-2.1	(-1.9 to -2.3)
	WTO	-3.2	(-2.7 to -3.7)
	WTO+	-7.8	
CEP	Dynamic EEA/FTA	-7.9	(-6.3 to -9.5)
	Static EEA	-1.3	
	Static WTO	-2.6	
PwC/CBI	FTA	-1.2	
	WTO	-3.5	
Economists for Brexit	WTO	+4.0	

Source: Emmerson et al. (2016)

If getting across clearly, the difference between gross and net contributions to the EU budget was difficult, explaining the likely second-round financial effects of a Brexit decision was much more difficult. It was estimated that the net contribution of £8bn per year, for example, would be lost to the government if the growth of the economy slowed down such that the economy was 0.6% smaller than expectedly it would have been following Brexit. Slow growth would lead to lower tax receipts leading to less money to be spent on public services. The vast majority of the forecasts before the referendum suggested the economy would be reduced in size by more than 0.6% following Brexit (see Table 4.2). As noted by Emmerson et al. (2016) of the IFS, 'assuming WTO rules, NIESR, CEP and HM Treasury found that GDP would be more than 7% less in the long run than it would otherwise have been'. A reduction in the size of the economy of this amount would have led to large falls in tax receipts and so have important implications for the public finances and so public expenditure.

A further complication is that when making forecasts, estimates of the likely falls in the size of the economy and growth rates are uncertain due to the uncertainty over the possible trading arrangements after an EU exit. The Treasury in their research discussed three possible alternatives, and their estimates of the likely falls in the level of GDP predicted in 2030 with Brexit compared with remaining in the EU are

again shown in Table 4.2 (with confidence levels given around GDP predictions). Their assumed alternative scenarios were:

- Membership of the European Economic Area (EEA) like Norway
- A negotiated bilateral agreement, such as between the EU and Switzerland, Turkey or Canada
- World Trade Organization (WTO) membership without any form of specific agreement with the EU, like Russia or Brazil

Falls in growth occur because following Brexit under whatever trading arrangements that are likely to be adopted it was assumed that trade would fall and economic theory suggests that increasing trade barriers reduces world output and freer trade increases world output. Following the referendum result, economic forecasters came in for criticism as the economy didn't immediately begin to contract, and so it was suggested forecasters shouldn't be trusted. However, forecasts from economic models are predictions based on knowledge we have at the time forecasts are made, and if for any reason the world changes, such as unforeseen demand or supply shocks take place, forecasts will have errors. Economic models also are dramatic simplifications of the world in which we live, and many unforeseen shocks will hit the economy. So forecasts from economic models are predictions based on knowledge we have at the time forecasts are made; we call them conditional forecasts. Therefore, economic models are better at giving an estimate of the direction of change following a policy change rather than a precise estimate.

For example, medics/doctors can tell you smoking is bad for you, increases your chances of getting cancer and reduces your life expectancy but can't tell you the date you might get cancer. They will tell you your chances of getting cancer might also depend on other lifestyle choices and environmental factors. The same is true with economic models, and it is difficult to be precise about the exact economic outcomes of Brexit; however, economists are more confident about the direction of travel. Why? Because it is agreed that freer trade, through enabling countries to specialise, increases world output.

Forecasts are also influenced by unforeseen policy responses for example, the UK economy was supported after the referendum result by a delay in triggering Article 50 and a monetary policy stimulus, seen in a reduction in the interest rate and a boost in quantitative easing. Both responses were designed to boost economic growth in the short run. The government also loosened its deficit reduction programme, its fiscal stance, which again supported the economy in the short run.

For most individuals GDP is a fairly abstract concept. What does Brexit mean for individual households? The Treasury estimated the loss of income to the economy under its three alternative scenarios, as shown in Table 4.2. However, there are likely to be important distribution effects, and these were estimated by the NIESR (Armstrong, Lisenkova, & Lloyd, 2016). The NIESR estimated that because of the fall in income following Brexit if the government was to maintain its deficit reduction programme, public expenditure would need to be further reduced. Table 4.3 shows potential reductions in household income for different family types following

Table 4.3 Estimated loss of tax credit and benefit receipts of low-income household 2014

Claimant type	Loss if 25% of cuts fall on welfare budget	Loss if 50% of cuts fall on welfare budget
Single, working age, no children	£600	£1200
Couple, working age, no children	£465	£930
Couple, working age, two children	£1211	£2422
Lone parent, working age, two children	£1386	£2771
Single, unemployed, no children	£558	£1116

Source: Armstrong et al. (2016)

two different scenarios, where the welfare benefits cut account for 25% and 50% of the expenditure cuts, respectively. This NIESR research shows costs of Brexit are likely to fall disproportionately on low-income households, with the biggest losers a lone parent working age household with two children. They state, ‘After 15 years even with savings from reduced contributions to the EU, receipts would be £20bn a year lower (EEA), £36bn a year lower (bilateral agreement) and £45bn a year lower for the WTO alternative’. They note, ‘£36bn is more than a third of the NHS budget and equivalent to 8p on the basic rate of income tax’.

Despite large drops in predicted income, the NIESR weren’t predicting large increases in unemployment mainly due to relatively flexible labour markets found in the UK; so they forecast unemployment would not be perceptively higher by 2030 following a Brexit decision. However, they did suggest wages could be between 4.6% and 7.0% lower (in real figures) following a decision to leave the EU. The IFS (Emmerson et al., 2016), using NIESR GDP forecasts estimated that the public figures could be between £20bn and £40bn worse by 2019–2020 than currently forecasted. They suggested this would extend the ‘austerity programmes’ and deficit reduction plan by an additional 1 or 2 years. Also as a result, government debt would be higher than originally estimated requiring additional debt interest payments.

Table 4.2 shows that one group of forecasters, Economists for Brexit, estimate that GDP would be 4% higher by 2030 (than estimated if the UK remained) following a decision to leave the EU. As noted by Sampson, Dhingra, Ottaviano, and Van Reenen (2016), this is surprising as the vast majority of forecasters predict a negative outcome on the economy of leaving the EU. They put this down to the use of a theory-based computable general equilibrium (CGE) model and the assumption of perfect competition and lack of a gravity equation. The lack of a gravity equation is important as they argue ‘Geography matters – the further apart countries are, the less they trade’. Their model also assumes the UK will revert to World Trade Organization (WTO) rules after Brexit and the UK will unilaterally eliminate all trade barriers to imports. Minford, Gupta, Le, and Mahambare (2016) note that this would likely eliminate large sections of manufacturers in the UK leaving mainly design, marketing and hi-tech industries, but this shouldn’t concern us as these industries are part of the high-growth sectors. He also claims if we left the EU we would no longer be bound by EU safety standards and this could benefit trade and

reduce prices in the UK. Sampson et al. also (2016) suggest that the Minford forecasting model is not an appropriate model for estimating the effects of Brexit on the economy, as it ignores important recent empirical data on trade flows. They also find no evidence of a developed country unilaterally dropping tariffs against other countries, which they believe would be extremely damaging to the economy and also lead to a further increase in wage inequality. A unilateral move to free trade they argue would mean the UK would lose an important bargaining position and result in tariffs still being present on UK exports to other countries.

Exit from the single market could also have implications for foreign direct investment (FDI) inflow into the UK. A significant proportion of FDI into the UK particularly from countries like the USA and Japan was undertaken to avoid the EU common external tariff barriers. The relatively depressed areas of the UK like Wales benefitted significantly from such investment and so helped address the problem of growing regional inequalities in economic performance. Wales not only provided a tariff-free base to foreign investors from which to exploit the large EU market but also offered financial incentives and relatively low labour costs. Despite having only approximately 0.5% of the EU population, Wales accounted for almost 5% of total foreign investment into the EU between 1982 and 1994. By 1992 30% of all employees in the manufacturing sector were employed by foreign companies.

Foreign direct investment is thought to bring with it a number of advantages. Firstly, by attracting foreign-owned firms, the economy increases its economic capacity and so provides more employment. Secondly, they are thought to bring with them more advanced products and processes; their production systems are more likely to be at the frontier of available technology in order to be able to overcome the additional costs associated with entering foreign markets, and generally their plants are more productive than domestic firms. Thirdly, there are thought to be positive economic spillovers to domestic plants that are located near (either geographically or sectorally) to foreign plants. From the labour market perspective, foreign firms are thought to pay higher wages, tend to be located in sectors with high growth rates, have a higher probability of exporting and are more capital and R&D intensive when compared to domestic firms. All of these factors suggest that FDI is beneficial to an economy, and indeed UK industrial policy has in the past been directed at attracting foreign investment into the UK, especially to relatively less prosperous areas, such as Wales as a means of increasing and safeguarding employment.

Dhingra, Ottaviano, Sampson, and Van Reenen (2016) conclude ‘that leaving the EU will reduce FDI inflows to the UK by around 22%’, which could lower real incomes by as much as 3.4% following reductions in investment and lower productivity effects. They estimate that the impact on the UK car industry could be particularly dramatic with production falling by 12% and prices rising by 2.5%. Also given that the financial services sector is currently the largest beneficiary of FDI and concerns over the loss of ‘single passporting’ benefits to the City of London, losses in this sector could be substantial.

A recent working paper by Sands, Balls, Leape, and Weinberg (2017) published by the Harvard Kennedy School moved the focus from multinational firms and

focused on domestic SMEs noting that this group was perceived to see greater benefits from Brexit and noted the importance of these firms to the UK economy, where they employ around 14.5 million individuals and are responsible for almost 50% of the country's GVA. They suggest that much of the current rhetoric around Brexit is a legacy of the referendum campaign where 'leavers' tended to exaggerate opportunities and downplay risks and 'remainers' tending to overstate threats to businesses and the economy. Their research involved interviews with 50 SMEs and their trade associations to assess the challenges and opportunities to businesses. Their findings emphasised the importance of outcomes on SMEs in achieving a good trade deal with the EU, the importance of the regulatory burden not increasing after Brexit and other important concerns raised by particular industrial sectors.

They note that given over half of the UK's current trade is with the EU generally, firms see the importance of and wish to remain in the single market and customs union and not default to WTO rules, which would lead to a sharp increase in tariffs and non-tariff barriers. Whilst they note that companies welcome the increased trading opportunities which could result following Brexit, they also observe that 'the UK's major export markets outside the EU, which are the US, Canada, Switzerland and Korea already have low or no tariffs as a result of EU FTAs and other trade facilitation arrangements'. They note that trade opportunities outside of the EU are often exaggerated; for example, Germany currently exports four times more to China than the UK; so trade is often restricted by a lack of products to trade from the UK arising from structural and competitiveness issues which have nothing to do with being a member of the EU. Taking advantage of many opportunities outside of the EU would require changes in product ranges, innovation, substantial new investment and increases in competitiveness all of which could take many years to achieve.

Concerns were also expressed about the ability to negotiate new trade deals with the fastest-growing economies in the world such as China and India as well as Commonwealth countries. Current exports to Commonwealth countries amount to less than a quarter of that which the UK exports to the EU. Sands et al. (2017) calculate, for example, 'to compensate for a 5% reduction in trade with the EU, the UK would have to increase trade volumes with the top ten Commonwealth trading partners by around 28%...trade with India would have to increase by more than 170%'. They also suggest that completing a trade agreement could be difficult, given that despite the EU being India's largest trading partner, free trade negotiations have 'stalled repeatedly'.

Sands et al. (2017) also find that firms don't expect a regulatory 'windfall' after Brexit and are generally happy with current regulatory procedures; a fear is that the regulatory burden could increase if UK and EU regulations diverge. Concerns were also expressed over the loss of UK engagement in EU rule-making, which they believe had been helpful in the implementation of appropriate regulations particularly in financial services, energy and creative industries. A number of industries such as pharmaceuticals noted whether in or out of the EU they will still be heavily influenced by EU regulations, such as drug approval. Important sectors such as finance and the creative industries will also be constrained by EU rules when trading in the EU post Brexit.

Anxiety was also expressed over the potential damage to complex supply chains which have developed over many years, following the UK entry in the EU and the single market, in industries such as automotive, aviation and the chemical sectors, where unregulated and tariff-free movement of components is seen as critical. Many sectors, for example, have complex just-in-time production methods with components moving across many borders in Europe; tariff increases, potential delays at border crossings and increased bureaucracy associated with trading with the UK could damage the efficiency of current supply chains leading to production leaving the UK. Other sectors such as agriculture and fishing outlined their dependence on EU protection and subsidies. Many sectors also revealed the importance of the need for continued access to EU labour both skilled and unskilled and the benefits of the free movement of labour from an operation's view point.

After the referendum result, studies also began to look at the likely regional/area impacts within the UK of Brexit. Clayton and Overman (2017), for example, estimated that 'every local authority area is predicted to be negatively affected but cities are likely to be hit harder than non-urban areas' even though they may recover quicker. They also predict that cities with relatively high employment shares in private sector knowledge-intensive services will be the hardest hit. Dhingra, Machin, and Overman (2017) also predict a North-South divide, with nine of the top ten worst affected local authorities being located in the South; these areas 'have high employment shares in Business Activities or Financial Intermediation (or both)'. The only area in the North, in the top 10 group, is Aberdeen City. The ten areas predicted to be least affected show more geographical dispersion but are overly concentrated in the North. They noted their results are different to earlier studies, such as Los, McCann, Springford, and Thissen (2017), and suggest that this difference arises due to that study not modelling non-tariff barrier affect which they argue could be particularly costly under a hard Brexit scenario. They also find that the areas predicted to be most harmed economically by Brexit were also more likely to vote to remain in the EU, consistent with a rational voting model.

In summary as a result of Brexit, the UK economy faces many challenges and uncertainties, especially as the UK trading arrangements after Brexit are still to be agreed. Opportunities exit as potentially new markets will be opened up after negotiating new trade deals. The UK does have a comparative advantage in business and financial services; these sectors also account for a relatively large proportion of the economy, and this type of trade is growing relatively quickly and has the potential for further growth (as the digital economy continues to grow in importance), especially if the relatively high trade barriers facing many business and financial services can be reduced. Growth prospects in these areas may also be higher in many emerging markets which are forecast to grow quicker than many advanced countries. However, as shown earlier, geography matters and when it comes to trade the EU will still be the UK's major trading destination as it currently accounts for just under half of our exports and just over half of our imports. So getting the best possible trade deal in terms of access to the single market following Brexit will be critically important. The implications of a no deal could be very damaging for the UK economy, complex international supply chains and just-in-time production methods

could be badly damaged, and multinational companies could cut back on FDI, with important implications for growth, jobs and living standards. Negotiating new trade agreements with other countries and trading blocs will be particularly important, though on past evidence these could take up to 5–10 years to negotiate with the possibility of important failures along the way. Deals may also have to be renegotiated with countries where EU trade deals currently exist. Trying to negotiate many deals simultaneously will put substantial pressures on UK trade negotiators, where success will be critical if the worst predictions for the economy after Brexit aren't to come true.

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References

- Armstrong, A., Lisenkova, K., & Lloyd, S. P. (2016). The EU referendum and fiscal impact on low income households. National Institute of Economic and Social Research, 9 June 2016. London, UK.
- Clayton, N., & Overman, H. G. (2017). Brexit, trade and the economic impacts on UK cities, centreforcities, London.
- Dhingra, S., Machin, S., & Overman, H. G. (2017). The local economic effects of Brexit. Centre for Economic Performance, Brexit analysis, No. 10. LSE. London.
- Dhingra, S., Ottaviano, G., Sampson, T., & Van Reenen, J. (2016). The Impact of Brexit on foreign investment in the UK. Centre for Economic Performance, Brexit analysis, No. 3. LSE.
- Emmerson, C., Johnson, P., Mitchell, I., & Phillips, D. (2016). Brexit and the UK's public finances, Institute for Fiscal Studies, Report 116. London.
- Los, B., McCann, P., Springford, J., & Thissen, M. (2017). The mismatch between local voting and the local economic consequences of Brexit. *Regional Studies*, 51(5), 786–799.
- Minford, P., Gupta, S., Le, V. P. M., & Mahambare, V. (2016). *Should Britain leave the EU? An economic analysis of a troubled relationship* (Second ed.), Institute of Economic Affairs, London.
- Sampson, T., Dhingra, S., Ottaviano, G., & Van Reenen, J. (2016). Economists for Brexit: A critique. Centre for Economic Performance, Brexit Analysis, No. 6 LSE.
- Sands, P., Balls, E., Leape, S., & Weinberg, N. (2017). Making Brexit work for British Businesses, Harvard Kennedy School.

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