

THE ECONOMIC IMPACT OF BREXIT, NINE YEARS ON: WAS THE CONSENSUS RIGHT?

John Springford

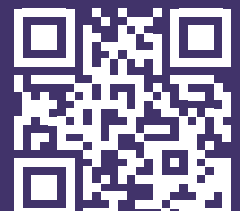
THE
CONSTITUTION
SOCIETY

THE FEDERAL TRUST
for education & research
enlightening the debate on good governance

First published in Great Britain 2025
The Constitution Society
Top Floor, 61 Petty France
London SW1H 9EU
www.consoc.org.uk
© The Constitution Society

ISBN: 978-1-913497-27-9

All rights reserved. Without limiting the rights under copyright reserved above, no part of this publication may be reproduced, stored or introduced into a retrieval system, or transmitted, in any form or by any means (electronic, mechanical, photocopying, recording or otherwise), without prior written permission of both the copyright owner and the publisher of this book.



THE ECONOMIC IMPACT OF BREXIT, NINE YEARS ON: WAS THE CONSENSUS RIGHT?

John Springford

THE
CONSTITUTION
SOCIETY

THE FEDERAL TRUST
for education & research
enlightening the debate on good governance

A note on authorship

John Springford

John Springford is an associate fellow at the Centre for European Reform in London, having previously been deputy director. He works on trade, migration and climate and energy policy for the CER, as well as the economic impact of Brexit, having put together a series of ‘doppelgänger’ estimates of the cost of Brexit.

John has contributed opinion pieces to various newspapers, including the Financial Times, The New York Times, The Wall Street Journal and The Guardian. He regularly commentates on economic and political issues for the broadcast media. He has acted as a specialist advisor to the House of Commons Treasury committee, and has given evidence to committees in both houses of parliament in the UK.

The Constitution Society

The Constitution Society is an independent educational foundation founded in 2009. It promotes public understanding of the UK constitution and works to encourage informed debate between legislators, academics and the public about proposals for constitutional change. The Society advocates the maintenance of basic constitutional standards and a considered approach to constitutional change. Where such change is required, the Society argues for the careful preparation of legislation, with broad consultation and adequate time for scrutiny and debate.

The Constitution Society is a registered charity and is entirely independent, with no connection to any political party.

The Federal Trust for Education and Research

The Federal Trust is a think tank that studies the interactions between regional, national, European and global levels of government. Founded in 1945 on the initiative of Sir William Beveridge, it has long made a powerful contribution to the study of federalism and federal systems. It has always had a particular interest in the European Union and Britain’s place in it. In more recent years, it has supplemented its European work by studies on devolution and regional government in the United Kingdom and a series of reports on global governance.

The Federal Trust has no allegiance to any political party. It is registered as a charity for the purposes of education and research. For more information visit www.fedtrust.co.uk.

Summary

- Since the Brexit referendum was announced in 2012 by then prime minister David Cameron, the broad consensus among economists was that it would damage the economy. They believed that trade, investment and migration flows would be lower if the UK chose to leave. Since then, a huge amount of research has been conducted on the economic consequences of leaving the EU. Now that nine years have passed since the referendum, it is a good time to survey the evidence, and see if that consensus was right.
- This paper performs a 'Brexit audit', using a wide range of publications. As a starting point, it takes the Office of Budget Responsibility's (OBR) view of the economic impact – that withdrawal would reduce productivity, and thus GDP by about 4 per cent compared to a Remain scenario; trade by about 15 per cent, and have a sizeable impact on investment and a smaller one on losses of GDP stemming from lower net migration. It then surveys the other research to test the OBR's views.
- The OBR's 4 per cent is an average of long-term forecasts by reputable institutions and academics. These forecasts had a wide range of estimates of Brexit's effect on productivity, ranging from a 1.8 per cent loss to 10 per cent, depending on the methods used. Those towards the upper end of the scale assumed that Brexit would have larger impacts on productivity, because trade barriers would disproportionately affect bigger, more productive companies.
- We can loosely test the OBR's average of forecasts against how the UK compared to other countries since the referendum. If we compare the UK to France and Germany, or take the average of the G7, there appears to be no effect of Brexit on GDP whatsoever, because those countries, Italy and Japan also suffered from weak growth after 2016. But using a synthetic control method – also known as the 'doppelgänger method' – to identify which countries had the most similar growth path to the UK before 2016, and then measuring the difference in growth between the UK and these countries afterwards, a gap of 5 per cent had emerged by the middle of 2022.
- Investment stagnated between 2016 and 2022, after recovering strongly from the financial crisis. That belies the notion that Brexit had a small effect on productivity and GDP. Two different methods for quantifying that gap show a shortfall of around 10 per cent as a result of Brexit. That business investment strike alone reduced GDP by at least 1.3 per cent.
- The 'gravity' models that underlay the GDP forecasts predicted around a 15 per cent reduction in UK trade in both goods and services. In goods, the size of the impact depends on how it is measured, with methods comparing UK-EU trade with the rest of the world finding small effects. But comparing UK goods trade to other countries, we find an impact of a similar size to the gravity models. The difference is explained by Brexit appearing to have curtailed UK exports and imports with both the EU and the rest of the world.
- The dire trade performance of the UK's automotive sector – a highly productive sector – explains how Brexit may have hit the UK's trade to all destinations. The car industry's exports has been shrinking rapidly, and it is embedded in international supply chains with Europe and countries elsewhere. Investment in the sector fell after 2016, and exports to all destinations have performed poorly since the pandemic struck. Its export performance has been much worse than other countries with large car sectors.
- Another explanation is that after the pandemic, goods trade within the EU grew much faster than outside the Union, as savings built up during lockdowns were spent on consumer goods. If the UK had remained in the EU, it might also have seen rapid trade growth with other member-states, but trade with the EU and the rest of the world remained similar.
- UK services exports have grown strongly since Brexit, which seems to contradict the gravity models' predictions. But services trade grew rapidly in other advanced economies too, and the rising tide played to the UK's strengths. Looking more closely at finance and transport services – sectors in which the EU's single market is most advanced – exports grew much more slowly than the average of other advanced economies. If those two sectors had grown in line with the UK's peers, services exports would have been 11 percent higher, which is close to the gap that the gravity models forecast.
- Leave's advocates argued that Brexit would free the UK to sign free trade agreements (FTAs) with fast growing countries outside Europe. But according to government forecasts, the new FTAs signed so far will only raise GDP by 0.2 per cent in the long run. Even if the UK signed a full FTA with the US, as opposed to the damage-limitation deal agreed in May 2025 that left a 10 per cent tariff on UK exports to the US, the government forecasts that GDP would rise by a further 0.15 per cent. Those benefits are small because the countries are far away from Britain and FTAs are shallower than the single market, dealing more with tariffs than non-tariff barriers like differing regulations.

- The benefit of regulatory autonomy – the other main economic argument of Leave campaigners – is hard to quantify, because we have limited ability to assess the effects of the hundreds of regulatory changes that happen each year. There will be some areas in which the UK chooses more productivity-enhancing rules than the EU does. But those gains must be set against the costs of divergence from EU rules and standards, which means that some exports would lose market access in the EU. That is why the Sunak and Starmer governments have chosen to continue to align with EU regulation in many areas.
- The biggest divergence from EU rules was the end of free movement, and a new migration regime that had the same rules for people from all countries. Free movement flows within the EU have fallen as wages in central and eastern Europe have been converging with the west, so it is difficult to know how much higher net migration from the EU would have been if Brexit hadn't happened. The post-pandemic jump in migration from the rest of the world was also experienced in other European countries, as demand came roaring back and employers brought in foreign workers to help satisfy it. The Johnson government's relatively liberal regime helped offset most of the losses of GDP and tax revenues from the end of free movement, but it is impossible to be precise. In any case, the OBR's 2020 forecast of the impact of the end of free movement on the economy found smaller effects than the impact of trade barriers upon leaving the single market.
- Considering all of the evidence, the consensus view – that Brexit's economic impact would be negative and large – has been borne out. The 2019-2024 parliament raised taxes by around £100 billion, and if we take the OBR's 4 per cent loss of productivity to be the true figure, £40 billion of those tax rises were needed because of EU withdrawal.

Contents

A note on authorship	4
Summary	5
Preface	8
GDP	9
Trade	15
Trade agreements outside Europe	20
Regulation	22
Migration	23
Conclusion	26
Bibliography	27

Doctor Emmett Brown: *Obviously the time continuum has been disrupted, creating a new temporal event sequence resulting in this alternate reality.*

Marty McFly: *English, Doc!*

Doc: *Here, let me demonstrate. Let's say that this line represents time. Here's the present 1985, the future, and the past. Obviously, somewhere in the past the timeline skewed down into this tangent, creating an alternate 1985. Alternate to you, me, and Einstein, but reality for everyone else.*

Back To The Future Part II, dir. Robert Zemeckis (1989)

It's not easy to observe the effects of Brexit – unlike Marty McFly and Emmett Brown we can't visit the alternate timeline in which the British public chose Remain over Leave. So we have to rely on inference, using surveys, interviews, statistics and models to perceive the impact of leaving the EU on the economy. We are liable to make mistakes in doing so, and we can all become the victims of motivated reasoning because we all have questions of identity and political preferences interfering with our judgement.

We can all think of examples of biased or shoddy Brexit predictions about the Brexit process. Under Chancellor (and Remain supporter) George Osborne, the Treasury said in early 2016 that a recession was possible if the public voted to leave, but the recession didn't happen. One month after the vote, the new Brexit secretary David Davis claimed: "Within two years, before the negotiation with the EU is likely to be complete, and therefore before anything material has changed, we can negotiate a free trade area massively larger than the EU". In truth, the UK did manage to sign a free trade agreement with the EU, roll over the trade deals that the UK had as a member-state, and sign new ones, but the process was far longer and more difficult than Davis said.

And in print, on social media and on the airwaves, partisan outriders of Leave and Remain contested every bit of news and data that challenged their case, and trumpeted everything that supported it. In such an atmosphere, it was difficult for journalists to provide impartial information about the economics, and many, especially at the BBC, chose instead to allow the debate between pro and anti to play out without providing analysis themselves.

Part of the difficulty was that Brexit was both a policy decision and a constitutional one. In leaving the EU, the UK left the jurisdiction of EU law. For the UK, most of that EU law governed commercial integration through the EU's single market and its external trade policies, because the country was not a member of the border-free Schengen area or the euro, and had opt-outs from some elements of EU security and migration co-operation. So the central policy question of Brexit, 'can policy autonomy make up for the loss of a single market established by EU laws?', became entangled with the constitutional one: 'should the UK be governed by laws made by EU institutions?' Many people fell into the trap of reasoning backwards from their political preference to the economics. In the case of journalists, the risk of appearing to be biased on the politics of EU membership led many to treat the economics as a partisan subject, not an empirical one in which some objectivity could be attained. The well-known failures of economic forecasting made that decision understandable.

Now that four years have passed since the UK ended the transition period in 2021, and a sizeable amount of research has been done on Brexit's economic effects, it is a good time to survey what we can infer from the data and modelling that we have. What follows is an attempt to provide a reasonably comprehensive reference guide to the five main areas of Brexit economics: the effects of the decision to leave the EU, and pursue single market and customs union exit on GDP, investment, trade in goods and services, regulation and migration. The effects on the member-states who remained in the EU is largely ignored, partly because they have not been studied much, and partly because, given the different sizes of the British and EU economy, the largest effects on the EU were political, not economic.

GDP

“That’s your bloody GDP, not ours”, a heckler told academic Anand Menon at an event in Newcastle just before the referendum. She was right and wrong about that: real wages had on average stagnated after the financial crisis, which meant most people didn’t have higher incomes, but gross domestic product had grown – partly because of employment growth and partly because of rising capital investment and corporate profits. GDP is the sum of all production (or income and spending – the three should be very similar) done by everyone within a national economy, expressed in money terms, so unless she didn’t spend anything, it was her GDP too. Less of it entailed lower tax revenues, lower public spending, and lower redistribution via the social insurance system.

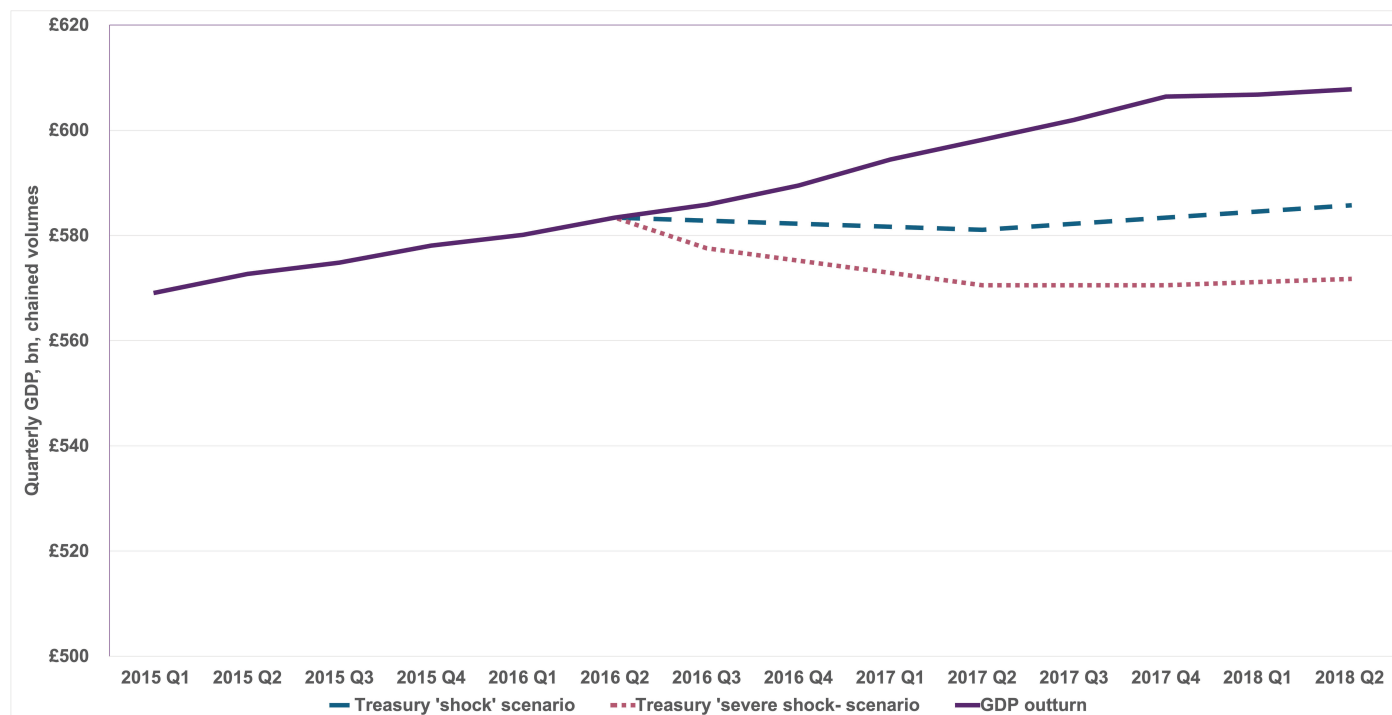
We have good reason to believe that Brexit has curtailed GDP, although it is difficult to know by exactly how much. The impact of trade, investment and migration restrictions on GDP is more like a slow puncture than a blow-out, because other forces continue to push GDP up: technological progress, improved skills, growing employment, and fiscal and monetary policy. So the measure of Brexit’s effect on growth is its path of GDP compared to the ‘what-if’ path if Remain had won. This counterfactual path is difficult to estimate precisely, because cause and effect are buried in the noise of all the other things that affect spending in an economy as large and complex as the British one.

There are three ways of estimating the impact of Brexit on GDP:

- short-run ‘shock’ forecasts, which the Treasury and the IMF used when highlighting the risk of a recession if the UK voted Leave
- long-run ‘conditional’ forecasts, in which the impact of trade barriers with the EU are fed into a model of the UK economy, to estimate how that would change the level of output over a decade or more
- backward-looking methods, which compare UK GDP data after 2016 to other countries to see if a gap has opened up.

All these methods have their problems. The **short-run forecasts** of recession were wrong. Inevitably, the failure of the recession to arise was presented by Leave advocates as evidence of bias or worse, deliberate misinformation, but short-run economic forecasting is difficult.

Chart 1. The Treasury’s short-term Brexit forecast miss



Sources: ‘The immediate economic impact of leaving the EU’, HM Treasury, May 2016, Office of National Statistics, ‘Gross domestic product: chained volume measures, seasonally adjusted’, ABMI.

The Treasury's pre-referendum forecast set out two scenarios – 'shock' and 'severe shock'.¹ The scenarios took a few key assumptions, which were grounded in the economics literature but not based on observations of the UK economy going through Brexit – rather obviously, because that had not happened before – and applied them to a dynamic model of the entire economy. The assumptions were that sterling would fall by 10-15 per cent (it did), the UK would quickly leave and impose trade barriers with the EU, either with an FTA or no deal (it didn't), uncertainty would depress spending (it did, but not as much as the Treasury assumed) and financial markets would push up borrowing costs (they fell, partly because the Bank of England eased monetary policy). As we can see in Chart 1, the Treasury's mistaken assumptions led to a sizeable forecast miss for the 'shock' scenario and a bigger one for 'severe'.

So much for short-run forecasts, then. Should this mean that we can ignore the **long-run forecasts**, which attempted to work out how much smaller the economy would be once it had adjusted fully to Brexit? The answer to that question is No, for two reasons.

First, long-run forecasts, on the whole, do not attempt to model the path of GDP. Rather, they take two steady states – Brexit, and no Brexit – and model the difference between them. Most models do not have time in them, and are called 'long-run' only because it is assumed the adjustment would take a long time – perhaps a decade to fifteen years, although the adjustment could happen faster or slower than that. Dynamic, short-run forecasts try to work out the path of GDP in the coming few years, which is very difficult because there are so many more assumptions that can be wrong, as we have seen, and other good and bad surprises can happen that have nothing to do with Brexit.

Second, the assumptions in long-run forecasts are more testable on data. The reactions of policy-makers, individuals, companies and financial markets to surprises are hard to model, because their behaviour is based on their own predictions of what will happen, and their assumptions might be different from economists' ones. Households might carry on spending, when economists expect them to save. Financial markets might assume that a referendum would be reversed or Brexit watered down to something very soft so that trade barriers are limited. So-called 'conditional' long-run forecasts do not have to worry about such forecasts of forecasts, since they're based on observed relationships between, for example, trade and GDP data.

Economists have well-established methods for estimating how much trade agreements have raised trade volumes: so-called gravity models (for more, see the trade section below). These have good 'predictive power', meaning that when they are used to estimate things that we know from observed data, they come close to the real numbers.² We also know that there is a strong relationship between openness to trade and the level of GDP across economies, and have well-tested theories – and models founded on those theories – that explain why, how and, with less precision, the extent to which trade raises GDP.

As a result, long-run forecasts are better than short-run dynamic ones. Just as a doctor cannot say for certain when drinking forty pints of beer a week will cause your liver to fail, they can know that in the long run it will fail.

However, long-run forecasts can't give us precise estimates of how big the effect of Brexit on GDP will be. The Office For Budget Responsibility's oft-cited forecast for the impact of moving from EU membership to a free trade agreement is a 4 per cent reduction in productivity over the long run (which amounts to a 4 per cent reduction in GDP and GDP per capita, give or take, because each worker in the UK would be producing and earning 4 per cent less). But that figure is a simple average of the reputable studies by academics and officials. As Table 1 shows, the range of these studies is very wide – from 1.8 to 10 per cent.

¹ 'The immediate economic impact of leaving the EU', HM Treasury, May 2016.

² Yoto Yotov, 'Gravity at 60: A celebration of the workhorse model of trade', VoxEU, January 2022.

Table 1. The wide range of studies' findings of the impact of replacing EU membership with an FTA.

Study	Productivity assumption	Per cent effect on productivity
Felbermayr et al (2018)	Constant returns to scale	-1.8
IMF (2018)	Constant returns to scale	-2
Mayer et al (2018)	Constant returns to scale	-2.4
UK in a Changing Europe (2019)	Constant returns to scale	-2.5
OECD (2016)	Dynamic productivity	-2.7
IMF (2018)	Increasing returns to scale	-3.3
Netherlands CPB (2016)	Increasing returns to scale	-3.4
Bank of England (2019)	Dynamic productivity	-3.5
NIESR (2018)	Dynamic productivity	-3.8
Office for Budget Responsibility (2020)	Average of studies	-4
Whitehall study (2018)	Increasing returns to scale	-4.9
Netherlands CPB (2016)	Dynamic productivity	-5.9
UK in a Changing Europe (2019)	Dynamic productivity	-6.4
World Bank (2017)	Dynamic productivity	-10

Source: Office for Budget Responsibility, 'The effect on productivity of leaving the EU', *Economic and Fiscal Outlook*, March 2020, Box 2.1

The reason why the range is so wide is because trade barriers have many effects on productivity, and economists differ on how the effects should be modelled. The models that use constant returns to scale get the smallest effects. They take account of higher prices and lower consumption as trade is disrupted, but they assume the productivity of big exporters doesn't shrink faster than small ones as their exports contract, so car firms don't lose the additional productivity that comes with having bigger car plants, for example. That assumption might be right if big firms can more easily cope with Brexit red tape and maintain output.

But to continue with the car example, it is a highly competitive industry with relatively low margins, so in the long run, companies might balk at the higher costs of basing their operations in Britain, wind down car plants and satisfy European markets with production in the EU or elsewhere. In that case, a model with increasing returns to scale is better, and these tend to find a bigger effect.

Many studies find still larger impacts when they attempt to factor in other potential impacts of trade barriers, such as weaker competition from imports, which reduces incentives to innovate, and the loss of technology and knowledge transfer from companies investing in production in Britain. These reduce growth over the long term, rather than just leading to a one-off change in the productivity level, and that is why these models find the biggest impacts. But it is difficult to specify these assumptions using observed data.

There is no consensus on what model is best. Paul Krugman, who won a Nobel for showing how increasing returns to scale explain trade patterns, is sceptical about dynamic productivity models, and argued against their use in Brexit studies: "I know that there's some evidence for such effects; trade seems to favour more productive firms", he wrote in 2018, "but relying a lot of effects we can't model seems dubious".³

One way to test the forecasts is to use **backward-looking methods**, now that Britain has left the EU. Some are mental models that we see all over the Brexit debate: 'France and Germany have also grown slowly, so we can't assign weak growth in the UK to Brexit', with the implication that there must be something else constraining British GDP.

The fact that France and Germany have also struggled with weak growth since Brexit is a data point that tells us we shouldn't naively say 'growth has slowed down in Britain since mid-2017 or so, therefore Brexit is responsible for everything'. But it is not very helpful to use two other countries as a benchmark, because it's a tiny sample (two countries) and they are not identical to Britain – they have different economies, laws and specialisms.

Consider a scientific experiment: identical treatment and control groups are necessary to infer whether a drug has reduced disease. Medical trials divide a group of people suffering from the disease into two groups, and researchers take care to ensure the groups have a similar distribution of people, by other health problems, and age, weight and sex. The trials also recruit a lot of participants so that things they can't observe – like genetic predisposition to the disease –

3 Paul Krugman, 'Brexit, borders and the Bank of England', *The New York Times*, 30th November 2018.

are reasonably equal in both groups. That way, when one group is given a treatment and the other acts as the control, researchers can have more confidence that any apparent effect on health outcomes is down to the treatment and not differences between the groups.

Therefore a better test than a comparison to France and Germany, which raises the sample size a little, is to compare the UK to all other large, advanced economies – the G7. This benchmark is widely used, because it's transparent and it makes sense to use larger rich countries as a benchmark than small ones, which might suffer from a weakening growth if one of their key industries see a sudden hit to sales, or poor ones, whose economic performance tends to be more volatile because their financial systems are weak. But in some ways, the treatment country – Britain – is less similar to the G7 control group than if only France and Germany were used, because they are subject to the same European shocks as Britain and have more similar policies and economic institutions than, say, the UK and Japan.

A more sophisticated way to put together an independent control group is to use the 'synthetic control' method – dubbed the 'doppelgänger' method by the first researchers to use it on Brexit.⁴ This method is widely used by social scientists when experimental methods using treatment and control groups are unethical or unworkable. It is less transparent than simply comparing the UK to the G7, but it uses data, rather than intuition, to group together economies to make one that is most similar to Britain, as measured by GDP growth before the 2016 referendum.

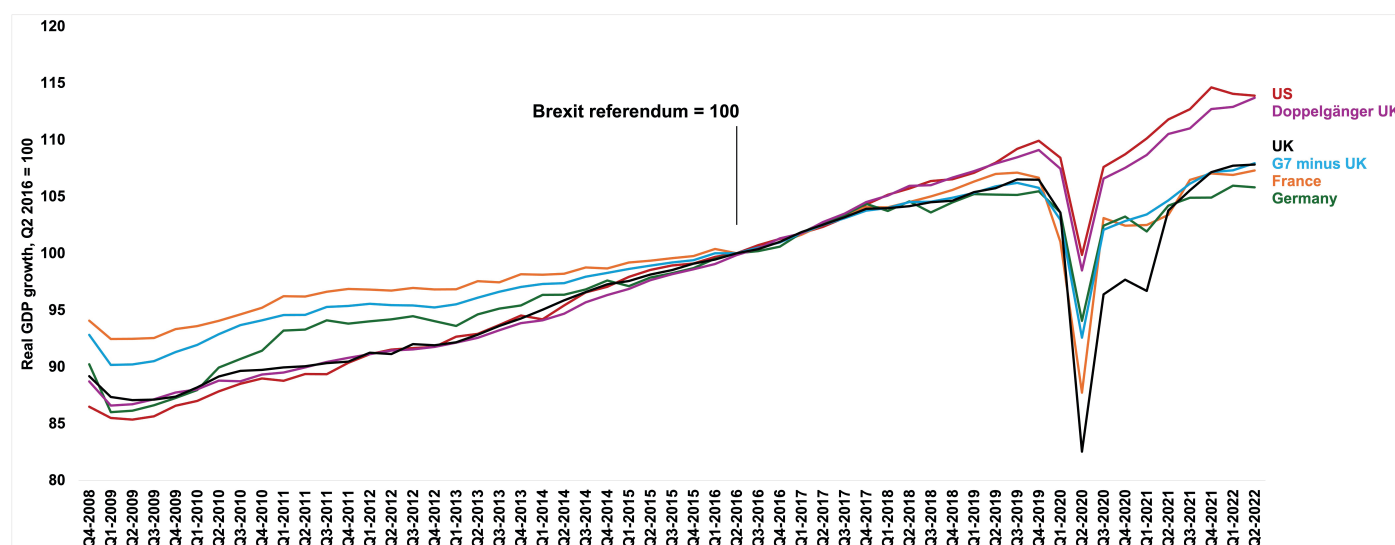
From a basket of economies, an algorithm selects those whose GDP growth most closely matched Britain's in the years before 2016, assigning weights to them so that the difference is minimized between Britain's path of GDP and that of the control. The discretion of researchers is left to choosing which countries should be in the starting basket and how the algorithm should select from it (and there is continuing debate about how best to do that). But the method is better at finding a control that is plausibly similar to the UK economy than simpler, human-chosen country groupings. The UK has a services-dominated, consumption-led growth model, with more flexible labour markets than many other European countries, but a larger state than the US, and the algorithm puts together a 'doppelgänger UK' that tends to combine the US with several European and other Anglophone countries. That match is intuitive: different types of economies react to global shocks and trends in different ways, so it follows that UK growth would be correlated with a combination of other Anglophone and European countries.

The results of the three methods are set out in Chart 2. By comparing the UK's performance to France, Germany and the rest of the G7, we might conclude that Brexit has had no impact on the UK's GDP between the referendum and the second quarter of 2022. (After that period, the energy crisis, whose effects were most strongly felt in Europe, undermines comparisons with non-European countries. And in the autumn of 2022, Liz Truss's mini-budget was another non-Brexit event.)

However, France and the G7 average tended to grow more slowly after the financial crisis than Britain did. After a better recovery between 2009 and 2011, so did Germany. The US, UK and doppelgänger had similar growth rates between 2009 and 2016 – remember that this is by design when it comes to the doppelgänger. Then, after the summer of 2017, their growth diverged from Britain's, resulting in a 5 per cent shortfall in the level of GDP by the summer of 2022. This is not far from the average of the long-term forecasts.

⁴ Benjamin Born et al, 'The costs of economic nationalism: Evidence from the Brexit experiment', The Economic Journal, October 2019.

Chart 2. UK growth has underperformed compared to its pre-referendum peers, but not France, Germany and the G7 average.



Source: author's analysis of OECD, real quarterly GDP, chained volumes, national currencies indexed at 2015 levels. See the author's 'What can we know about the cost of Brexit so far?', Centre for European Reform, June 2022, for more details on the synthetic control method used.

Note: The countries selected by the algorithm for doppelgänger UK are the United States (31 per cent), Germany (15 per cent), New Zealand (14 per cent), Norway (8 per cent) and Australia (5 per cent). The remaining countries make up less than 5 per cent of the doppelgänger each, with European countries predominating.

The problem with the synthetic control approach is that it cannot account for events after 2016 that affect relative growth rates between Britain and countries forming the control.

An obvious event is the Covid-19 pandemic, which all countries suffered from, but handled in better or worse ways. Yet across countries the relationship between excess deaths through the pandemic and the subsequent economic recovery is very weak, as one would expect given that most people who died from Covid were retired.

Another possibility might be that the highly integrated European economy weakened after 2017, with Brexit having some effect on supply chains between Britain and the EU, and with the eurozone's export-led recovery from its financial crisis weakening as China-US trade wars gathered pace. That weakness would mean that Britain's growth would have slowed anyway if the public had voted Remain.⁵ However, while France and Germany suffered from weaker growth after 2017, like the UK, many other European countries that are also big traders with the UK such as the Netherlands, Belgium, and Spain did not.

The US also had looser fiscal policy after Trump's 2017 tax cuts and after the pandemic. But if we remove the US from the doppelgänger analysis, we get a similar shortfall in UK GDP as we do when we include it. If we go further, and randomly drop all of the countries from repeated analyses, one by one and in groups, and use the doppelgänger whose GDP growth was the weakest, we still end up with a UK shortfall of around 3 per cent (and if we take the strongest performing doppelgänger, the shortfall grows to 6.7 per cent).⁶

We can conclude that the best backward-looking method supports the consensus of the long-run forecasts.

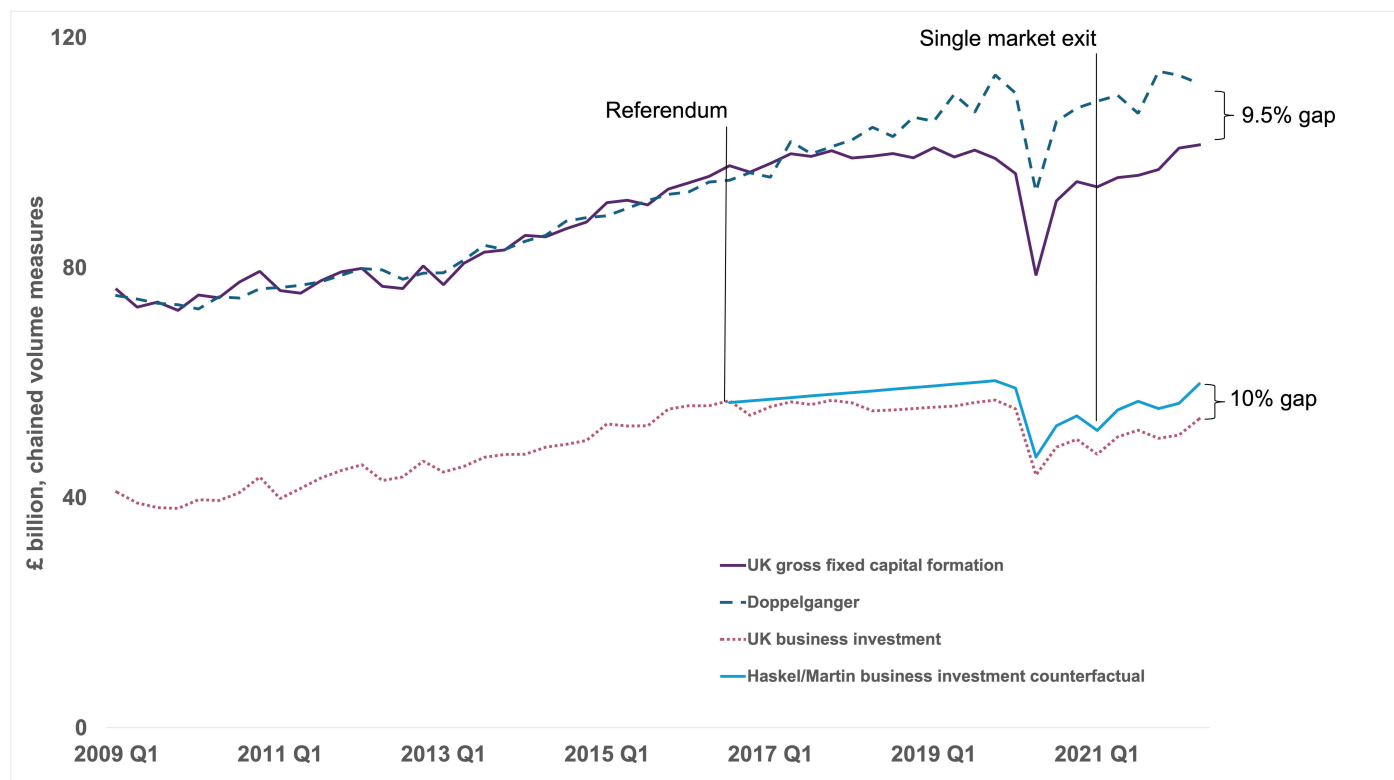
Moreover, the unambiguous stagnation in investment since 2016 supports the view that the referendum itself had macroeconomic effects, not just Britain's de facto exit from the EU in 2021. Immediately after the vote, sterling depreciated by 15 per cent, which meant that the value of British assets was written down by global investors anticipating that they would generate lower returns in the future. Uncertainty over how big trade barriers would be slowly gave way to certainty that the UK would leave the single market and customs union, with Theresa May's 2016 Conservative party conference speech promising to end free movement and the jurisdiction of EU law in Britain, her downfall after the failure of parliament to agree her withdrawal agreement in 2019, and Boris Johnson's election victory later that year. Investors are forward-looking, and the expectation of trade barriers meant that investment across the economy flatlined between 2016 and the 2020 pandemic.

5 Graham Gudgin and Saite Lu, 'The CER doppelgänger index does not provide a credible measure of the impact of Brexit', UK in a Changing Europe, June 2023.

6 John Springford, 'Are the costs of Brexit big or small?', Centre for European Reform, May 2023.

Chart 3 sets out attempts to quantify how much that stagnation cost. The top two lines show how investment across the British economy – gross fixed capital formation by businesses, government and households – compared to a synthetic control made up of countries whose investment growth most closely match the UK's between the financial crisis and 2016. The gap is about 10 per cent. An almost identical gap was found by Jonathan Haskel and Josh Martin of Imperial College London and the Bank of England when they compared investment, this time just by businesses, to the 1997-2016 trend (and maintained the gap that had opened up by 2019 through the pandemic period).

Chart 3. The cost of stagnating whole-economy and business investment.



Sources: John Springford, 'The cost of Brexit to June 2022', Centre for European Reform, December 2022; Jonathan Haskel and Josh Martin, 'How has Brexit affected business investment in the UK?', Economics Observatory, March 2023.

Haskel and Martin estimated how much business investment losses curtailed GDP growth, using standard capital accounting techniques, and found that GDP would have been 1.3 per cent higher in 2022. That figure does not include further losses as a result of the trade barriers between the UK and EU being erected when it left, the losses from weaker household and government investment, or weaker consumption growth as import prices rose after the depreciation of sterling in 2016.

Comparing long-term forecasts and backward-looking methods together, then, the impact of Brexit on GDP has been negative, and probably substantially so. The OBR's 4 per cent hit to productivity equates to a loss of around £4,000 per household in the UK, at 2024 prices – although note that the OBR has not made a judgement of whether the full impact of Brexit has yet materialised, other than around a 1.5 per cent loss having already been incurred before the transition period ended.⁷ If we assume that the OBR's 4 per cent figure has now materialised, the lost tax revenue as a result of that foregone output is around £40 billion.⁸ For comparison, the government raised taxes by around £100 billion in the 2019-24 parliament, so a large chunk of that would not have been necessary if the UK had voted to remain in the EU or chosen a softer form of Brexit.⁹

However, many things determine a country's economic growth, and as we have seen, it is not easy to isolate the impact of Brexit from all the other things that affect GDP. By examining parts of the economy in which it is easier to identify Brexit effects, we can make use of further evidence to assess whether the consensus macroeconomic story – that Brexit would curb GDP growth via curtailed flows of trade and migration – has turned out to be correct.

⁷ 'Brexit analysis: Current assumptions and judgements', Office for Budget Responsibility, February 2025.

⁸ If we use the 2024 tax-to-GDP ratio and apply it to the 2024 GDP out-turn, and multiply tax revenues by 1.04.

⁹ Carl Emmerson et al, 'This will be the biggest tax raising parliament on record', Institute for Fiscal Studies, September 2023.

Trade

Recall that long-run models that assumed increasing returns with bigger effects on output, with bigger businesses being hurt more by trade barriers found bigger effects on output. The logic behind using increasing returns is that most trade is conducted by very large multinational companies, some of which have plants in different countries. These companies tend to have very high labour productivity, because they have lots of machinery and computers per worker, and so output is high compared to their wage bills. These multinationals' plants – or subcontractors to the big companies – also send many components to one another in so-called supply chains. If governments raise the cost of sending inputs into the production process between firms, these big multinational companies reduce production and thereby reduce average productivity across the economy.

The trade data gives support to both the advocates of constant and increasing returns to scale. In an important piece of research, economists at the London School of Economics found quite small effects, with total exports (ie, to both the EU and the rest of the world) 6.4 per cent lower and imports 3.1 per cent lower by the end of 2022. That challenged the Office for Budget Responsibility's forecast that UK goods trade would be 15 per cent lower than if the UK had stayed in the EU.

The LSE team discovered that smaller businesses were more affected by trade barriers, implying that bigger ones could afford the higher cost of red tape to export and import from the EU.¹⁰ These small effects on trade would translate into even smaller effects on productivity and GDP, because exporting UK companies can switch away from serving customers abroad to domestic ones, since imports are also trimmed a little by Brexit barriers.

This was a surprising result. The 'gravity' models that were used to underpin the long-run forecasts predicted a much bigger hit to trade. These models attempt to control for all the various factors that determine trade between countries, such as how big their economies are, how rich they are, and how far apart they are (and many others, like having a common language, one country being landlocked, and so on). Hence the 'gravity' moniker: big economies that are close to each other trade more than smaller ones that are on the opposite sides of the globe, just as Jupiter exerts more gravity on Mars than Mercury does with Pluto. When all those factors are accounted for, we find that EU countries trade much more with each other than the model would predict, and as a result, leaving the EU and substituting membership for an FTA would imply a loss of about 15-20 per cent in Britain's worldwide goods exports and imports. In services, the estimated effect is similar.¹¹ Those trade impacts drive most of the losses of productivity and GDP in the long-run forecasts.

The LSE's result is all the more surprising if we compare UK goods trade to other advanced economies (but not services, which we will come to). The UK's goods trade slumped to near the bottom of the G7 league after leaving the single market and customs union in 2021 (Chart 4). That's despite Britain tending to be in the upper half of the table before Brexit, and despite the big inflationary surge in trade between advanced economies after it, as consumers used savings built up during pandemic lockdowns to spend on consumer goods.

The same synthetic control method can be used for goods trade as it can for GDP, with a set of countries put together to create a doppelgänger that most closely matches the UK's goods trade performance prior to leaving the single market. The UK's shortfall in goods exports vs the synthetic control was 15 per cent, and imports 13 per cent – around the same as the gravity models predicted.

These numbers are similar to those found by academic economists comparing UK trade performance to other countries, but using more sophisticated synthetic methods.¹²

¹⁰ Rebecca Freeman et al, 'Deep integration and trade: UK firms in the wake of Brexit', London School of Economics Centre for Economic Performance, December 2024.

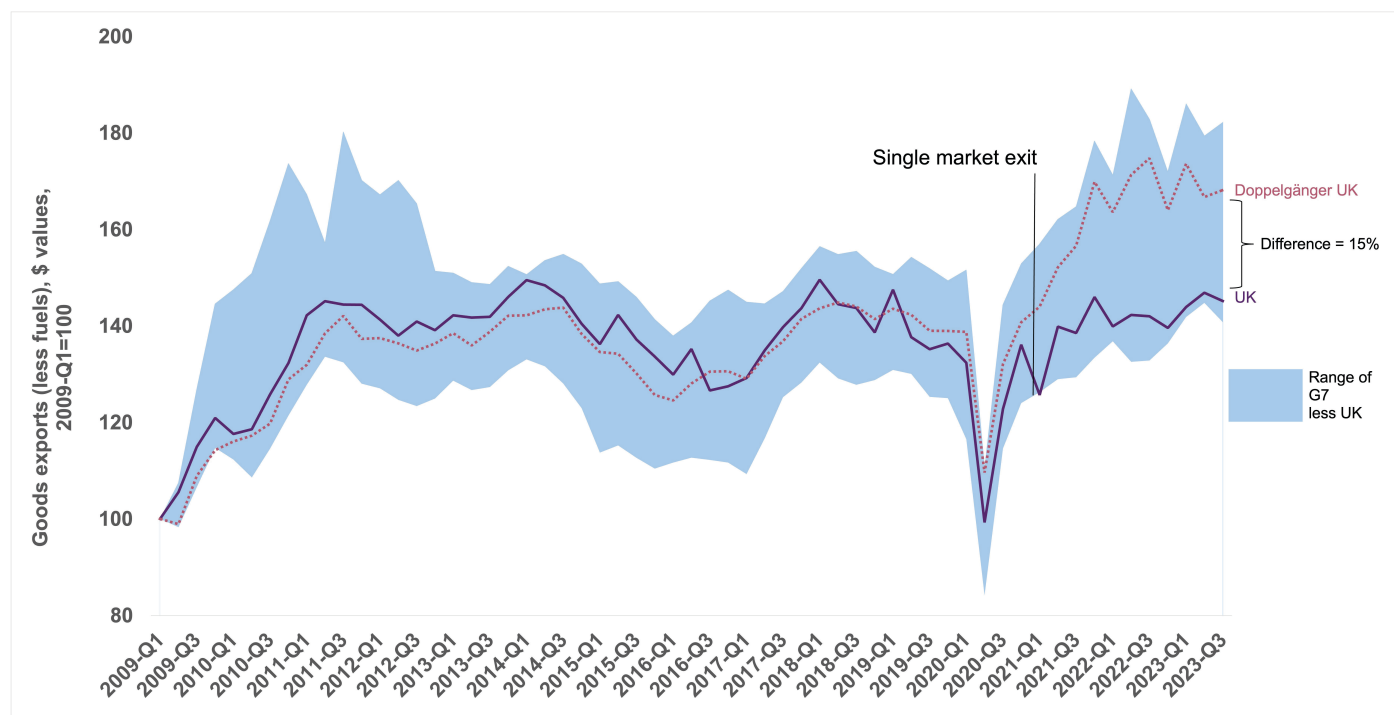
¹¹ 'The long-term economic impact of EU membership and the alternatives', HM Treasury, April 2016; 'The economic consequences of Brexit: a taxing decision', Organisation for Economic Co-operation and Development, April 2016; 'United Kingdom: Selected issues', International Monetary Fund, June 2016; Monique Ebell and James Warren, 'The long-term economic impact of leaving the EU', National Institute of Economic and Social Research Review, May 2016.

¹² Jun Du et al, 'How did Brexit affect UK trade?', Contemporary Social Science, 2023.

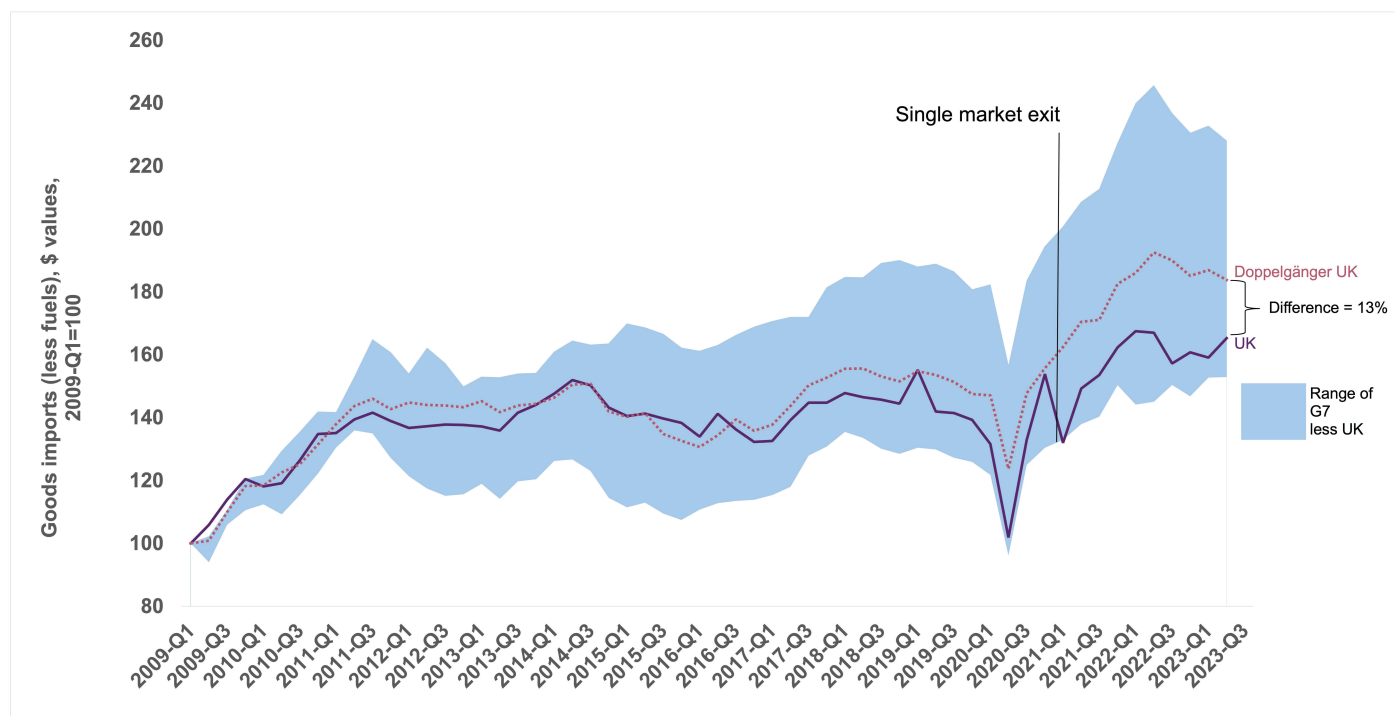
Charts 4a & 4b.

UK goods trade has been weak compared to other advanced economies.

Worldwide goods exports (less fuels)



Worldwide goods imports (less fuels)



Sources: OECD, quarterly goods trade, current values (\$) and World Bank, fuels share of goods exports. See the author's 'The cost of Brexit, January 2021: The end of transition edition', Centre for European Reform, March 2021, for more details on the synthetic control method used.

Note: The countries that make up the doppelgänger are the US (33 per cent), Luxembourg (11 per cent), Australia (8 per cent), Germany and Greece (7 per cent each), Iceland (6 per cent) and Italy (5 per cent). The remaining countries each make up less than 5 per cent of the doppelgänger.

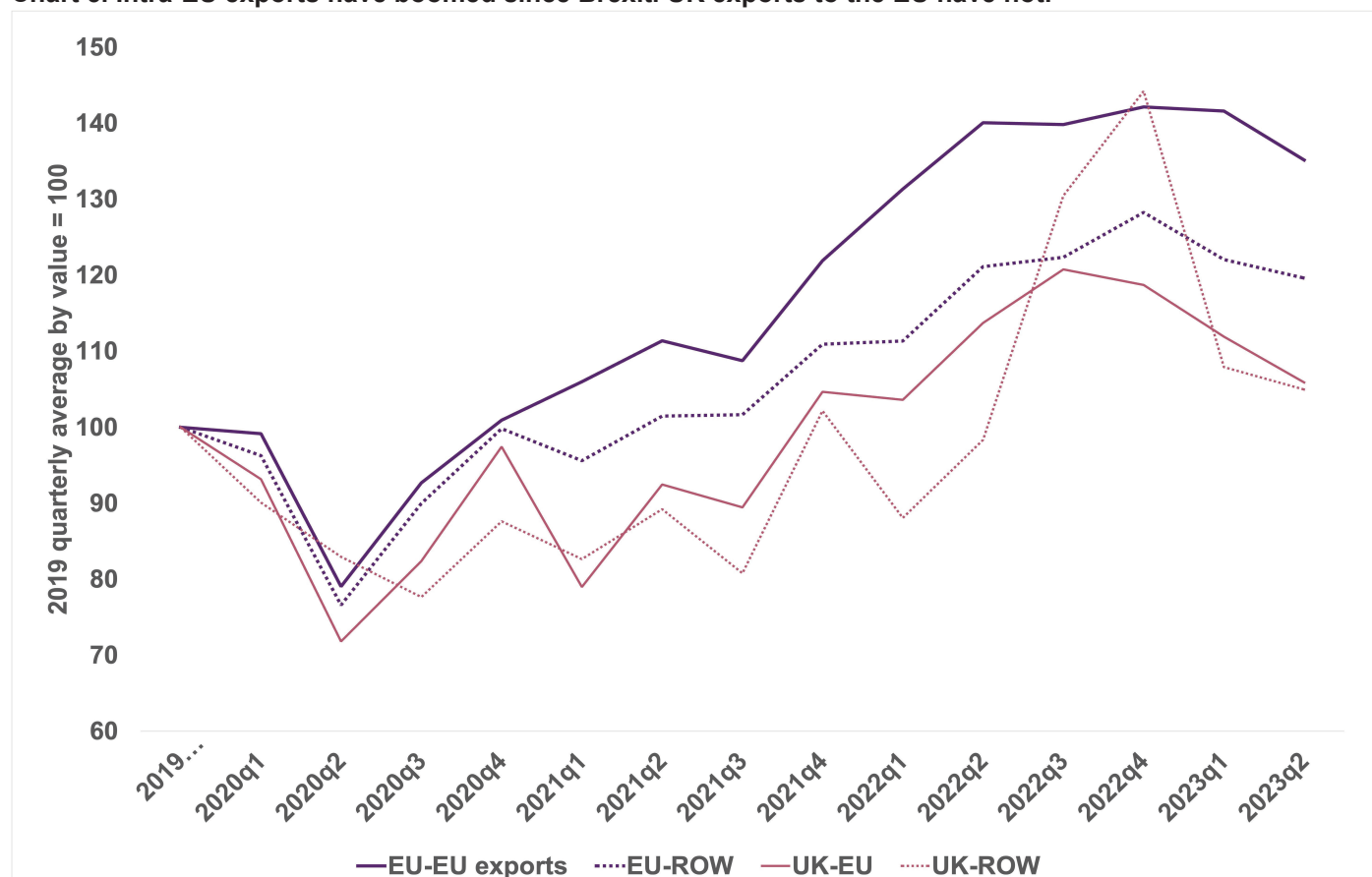
What explains the discrepancy between the LSE's work and the cross-country comparisons? Different ways of measuring Brexit effects are to blame. Goods exports and imports to the EU have broadly tracked those to the rest of the world, despite new trade barriers being imposed on the EU but not everywhere else. The LSE team dug into thousands of firms' sales and purchasing records that were collected by His Majesty's Revenue and Customs. They compared firms' exports and imports to the EU with those to the rest of the world, before and after Brexit. On average, only a small shortfall had appeared between trade with the EU and the rest of the world after Britain left the EU. Although the shortfall for small companies was much larger than for big ones, big companies do most of the trading, so the overall impact was small. They also found that companies had been substituting imports from the EU, which were harder to come by post-Brexit, with imports from outside it.

It is a paradox that Britain's goods trade performance has been so markedly worse since it left the EU, but there isn't a clearer hit to EU trade versus everywhere else. Various theories have been proposed to explain why that might be. The pandemic could be one reason – perhaps UK manufacturers were unusually affected by it because of labour shortages. But manufacturing is not a labour-intensive business in advanced economies, especially the types of manufacturing businesses that do most exporting of finished goods and imports of components, such as cars, aerospace, pharmaceuticals and chemicals.

Another reason could be supply chains. Companies in these sectors are often 'intermediate producers', importing metal and components and exporting engines to be fitted to cars in other countries, for example. If imports from the EU are interrupted by Brexit barriers, that could affect exports to the rest of the world. However, the LSE team found that firms that export more in general did not see a bigger fall in exports to the rest of the world, compared to those that export less. You would expect the opposite to be the case if supply chain disruptions with the EU were causing big exporters problems. But they did find that firms that are big importers, compared to those that don't import so much, saw bigger reductions in imports from the EU and bigger increases in imports from the rest of the world.

A third reason is that, outside Britain, European goods trade recovered more rapidly from the pandemic than trade between European countries and those outside Europe. That might be because consumers in rich countries bought consumer goods that European countries specialise in, like cars and appliances, with the savings they had built up during lockdowns. As a result, British manufacturers might also have seen a surge in exports to the EU, rather than weak export growth to both EU and non-EU markets. Chart 5 shows EU member-states' goods exports, broken down into exports sold to other member-states and those to the rest of the world. Over the course of 2021 and 2022 the value of intra-EU exports grew much faster than those to the rest of the world, but the UK did not join in the trade boom in European goods. Brexit could be to blame.

Chart 5. Intra-EU exports have boomed since Brexit. UK exports to the EU have not.

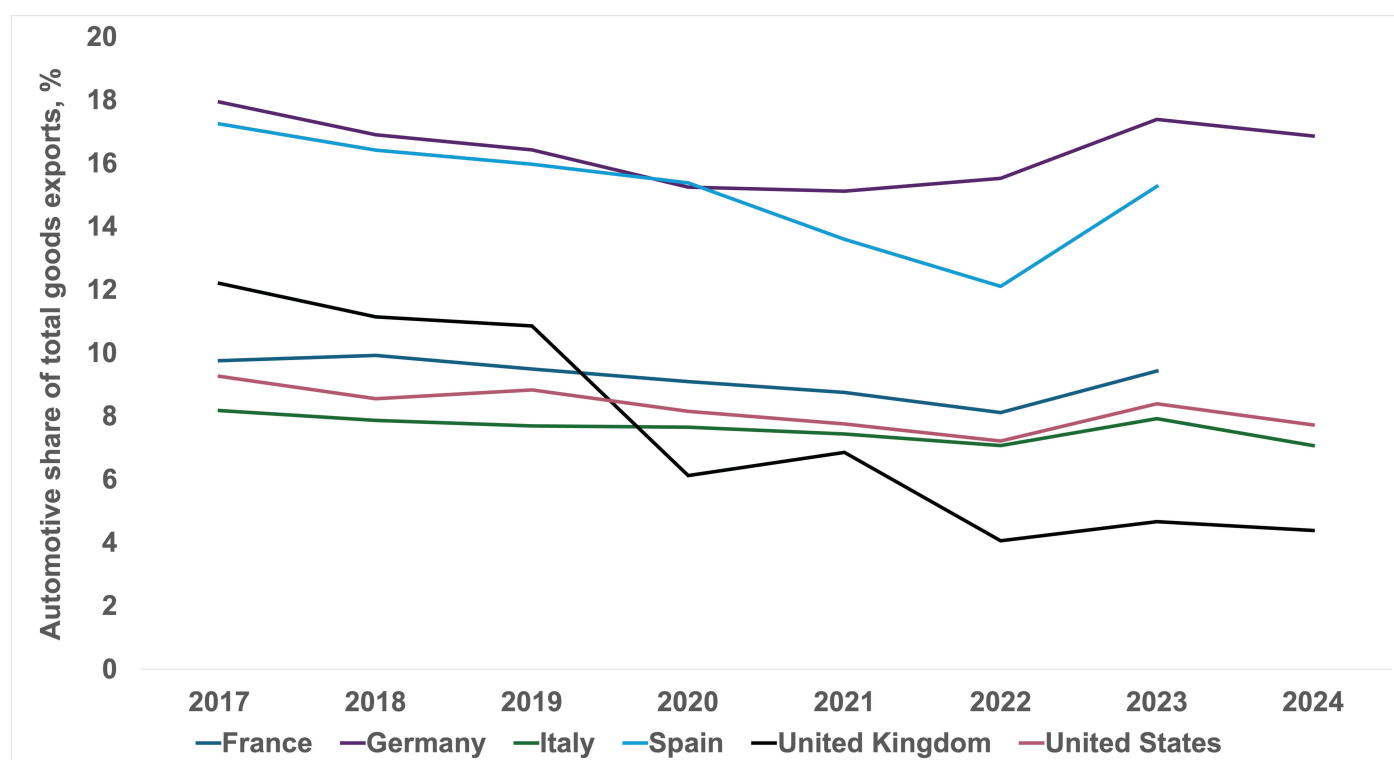


Source: Eurostat, 'EU trade since 2002 by HS2-4-6 and CN8' data. Data are in current prices.

A fourth reason could be that, broadly, the UK became a worse place to be a trading business. Big multinational companies – or UK ones – decide that more costly trade with the EU means they should wind down production in Britain, irrespective of whether its products were destined for European markets or elsewhere. We have some evidence for that in two key exporting sectors – automotive and financial services.

The automotive industry is going through huge change, as internal combustion engines are replaced with electric motors, Chinese companies are providing stiffer competition in EVs, and the industry continues to consolidate into a smaller number of global companies. In many big car exporting countries, we have seen a slow decline in the share of total goods exports that finished cars and components make up (Chart 6). But by far the biggest drop has been in the UK. That process started before Brexit was enacted, with a big drop in the automotive export share between 2019 and 2020, and a further decline since then. But that is in keeping with the pattern of investment in car production, with companies making decisions about expanding or cutting production with a view to future demand and production costs, because car plants require huge, lumpy capital expenditures to expand production or produce new models. The UK sends around half of its cars to the EU and half to the rest of the world, and it appears that it has become less attractive as a site for production to serve all markets.

Chart 6. British automotive exports have been in big decline since 2019, relative to peer economies.



Source: UN Comtrade, trade values (\$) by HS code chapter.

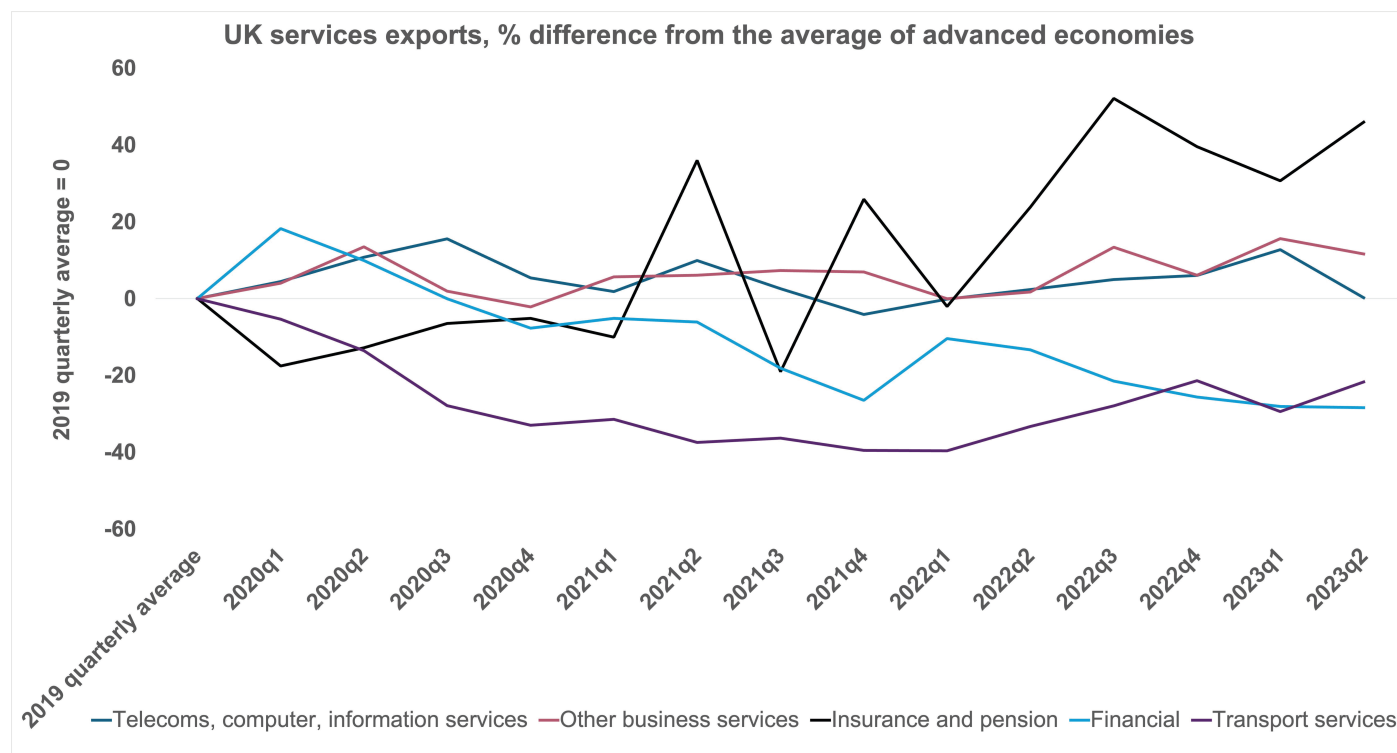
Financial services has shown a similar pattern. Overall, Britain's services exports to both the EU and the rest of the world have been growing at a decent clip since the UK left the single market, apparently defying the predictions of the gravity modellers. However, services trade has shown robust growth across rich countries, and the UK is unusual for a large economy because services make up a big share of its total trade – almost half. There has been a rising tide – and one that favours the UK's strengths – that might cover over the impacts of Brexit. If we account for rising demand for services exports, we see that British financial services exports might be expected to have performed better than they did.

Chart 7 plots how UK services exports have fared compared to 22 economies that are the most mature globally (these are the economies that the IMF designated as 'advanced' in 1995). Telecoms and IT, insurance, pension, and 'other business services' – a series that contains consultancy, accounting, legal services – have all grown faster in the UK than the average of advanced economies since the UK left the EU.

Two services sectors have not, however. The financial sector has grown more weakly in the UK than elsewhere since the start of 2020 – when many financial services companies based in the UK opened operations in the EU to comply with its rules on location. The other is transport services – a category that contains road haulage and shipping. Like financial services, growth in British exports of transport services are well down on other advanced economies, despite

full reopening of the economy. That is probably because Britain's goods trade with the EU have been hit, reducing demand for British lorry drivers' services. Also, they can no longer do 'cabotage' within the EU – moving goods between member-states.

Chart 7. UK financial and transport services exports have underperformed other advanced economies since 2019.



Source: UNCTAD services (BPM6): Trade and growth by main service category, quarterly, value (\$).

Taking these relative losses of services exports into account, we find that the gravity models predicting a sizeable Brexit impact on services trade – around 15 per cent or so – were not so far off. If the UK's exports in these two sectors had performed in line with the global average of advanced economies from single market exit to the second quarter of 2023, then Britain's total services exports would have been 11 per cent higher.

The apparent hit to British car-making and financial services also gives some justification to the forecasters who chose to base their models on increasing returns to scale. Both are sectors with big, highly productive companies, which make use of a lot of advanced capital – plants with a lot of high-tech machinery, in the case of cars, and IT systems, in the case of financial services. Hits to those sectors will have a proportionally bigger effect on economy-wide productivity. Putting all the trade evidence together, then, the forecasters were right that Brexit would have a negative impact on UK trade, because the single market is a deeper form of economic integration than a free trade area, in which tariffs are reduced or eliminated, but non-tariff barriers to trade are erected. Just as with GDP, the size of the effect depends on how it is estimated, and judgements have to be made. But there are reasons to believe that the gravity models were about right.

Trade agreements outside Europe

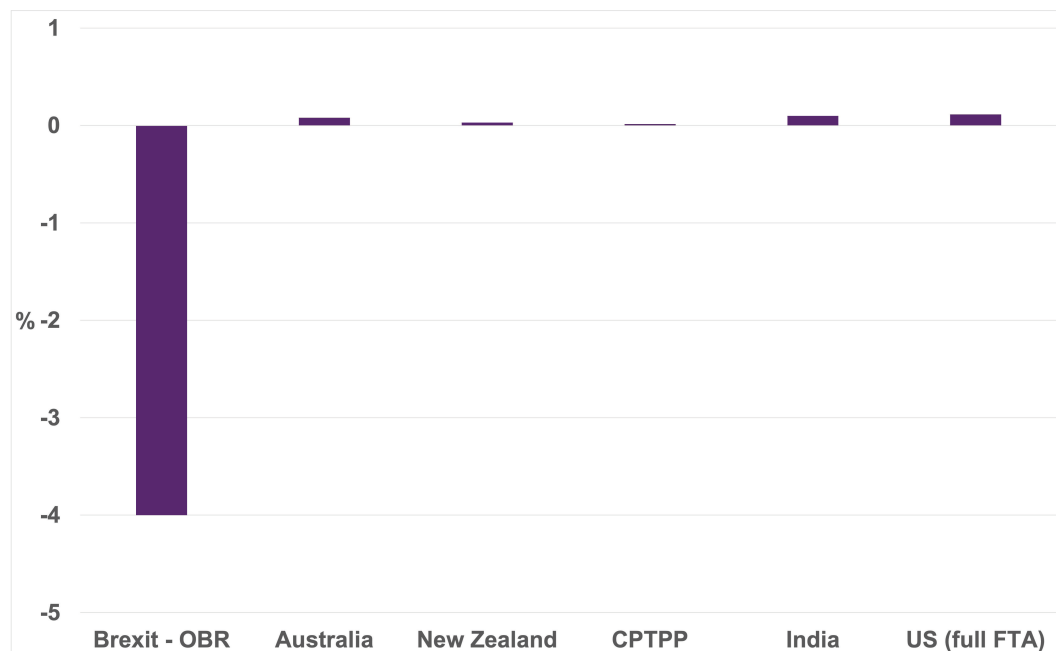
If we can trust the gravity models on the Brexit effects, we can have confidence in their predictions of the benefits of the UK signing free trade agreements (FTAs) with countries outside Europe. Britain being a champion of global free trade was central to the Leave campaign's economic pitch to voters. Of course, since 2016, the conditions for global trade have worsened, with the two election victories of arch-protectionist Donald Trump and growing tensions between the US and EU with China over its interventionist industrial policies. But, leaving that to one side, the same combination of gravity and macroeconomic modelling that was used to estimate Brexit costs has been used to forecast the benefits of Britain's FTAs – even the US, in the unlikely event that Trump decides that a full FTA, eliminating tariffs on the majority of goods trade, is worth pursuing with Britain.

It is important to remember that the EU signs FTAs too, as part of its common trade policy, so logically any gain from FTAs that the UK signs must arise either from new agreements or better ones than the EU manages. The previous Conservative government replicated EU trade agreements with other countries before the UK left the single market and customs union – a significant achievement, given the time pressure – but they do not count as 'Brexit wins'. However, it also signed FTAs with Australia, New Zealand and Pacific rim countries (the UK joined the wordily-titled Comprehensive and Progressive Trans-Pacific Partnership in 2024). The new Labour government finalised an FTA with India in May 2025. Days later, it also struck a non-binding agreement with the US, but that amounted to a reduction in trade openness with the US compared to the period before Trump's second presidency, because it left UK exporters facing a cross-the-board tariff of 10 per cent.

According to the government's impact assessments, the macroeconomic benefit of the new FTAs the UK has signed are very small, only offsetting the 4 per cent loss from Brexit by about 0.2 per cent (Chart 8). Even if a full FTA were signed with the US, that would rise to about 0.35 per cent.

It can't be portrayed as a Brexit win, because it's a partial u-turn, but the so-called reset with the EU is likely to be more beneficial than the FTAs that the UK has negotiated. A full government study of the benefits of the proposed deal, which was announced at a summit in May 2025, has not been made because it has yet to be fully negotiated. But the government has said that the economy-wide benefit of parts of that agreement – a deal on agriculture and food, and linking emissions trading schemes – should raise GDP by a similar amount as the FTAs signed so far.¹³

Chart 8. Government forecasts of the impact of UK FTAs on UK GDP are very small.



Sources: 'The effect on productivity of leaving the EU', *Economic and Fiscal Outlook*, Office for Budget Responsibility, March 2020, Box 2.1; 'Impact assessment of the Free Trade Agreement between the United Kingdom of Great Britain and Northern Ireland and Australia', Department for International Trade, May 2022; 'Impact assessment of the Free Trade Agreement between the United Kingdom of Great Britain and Northern Ireland and New Zealand', Department for International Trade, February 2022; 'Impact assessment of the UK's accession to the CPTPP' Department for International Trade, August 2024; 'Technical note of the preliminary economic impacts of the UK-India Free Trade Agreement', Department for Business and Trade, May 2025; 'UK-US trade agreement', Department for International Trade, July 2019.

¹³ 'Methodology note: How Defra has estimated the impact of a sanitary and phytosanitary agreement on the UK agricultural sector', Department for the Environment, Food and Rural Affairs, May 2025 and 'Methodology note: assessing the preliminary economic impacts of linking the UK-EU Emission Trading Schemes', HM Treasury, May 2025.

The principles behind gravity models explain why this is so: rich, nearby countries trade far more with each other than poor, distant ones, and even the US's enormous wealth cannot overwhelm the fact that its market is thousands of miles away from Britain. As noted above, the models also find much larger trade gains between members of the EU's single market than between countries that have free trade agreements with each other, because the single market removes many more barriers to trade, investment and migration. One study using a sophisticated gravity model estimates that even if the UK signed FTAs with almost all countries that are not members of the EU, the trade losses from Brexit would be less than halved.¹⁴

14 Steven Brakman et al, 'EXITitis in the UK: Gravity estimates in the aftermath of Brexit', *De Economist*, April 2023.

Regulation

Let us consider the other main economic argument that Leave advocates made – that outside the EU, Britain would be free to regulate its industries as it saw fit. That would lead to gains, either because they argued that EU regulation is bad for growth because it tends to be more interventionist, or because British industries have unique specialisms that require more bespoke regulation than the EU's institutions provide, since they must take the interests of 28 countries into account.

Most officials and academics who conducted Brexit forecasts shied away from trying to model these potential gains. Quantifying the beneficial effects of sovereign regulation is fraught with difficulty, because we have weak tools to assess whether a rule is good or bad for the economy, and it is impossible to estimate whether UK or EU rules will be better across the hundreds of rules that are made each year. For example, the UK has signalled that it will impose fewer restrictions on the use of personal data for the development of AI models than the EU, to help the industry grow. But the potential benefits are impossible to forecast accurately, because the industry is in its infancy, and its impact on productivity across the economy is uncertain.

In other areas of regulation, we have a better understanding of the benefits, but it is not clear if the British public would support a laissez-faire approach. The use of genetically modified organisms (GMOs) in agriculture, which are banned in the EU but not in the US, could raise farm productivity significantly, and some are currently allowed in the UK. But other US practices such as widespread use of hormones and antibiotics in animal husbandry – which, combined with very large farms, explain the high productivity of American livestock farming – have been too controversial for the government. EU environmental legislation, by its very nature, prevents businesses from doing things that add to output, at least in the short term, but harm the environment. Yet there's no indication that the British public would support a general roll-back of protections, and the UK-EU FTA prevents Britain from going too far in that direction in any case. If the UK did slash environmental red tape, it would find that the EU would curb market access.

Other mooted benefits have not materialised so far, because setting up entirely new regulatory agencies has been a big undertaking. And just as there are potential gains from sovereign regulation, there are potential losses. For example, the UK has been slower to approve new drugs than the EU since Brexit: being smaller than the US and the EU, the UK market is also less attractive to multinational pharmaceuticals companies as a location for expensive medical trials. The NHS also uses its buying power to bargain down prices for new drugs, dampening profits.¹⁵

The tug of EU gravity applies in regulation just as it does in trade. The whole point of the single market is to make use of common EU regulation to expand trade, because companies do not have to make products to meet 28 different national rules, and national governments can't use regulation to keep out imports, and protect their businesses and workers. So there are offsetting costs to sovereignty over regulation: divergence from EU rules means that British companies selling the EU market have to supply two sets of products, one for each market, which adds to their production costs.

The academic think-tank UK in a Changing Europe has kept a running tally of UK divergence from EU rules since Brexit. It has found that the rate of UK divergence has slowed down, with Rishi Sunak's Conservative government abandoning Boris Johnson's plan to sunset all EU rules and replace them with new ones. The new Labour government has chosen to align with new EU rules in two cases, and delay new regulations that would mean the UK diverged from the EU.¹⁶

The coming years are likely to show more active alignment with EU rules in many sectors of the economy. Keir Starmer's decision to deepen the UK's FTA with the EU, and pursue dynamic alignment with new EU rules in agriculture, food and energy, would entail Britain sacrificing regulatory autonomy for lower trade barriers. The government has also introduced a product regulation and metrology bill, which is making its way through parliament, and which would give ministers broad discretion to amend UK regulation if they choose to maintain alignment with the changing EU rules.

It's hard to tell how far this process of realignment will go, with the Conservatives and Reform UK both promising to unpick agreements that entail UK automatically following EU rules. But as the sections above show, the economic effects of ending the jurisdiction of EU law in Britain have been negative overall, and any future gains from regulatory divergence are uncertain and likely to be limited to a few sectors of the economy.

¹⁵ Matthias Hofer, 'Post-Brexit medicine approvals: what we know', Imperial College London Business School, March 2023.
¹⁶ Joël Reland, 'UK-EU regulatory divergence tracker, Q2-Q3 2024, UK in a Changing Europe, November 2024.

Migration

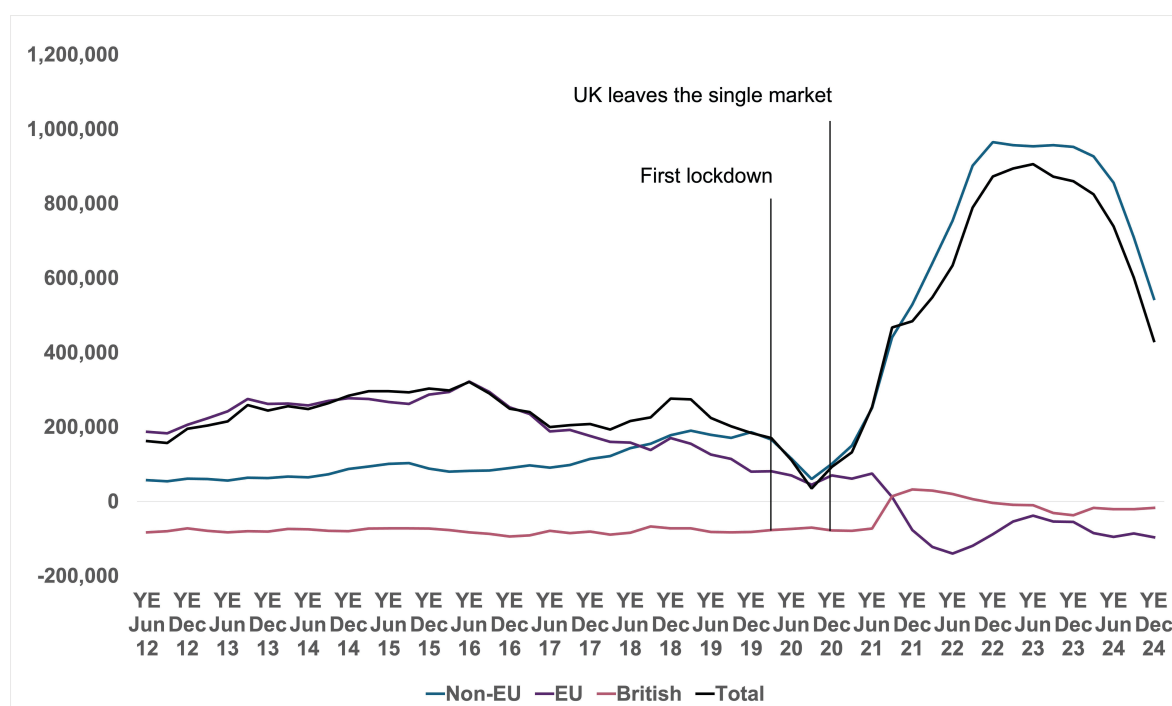
The largest divergence from EU rules has been the end of free movement and the imposition of a new migration regime. That regime subjects all immigrants to the UK to the same rules, whether they are from the EU or elsewhere. The economic effects of this change were expected to be profound, because the UK was a popular destination for European migrants, especially after central and eastern European countries joined the EU from 2004 onwards. Ending their right to live, work, receive benefits and use public services in the UK would lead to changes to output, the types of workers available to UK employers, taxation and public spending, if the government applied the relatively restrictive regime for non-EU immigrants to EU ones. However, the post-Brexit migration rules were in the hands of the government, and initially at least, it chose a relatively liberal regime. That meant that the negative economic impact of reduced migration flows that many predicted did not come to pass.

If immigrants have high employment rates and pay more in taxes than they receive in benefits, by definition, immigration adds to GDP. We know that both those conditions held for EU immigrants to Britain. We also know that over their lifetime EU migrants are on average a net fiscal gain to the Treasury.¹⁷ There is some evidence that high rates of immigration of less-skilled workers, as happened after EU enlargement from 2004, reduces wages in some sectors of the economy, but that effect is not replicated across all studies, and is in any case small and overwhelmed by productivity improvements across the economy and rises in the minimum wage. Equally, there is evidence that immigration raises productivity and wages across the economy, by bringing in knowledge, capital and technology, and helping domestic workers to specialise more by relieving them of some tasks, although researchers do not agree on the size of this effect.¹⁸

In March 2020, before the Johnson government enacted the new immigration regime, the Office for Budget Responsibility forecast that it would reduce net migration to the UK, compared to the pre-existing combination of free movement and visas for non-EU nationals. That would reduce output and hurt the public finances, if only marginally, raising public debt by £1 billion in 2024/5.¹⁹

What actually happened is well-known: while net migration from the EU turned negative, it soared from the rest of the world, with overall net migration reaching a peak of 900,000 in 2023, before falling back to around half that level by the end of 2024.

Chart 9. After Brexit, net migration from the EU fell, while it soared with the rest of the world.



Source: 'Long-term international migration, provisional: year ending December 2024', Office for National Statistics, May 2025.

17 'The fiscal impact of immigration in the UK', Oxford Economics, September 2018; Christian Dustmann and Tommaso Frattini, 'The fiscal effects of immigration to the UK', The Economic Journal, 2014.

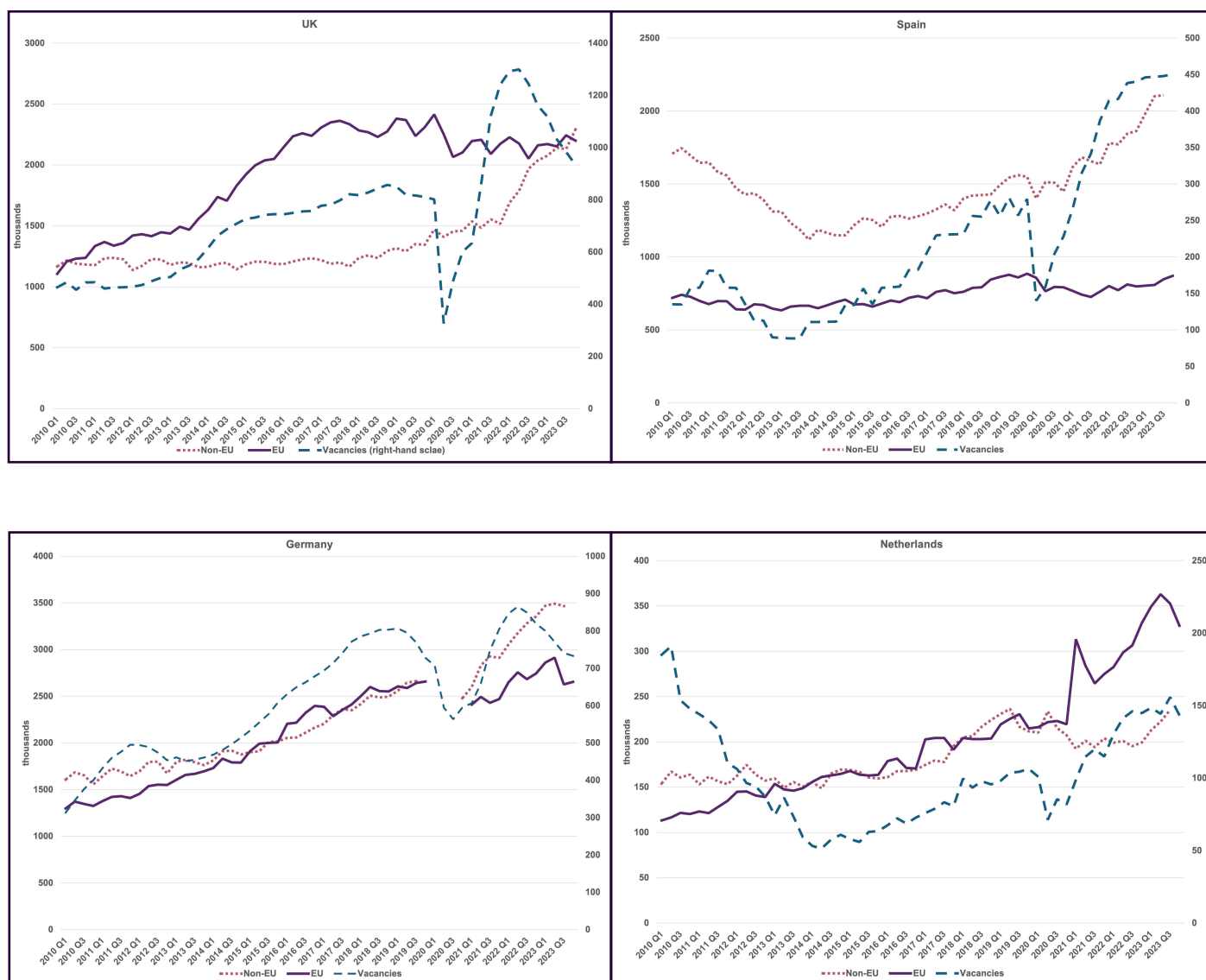
18 For a survey of the literature on the labour market effects of immigration to the UK, see 'EEA migration in the UK: Final report', Migration Advisory Committee, September 2018.

19 'The effect of the new migration regime on our fiscal forecast', Office for Budget Responsibility, March 2020.

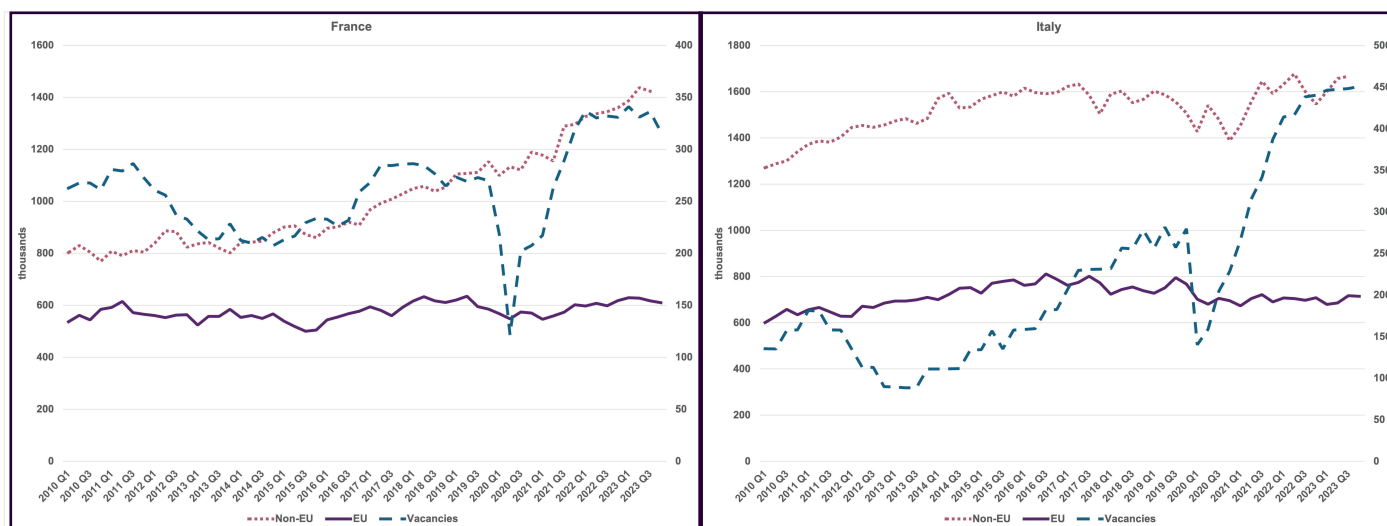
It's impossible to know with any precision what would have happened if the UK had remained in the EU. The Johnson government's decision to set salary thresholds for work visas at a low level – around £25,000, and lower for NHS, social care and some other workers – can perhaps be seen as a 'Brexit effect'. Concerns over labour shortages after the end of free movement may have prompted the government to choose relatively liberal migration rules.²⁰ However, the rise in refugees, mostly from Ukraine and Hong Kong, and international students from outside Europe had nothing to do with Brexit.

There were also macroeconomic factors after the pandemic that drove rapid migration flows in Britain and other countries. Consumer demand came roaring back as lockdowns were lifted, while the supply side of the economy took longer to recover. This led to a big mismatch in supply and demand. Job vacancies rose sharply, as companies and the public sector, especially the NHS, needed more workers to satisfy the surge in demand. Many of those jobs were filled by non-EU workers in Britain and other EU countries (Chart 10). As wage differences between older and newer member-states of the EU have narrowed, free movement has become less of a source of new workers for richer member-states. And after the pandemic, free movement was less important in helping Europe's labour markets to adjust to shocks than during the financial and euro crises. So even if the UK had remained in the EU – or if the Johnson government had chosen a more restrictive regime with higher salary thresholds, there might have been substantially higher net migration from outside the EU after Brexit than before it.

Charts 10 a-f, Employment of non-EU workers in many European countries rose after the pandemic, as vacancies surged.



20 Jonathan Portes, 'Brexit and the economy – what do we know?', UK in a Changing Europe, June 2023.



Source: Office of National Statistics, 'Employment, unemployment and economic inactivity by nationality and country of birth', 'Vacancies and unemployment'; Eurostat, 'Employment levels by nationality', and national statistical offices.

Thus the macroeconomic impact of the end of free movement on the UK economy has been smaller than the OBR thought in 2020 – and possibly even slightly positive – although the OBR only forecast a small negative impact on output and the public finances. Those relatively minor effects are because the government has the power to choose who to let in to the country, and to date it has largely chosen to allow migration to help the labour market to adjust to shocks. The Labour government is now consulting on further restrictions to reduce net migration – which would not have been entirely in its power if Britain were still an EU member-state. But the decline of migration within the EU suggests that the end of free movement is less useful to those who seek to reduce net migration than it appears.

Conclusion

Putting all of the evidence together, then, we can conclude that the broad consensus among economists on Brexit was broadly correct. GDP, trade flows and investment have all been curtailed by barriers to trade with the EU. The EU's single market does raise trade substantially more than free trade agreements, and the UK's distance from other markets means that trade deals with non-EU countries cannot make up for the losses. The gains from regulatory autonomy are hard to quantify, and must be set against the trade losses stemming from divergence from EU rules – and the fact that even if the UK remains aligned with EU standards and rules, British products are still subject to bureaucracy at the border unless the EU agrees to reduce checks. The end of free movement has been less costly than predicted, because the government has chosen to remain open to immigration, but the forecast losses were significantly smaller than the impact of barriers to trade in any case.

Looking ahead, it is important to remember that the costs of Brexit are likely to be permanent, with the economy continuing to be 4 per cent smaller into the future (if we take the OBR's assumption). Given the fact that FTAs will not make up for Brexit, and the EU also signs trade deals, that means that future British governments can only significantly offset those losses, or eliminate them, through reintegration with the European economy. Whether they choose to do so is up to British politicians and voters and the member-states of the EU, who will determine what the price of reintegration will be.

Bibliography

Nicholas Bloom et al, 'The impact of Brexit on UK firms', Bank of England, 2019.

Benjamin Born et al, 'The costs of economic nationalism: Evidence from the Brexit experiment', *The Economic Journal*, October 2019.

Steven Brakman et al, 'EXITitis in the UK: Gravity estimates in the aftermath of Brexit', *De Economist*, April 2023.

Department for Business and Trade, 'Technical note of the preliminary economic impacts of the UK-India Free Trade Agreement', May 2025.

Department for International Trade, 'UK-US trade agreement', July 2019.

Department for International Trade, 'Impact assessment of the Free Trade Agreement between the United Kingdom of Great Britain and Northern Ireland and New Zealand', February 2022.

Department for International Trade, 'Impact assessment of the Free Trade Agreement between the United Kingdom of Great Britain and Northern Ireland and Australia', May 2022.

Department for International Trade, 'Impact assessment of the UK's accession to the CPTPP', August 2024.

Department for the Environment, Food and Rural Affairs, 'Methodology note: How Defra has estimated the impact of a sanitary and phytosanitary agreement on the UK agricultural sector', May 2025.

Jun Du et al, 'How did Brexit affect UK trade?', *Contemporary Social Science*, 2023.

Christian Dustmann and Tommaso Frattini, 'The fiscal effects of immigration to the UK', *The Economic Journal*, 2014.

Monique Ebell and James Warren, 'The long-term economic impact of leaving the EU', *National Institute of Economic and Social Research Review*, May 2016.

Carl Emmerson et al, 'This will be the biggest tax raising parliament on record', *Institute for Fiscal Studies*, September 2023.

Gabriel Felbermayr et al, 'Undoing Europe in a new quantitative trade model', *IFO Institut*, 2018.

Rebecca Freeman et al, 'Deep integration and trade: UK firms in the wake of Brexit', *London School of Economics Centre for Economic Performance*, 2024.

Graham Gudgin and Saite Lu, 'The CER doppelgänger index does not provide a credible measure of the impact of Brexit', *UK in a Changing Europe*, June 2023.

Jonathan Haskel and Josh Martin, 'How has Brexit affected business investment in the UK?', *Economics Observatory*, March 2023.

HM Government, 'EU exit analysis: Cross-Whitehall briefing', 2018.

HM Treasury, 'Methodology note: assessing the preliminary economic impacts of linking the UK-EU Emission Trading Schemes', May 2025.

HM Treasury, 'The immediate economic impact of leaving the EU', 2016.

HM Treasury, 'The long-term economic impact of EU membership and the alternatives', 2016.

Matthias Hofer, 'Post-Brexit medicine approvals: what we know', *Imperial College London Business School*, March 2023.

International Monetary Fund, 'United Kingdom: Selected issues', 2016.

International Monetary Fund, 'United Kingdom: Selected issues', 2018.

Thomas Mayer et al, 'The cost of non-Europe, revisited', *CEPII*, 2018.

Migration Advisory Committee, 'EEA migration in the UK: Final report', September 2018.

Alan Mulabdic et al, 'Deep integration and UK-EU trade relations', World Bank, 2017.

Netherlands CPB, 'Trade effects of Brexit for the Netherlands', 2016.

Office for Budget Responsibility, 'The effect on productivity of leaving the EU', Economic and Fiscal Outlook, March 2020.

Office for Budget Responsibility, 'The effect of the new migration regime on our fiscal forecast', March 2020.

Office for Budget Responsibility, 'Brexit analysis: Current assumptions and judgements', February 2025.

Organisation for Economic Co-operation and Development, 'The economic consequences of Brexit: a taxing decision', 2016.

Oxford Economics, 'The fiscal impact of immigration in the UK', September 2018.

Jonathan Portes, 'Brexit and the economy – what do we know?', UK in a Changing Europe, June 2023.

Joël Reland, 'UK-EU regulatory divergence tracker, Q2-Q3 2024', UK in a Changing Europe, November 2024.

John Springford, 'What can we know about the cost of Brexit so far?', Centre for European Reform, June 2022.

John Springford, 'Are the costs of Brexit big or small?', Centre for European Reform, May 2023.

John Springford, 'The cost of Brexit to June 2022', Centre for European Reform, December 2022.

John Springford, 'The cost of Brexit, January 2021: The end of transition edition', Centre for European Reform, March 2021.

UK in a Changing Europe, 'The economic consequences of the Brexit deal', 2019.

Garry Young et al, 'The economic effects of the government's proposed Brexit deal', National Institute of Economic and Social Research, 2018.

THE
CONSTITUTION
SOCIETY

THE FEDERAL TRUST
for education & research

enlightening the debate on good governance