April 2016

The economic consequences of leaving the EU

The final report of the CER commission on Brexit 2016

CENTRE FOR EUROPEAN REFORM

Advisory Board

About the CER

The Centre for European Reform is a think-tank devoted to making the European Union work better and strengthening its role in the world. The CER is pro-European but not uncritical.

We regard European integration as largely beneficial but recognise that in many respects the Union does not work well. We also think that the EU should take on more responsibilities globally, on issues ranging from climate change to security. The CER aims to promote an open, outward-looking and effective European Union.

About the CER commission on the UK and the EU single market

The economic case for British membership of the EU has always rested on the country's participation in the single market. The CER invited leading economists, commentators, business people and EU experts to form a commission to consider the economic consequences of leaving the EU. Commissioners shared ideas and advice in a series of commission meetings, and commented on drafts of the final report.

Report authors

John Springford
Senior research fellow, CER

Simon Tilford
Deputy director, CER

Philip McCann
Professor of Economic Geography, University of Groningen
co-author, trade and investment chapter

Philip Whyte
Former chief economist, CER

Christian Odendahl
Chief economist, CER

Commissioners

Kate Barker
Former Member, Monetary Policy Committee, Bank of England

Sir Brian Bender
Former Permanent Secretary, UK Department of Business, Innovation and Skills

Wendy Carlin
Professor of Economics, University College London

Nicholas Crafts
Professor of Economics and Economic History, Warwick University

Paul De Grauwe
John Paulson Professor of European Political Economy, London School of Economics

Gérard Errera
Chairman, Blackstone Group France and former Secretary-General of the French Foreign Ministry

Martin Hatfull
Director of Government Relations, Diageo and former UK Ambassador to Indonesia

Sony Kapoor
Director, Re-Define

Sir Richard Lambert
Former Director, Confederation of British Industry and former Editor, Financial Times

Lord Mandelson
Former European Commissioner for Trade, and former Secretary of State for Business, Innovation and Skills

Mariana Mazzucato
RM Phillips Professor of Science and Technology, Sussex University

Lord Monks
Former General Secretary, Trades Union Congress and former General Secretary, European Trade Union Confederation

Kevin O'Rourke
Chichele Professor of Economic History, Oxford University

Andrew Oswald
Professor of Economics, Warwick University

Christopher Padilla
Vice-President, Governmental Programs, IBM and former Under-Secretary of Trade in the US Department of Commerce

Jonathan Portes
Director, National Insitute of Economic and Social Research

Sir Michael Rake
Chairman, BT Group plc and former President, Confederation of British Industry

André Sapir
Senior Fellow, Bruegel and Professor of Economics, Université Libre de Bruxelles

Simon Walker
Director, Institute of Directors

Sir Nigel Wicks
Former Chairman, British Bankers' Association and former Chairman, EU Monetary Committee

André Villeneuve
Advisory Council Member, TheCityUK

Martin Wolf
Chief Economics Commentator, Financial Times

The economic consequences of leaving the EU

The final report of the CER commission on the UK and the EU single market

Acknowledgements

We would like to thank BT, Diageo, JP Morgan and Shell for supporting this updated report. Thanks also to IBM and to TheCityUK for their support for the first edition. We are grateful to Gaaitzen de Vries of the University of Groningen for his work with the World Input-Output Database, and to Wolfgang Münchau, Jim Rollo, Peter Holmes, Stephen Woolcock and Hugo Dixon for providing evidence at commission meetings. Thanks to CER staff for comments on drafts and to Kate Mullineux for layout and production.

Contents

Summary

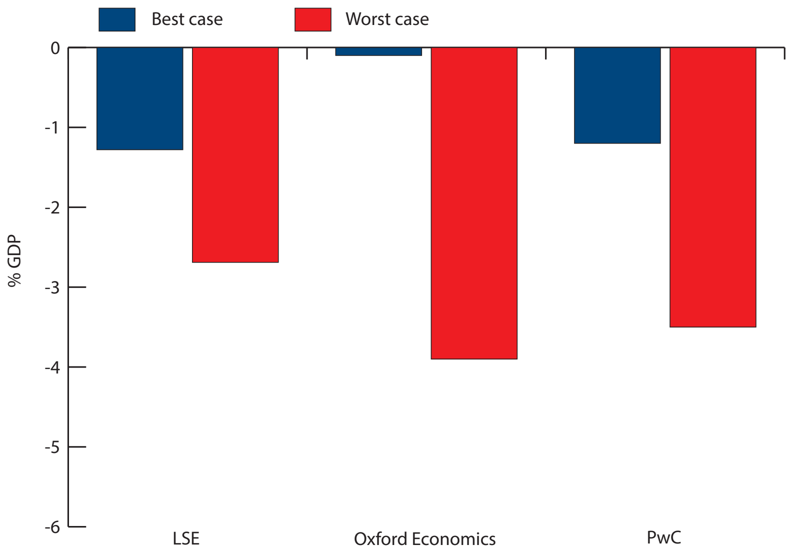
Britain will hold a referendum on its membership of the EU on June 23rd 2016, three years after Prime Minister David Cameron announced his 'renegotiation and referendum' strategy. In 2013, after David Cameron's announcement, the Centre for European Reform invited leading economists, journalists, business people and EU experts to form a commission to discuss the economic consequences of withdrawal from the EU.

This is an update of the commission's final report, which includes further evidence about the degree of economic integration between Britain and the rest of the EU; the changes in the relationship between the UK's financial sector and the eurozone; and the impact of immigration from the EU on British wages and employment. But since our initial report was published in June 2014, we have found no new evidence to change our view that 'Brexit' would be economically costly – and the best way to mitigate those costs would be to ensure that the economic relationship between the UK and the EU replicates membership of the single market as closely as possible.

In March 2016, three studies of the economic impact of 'Brexit' appeared in the space of four days – from the London School of Economics' Centre for Economic Performance, Oxford Economics and PwC.[1] All three organisations sought to model different economic relationships between the EU and the UK after Brexit, the results of which can be found in Chart 0.1. Their best cases were those that most closely replicated the current relationship – either through membership of the European Economic Area, like Norway, or remaining inside a customs union, like Turkey. Their worst cases were those in which Britain failed to sign a free trade agreement, and relied on a relationship governed by the rules of the World Trade Organisation (WTO). This would involve the biggest increase in tariff barriers – and, more important, non-tariff barriers – to trade, reducing the British economy's productivity and curbing inward investment.

1: Swati Dinghra and others, 'The economic consequences of Brexit for trade and living standards', London School of Economics, March 2016; Oxford Economics, 'Assessing the economic implications of Brexit', March 2016; PwC, 'Leaving the EU: Implications for the UK economy', March 2016.

Chart 0.1: Three Brexit forecasts



The headline figures are obviously estimates, since modelling the break-up of a complex economic and political relationship is difficult. But the three reports are also interesting for what they tell us about the gains and losses of Brexit in different areas. The London School of Economics found that tariffs applied by the EU on British exports would be less costly than higher non-tariff barriers – differences in regulation and behind-the-border protectionism against companies based outside the single market. Neither Oxford Economics nor PwC found that a move to unilateral free trade, by which Britain would eliminate tariffs on imports without demanding reciprocal tariff cuts by its trade partners, would lead to large gains. Nor would free trade agreements signed with the rest of the world do much to boost UK output.

Oxford Economics found that deregulation – one of the benefits of Brexit that the EU's critics emphasise – would be limited, raising the level of output by 0.13 per cent. PwC's estimate was larger, at 0.3 per cent. But under their WTO scenario that was offset by larger losses from higher trade barriers, partly arising from different regulations between the EU and the UK, at 2.1 per cent of GDP.

And both Oxford Economics and PwC found that reduced migration flows as a result of Brexit would cut the level of GDP by more than GDP per capita by 2030. A smaller population would mean less output, but would only reduce natives' earnings a little. Oxford Economics and PwC estimate that continued free movement would cause the level of GDP per capita to be 0.2 per cent and 0.1 per cent higher by 2030.[2]

Their findings closely match our commission's analysis, which is extended and updated below. This report has two goals. The first is to assess how much Britain gains from free trade in goods and services and the free movement of the factors of production, capital and labour, across the EU.

The second goal is to 'think through the counterfactual': from what we know about the costs and benefits of trade and foreign investment, EU regulation, free movement of workers, and the EU's budget, are the potential gains from Brexit large or small – and how do they compare to the costs? And, since the EU's single market is a grand bargain, in which member-states share sovereignty in pursuit of mutual benefit, what would the EU demand in return if Britain sought continued access to the single market after withdrawal?

Britain is highly economically integrated with the EU

In this updated report, we show the extent of economic integration between the UK and the EU, using the University of Groningen's World Input-Output Database. The database allows us to take into account Britain's exports to the EU and the supply chains that provide intermediate goods and services to exporters. With all of these effects, the share of UK output sold to the EU amounted to 9.8 per cent in 2011. To put that figure into perspective, London's share of UK output is 22 per cent, and the South East (excluding London), 15 per cent. But every other British region contributes less to UK GDP than the share sold to the EU. Trade with the US or China contributes far less to the UK economy than the EU. The US buys 3.4 per cent of Britain's output, and China, 1 per cent.

The UK has a comparative advantage in the production of business and financial services – as well as marketing, design, engineering and other services. The Groningen database shows that Britain's services exports – as well as services provided by domestic firms to exporting companies – are heavily skewed towards the EU. The EU provides two-fifths of the foreign demand for UK services, while the US's share is 17 per cent and the 'BRIC' emerging economies just 10 per cent.[3]

2: Compared to a scenario in which the UK's immigration regime for non-EU immigrants were applied to those from the EU.

3: Brazil, China, India and Russia.

But how much of that integration can we assign to the EU – rather than arising out of a simple fact of economic geography: the UK's close proximity to the rest of Europe?

★ The CER constructed a 'gravity' model to quantify how much trade is down to the EU. It shows that Britain's EU membership has boosted its trade in goods with other member-states by 55 per cent. In 2015, Britain's goods trade with the EU was £364 billion, so this 'EU effect' amounted to around £130 billion. By comparison, the value of Britain's bilateral trade with China was £43 billion that year.

Britain is highly integrated with the rest of the EU's economy in other ways.

★ In 1997, other EU member-states accounted for 30 per cent of the accumulated stock of foreign direct investment (FDI) in Britain; this proportion had risen to 50 per cent in 2014.

★ In 2015, the value of UK banks' assets held in the eurozone was 45 per cent higher than their US assets, despite the eurozone's economy being only three-quarters the size of the US economy. The City of London has been a major beneficiary of the single market in financial services: the eurozone is a much larger market for lending originating in Britain than its economic size would suggest.

Would Brexit liberate Britain?

There can be little doubt that some of the EU's regulations impose more costs than benefits. But many are justified: there would be no single market without them. Moreover, European rules are not a major constraint upon Britain's economy.

★ According to the OECD, Britain has the second least regulated product markets in the developed world, after the Netherlands. Both are EU members.

★ The OECD's labour market protection index shows that Britain has similar levels of labour market regulation to the US, Canada or Australia – and far lower than continental European countries. EU employment rules therefore do little to inhibit Britain's flexible labour market.

It follows that leaving the EU and 'de-Europeanising' British regulation would do little to boost its economy. In any case, Britain would find it difficult to avoid EU regulation even if it left the club. Outside the Union, the UK would lose full access to the single market unless it signed up to EU rules. Membership of the European Economic Area (EEA) would resolve little. This group, which includes Norway, Iceland and Liechtenstein, has almost full access to the single market, but must sign up to all of its rules despite having little say over them. The Swiss relationship is not much better: while it has a set of bilateral accords to give it access to some parts of the single market, it must regularly update its standards to match those of the EU, or risk a suspension of access. It follows that were Britain to sign a comprehensive free trade agreement with the EU, it would have to abide by most of the *acquis communautaire* – the EU's body of legislation. And Britain would only be given full access to EU financial services markets if it matched EU rules. As access to the single market is of critical importance, Britain might perversely be left in a position where it would have 'EU regulation without representation'.

Indeed, outside the EU, the UK could end up with little control over financial rules. The EU insists that non-members' regulations are equivalent to their own, in return for limited access to the single market. As a result, the City of London – the eurozone's largest wholesale financial centre – would be unlikely to enjoy unfettered access to eurozone financial markets if it were outside the Union. Eurozone authorities prefer wholesale activities – trading and lending between banks, rather than between banks and customers – to be conducted under their watch. In March 2015, the British government won a case against the European Central Bank (ECB) at the European Court of Justice over the ECB's attempt to make clearing houses specialising in euro-denominated trading relocate to the eurozone. If it left the EU, and did not join the EEA, the UK would have little recourse to institutions that police the single market. Banks, exchanges and private-equity and hedge funds would relocate some of their activities to Frankfurt, Paris or elsewhere.

But does the EU not hold back Britain's trade with non-European countries, by imposing tariffs on their goods, for example? The CER's trade model offers no evidence that Britain's trade with the rest of the world is constrained by its EU membership. Nor does the EU constrain exporters: Germany's exports to China have grown so rapidly that China is now its second largest export market, after the rest of the EU.

And as multilateral trade negotiations have broken down, bilateral trade agreements have grown in importance. In such agreements, economic size matters: it is difficult to imagine the US contemplating such a far-reaching agreement as the Transatlantic Trade and Investment Partnership (TTIP) with Britain alone.

Fiscal gains?

Ending Britain's contribution to the EU budget is the most easily quantified benefit from leaving the Union. The UK could save 0.5 per cent of GDP. However, the same trade-off applies: the EU insists that the price of unfettered market access is a fiscal contribution to the EU. EEA members and Switzerland help to fund the economic development of the poorer eastern half of the Union, by paying for infrastructure, R&D and training projects. If the UK were to pay into the EU budget upon the same basis as the Norwegians or the Swiss, its net contribution would fall by 9 per cent or 55 per cent respectively.

By quitting the EU, the UK could also leave the Common Agricultural Policy, which through its tariffs and subsidies drives up the cost of food for British consumers. But it would find it difficult to slash agricultural subsidies to zero. The agricultural lobby is powerful and would resist cuts. Wales and Northern Ireland are net beneficiaries of the EU budget. Their economies, particularly in rural areas, would suffer from the loss of agricultural subsidies and regional development funds, and the British government would have to make up at least some of the shortfall. This is also true of Cornwall and other poorer regions of the UK.

Free migration is a benefit for Britain

Alongside frustration at regulation by 'Brussels', immigration from Central and Eastern Europe is the other main cause of British dissatisfaction with EU membership. Many fear that Central and East Europeans are damaging the employment prospects of low-skilled Britons and driving down wages. While there is some evidence of a depressing effect on the wages of low-skilled British workers, the effect is very small – our best estimate is that immigration from the EU between 2004 and 2015 has reduced the wages of low-skilled services workers by 0.8 per cent. For comparison, the government's tax increases and benefit cuts between 2010 and 2019 will reduce the incomes of the poorest tenth of Britons by 10.6 per cent, according to the UK's Institute for Fiscal Studies. Many Britons forget that there are many high-skilled European immigrants in the UK, who raise British workers' productivity and hence their wages. But academic research shows that the combined impact of high- and low-skilled immigrants on British wages is small.

However, EU immigration is good for the public finances, as immigrants pay more in taxes than they receive in public spending. There are some costs that arise from higher demand for housing and public services. But current levels of immigration help Britain to deal with the costs of an ageing population, by replacing retiring workers, and by raising more taxes to pay for health and pension costs. Since hostility to immigration is pushing Britain towards the exit door, it is likely that the UK would restrict immigration from the EU upon exit. This would require Britain to increase taxes or cut spending.

Moreover, British people can live freely elsewhere in the EU, and this is a major benefit for the 1.8 million people who do so. The EU's large labour market gives Britons a bigger range of jobs from which to choose than those available in the UK. If their skills are in shorter supply in another member-state than they are in the UK, their income may be higher if they move than if they stay put. And the rest of the EU – particularly France and Spain – is a major destination for British retirees: over 400,000 are living in other EU member-states.

In short, the high degree of economic integration between the UK and the EU will always require some system of shared governance. The EU will not allow the UK, upon leaving, to have the same level of market access that it now has without paying a price. Britain will not be able to leave the EU and remain in the single market unless it is willing to sign up to EU rules that it did not help to write.

Introduction

Britain will hold a referendum on its membership of the EU on June 23rd, 2016. At the time of writing, opinion polls show that the Remain and Leave camps are evenly matched. The outcome of the vote is far from certain. The plebiscite is the culmination of years of rising popular disillusionment with the EU, and a deep split within the ruling Conservative Party over the issue. Prime Minister David Cameron has attempted to bridge these divisions by renegotiating the terms of Britain's membership, but the reforms he agreed with the rest of the EU in February 2016 have not assuaged his party's eurosceptics.[4] Although the government's two leading figures – Cameron himself and finance minister George Osborne – are campaigning for Britain to stay in the EU together with most of the Cabinet, 40 per cent of Conservative MPs currently support Brexit.

Two things will have a strong bearing on the referendum's outcome. The first is turnout. A majority of the over-55 age group favour leaving the EU, while younger voters, especially 18-34 year olds, favour staying. However, younger Britons have a poor record of turning out to vote. If the referendum's far-reaching political and economic ramifications boost turnout, the chances are the British will vote to stay, perhaps by a healthy margin. The other major influence is external. Immigration is the single biggest factor driving euroscepticism in the UK. And many Britons conflate migrants with refugees. An intensification of the EU's refugee crisis, combined with worsening acrimony among EU member-states, would increase the likelihood of a British vote to leave the EU. Were the EU-Turkey refugee deal to unravel shortly before the vote, or were there a terrorist attack in the UK that the Brexit camp could blame on the EU's principle of free movement, the impact on the vote could be decisive.

And yet, while membership of the EU cannot be weighed solely in pounds and pence, the decision will inevitably be shaped by the economic costs and benefits. Unfortunately, the British debate has

4: John Springford and Charles Grant, 'Deal done: Now for the hard work', CER Insight, February 20th 2016.

lacked much objective analysis of these, with both 'outs' and 'ins' using evidence selectively to make their case.

Researchers who argue that Britain should leave the EU have, by and large, attempted to add up the alleged regulatory costs of EU membership, the impact of the Common Agricultural Policy (CAP) and the UK's net contribution to the EU budget. Some add in the impact of the EU's tariff regime on the prices of imported goods. Most assume that Britain would not face any of these costs if it left the EU. And most tend to make optimistic assumptions about the degree of access that Britain would have to the single market after it left the EU, and over its ability to negotiate far-reaching trade agreements with other economies. They tend to ignore or dismiss any of the benefits of membership, including the EU's main economic aim, which is to increase trade, investment and migration flows between its member-states.[5]

For their part, pro-European campaigners have said that three million jobs depend on EU membership.[6] While there would be job losses in the short term if barriers to trade were erected, trade would continue with the EU, albeit at a lower level. So three million jobs would not be lost. In the medium term, Britain's flexible labour market would adjust and most people who lost their jobs would be re-employed. The Remain campaign has also trumpeted implausible estimates for the potential gains of deepening the single market: 2.8 per cent of GDP.[7]

More sophisticated researchers have used macroeconomic models to try to calculate the impact of exit (see the report's summary for examples). But such quantifications will always be highly uncertain, as it is not possible to know the terms of Britain's divorce with the EU in advance.

Rather than trying to quantify the net cost or benefit of exit and produce a single estimate of the effects of Brexit, the CER's commission has taken a different approach. It has focussed on first, the extent to which Britain has benefited from its membership of the EU's single market, and second, whether alternative economic arrangements with the EU – and with the rest of the world – would be better or worse than the status quo.

5: Tim Congdon, 'How much does the European Union cost Britain?', UK Independence Party, 2012; Ian Milne, 'A cost too far? An analysis of the net economic costs and benefits for the UK of EU membership', Civitas, 2004; Patrick Minford et al, 'Should Britain leave the EU?', Institute of Economic Affairs, 2005; Iain Mansfield, 'A Blueprint for Britain: Openness not isolation', Institute of Economic Affairs, 2014.

6: Nick Clegg, interview on BBC Radio 4's Today Programme, October 31st 2011.

7: Centre for Economics and Business Research, 'The impact of the UK being in the single market', October 2015.

The CER invited a group of politicians, economists, business people and economic commentators to consider what the implications of leaving the EU might be for:

★ Trade and investment

★ Migration

★ The City of London

★ Regulation

★ EU budget contributions

Each chapter in this report provides evidence of the effects – positive and negative – of EU policies in these five areas. But leaving the EU would not necessarily turn benefits into costs and vice versa. After a vote in favour of leaving, the UK and the EU would enter into negotiations. The British would be faced with a trade-off: regulatory sovereignty or unimpeded market access. The EU insists that 'third countries' outside the Union accept its regulations and help to pay for the development of the EU's poorer regions in return for unfettered access to the single market. The countries of the EEA – Norway, Iceland and Liechtenstein – have to accept almost all of the rules of the single market, while the Swiss have signed up to all of the rules of the single market for trade in goods (but not services). In addition, both the EEA member-states and the Swiss must abide by the EU's freedom of movement rules.

The purpose of this report is to try to clarify the choices British negotiators would face upon exit: between escaping EU regulations and budgetary contributions, and maintaining access to the single market; between scrapping financial regulations and maintaining the City of London's status as Europe's largest financial centre; and between maintaining the rights of British migrants in the EU and curbing immigration from Europe.

Chapter 1

Trade and investment

As the eurozone economy has continued to struggle, the proportion of British trade accounted for by the rest of the EU has fallen, and non-European markets have become more important for British exporters.

But this is not a reason for the UK to leave the EU. Membership significantly increases Britain's trade with other member-states, while there is little evidence that it reduces trade with countries outside the Union. Britain is home to a larger stock of EU and US foreign direct investment (FDI) than any other EU economy and is the preferred location for investment from other leading markets. Some of this trade and investment would be threatened by a UK exit from the EU.

If Britain were to leave the EU, it would face an unpalatable choice. It could negotiate access to the EU's single market in exchange for continued adherence to EU rules – but with little control over those rules. Or it could settle for less access to the single market in return for sovereignty over regulation, but that would maximise the damage to Britain's economy.

Much of the EU referendum debate has, rightly, revolved around the implications of Brexit for British trade and investment. British politicians and commentators – and to a certain extent, the public – accept the value of freer trade. But they differ on whether Britain should prioritise trade with Europe or with the rest of the world – and on whether the country's EU membership constrains British firms' ability to expand into non-European markets. In 2012, British trade with the rest of the world overtook its trade with the EU, in part because of the eurozone's weakness. It is legitimate to ask whether the UK's membership of the EU single market is any longer a matter of overriding national interest.

The proportion of British exports of goods and services sold to the rest of the EU fell to just 44 per cent in 2015. But that is no reason for the UK to quit the EU. Lower eurozone demand will inevitably reduce the EU's share of Britain's exports – but if Brexit led to higher trade barriers, Britain's export performance with the rest of the EU would deteriorate further. The purpose of the single market is to increase trade and investment flows between the EU's member-states, not to boost a particular country's exports. This drives efficiency gains: first, as member-states specialise in their areas of comparative advantage; second, as greater competition encourages companies to become more productive; and third, as technology and management techniques are shared between countries. The question that should be asked is whether Brexit would make the British economy more productive. The effect of the eurozone's economic cycle on the demand for British exports is irrelevant: Brexit would not raise that demand – in fact, higher barriers to trade would reduce it.

This chapter provides a brief overview of the changing nature of global trade, and Britain's place within it. It then considers whether the single market has boosted Britain's trade and investment, with a new analysis of the scale of economic integration with the EU and other large economies. Finally, it discusses the ramifications for Britain's trade and its attractiveness as a location for investment if the UK leaves the Union.

1.1 The changing nature of global trade

Since the end of World War II, global trade has grown faster than global output – apart from a brief pause in the 1970s after the oil shocks and the breakdown of the Bretton Woods system governing international exchange rates. Between 1980 and 2007, world trade tripled, while world economic output only doubled. Since 2007 world trade growth has declined, but has still expanded by more than world GDP.

This phenomenon – globalisation – has several causes. The emergence of East Asia as a major manufacturing hub since the 1950s – first Japan, then South Korea and South-East Asia, and then China – brought hundreds of millions of consumers and workers into global markets. Meanwhile, transport costs and tariffs have fallen steadily, reducing the cost of trade. Governments have also sought to reduce 'non-tariff barriers' to trade – the different national regulations, quotas and protections that make it difficult for exporters to penetrate foreign markets.

China's economy grew by almost 10 per cent a year between 2004 and 2014, and its trade integration with the rest of the world expanded even faster. India managed growth of almost 8 per cent a year over this period. Emerging economies' growth has slowed since the crisis – and in all likelihood will be permanently lower – but they will continue to expand more rapidly than developed countries. Hence, the reasoning goes, the EU's single market is of declining value to the UK. It may even hold the country back from developing its trade with emerging economies, and a British exit could free the country to pursue more – and more comprehensive – trade agreements with faster-growing economies.

However, while global trade has expanded, Europe has become a regional trading hub. Over three-fifths of EU member-states' trade in goods is conducted between themselves. Intra-EU trade expanded less rapidly than extra-EU trade in 2005-2015, but it still managed growth of 4 per cent a year, suggesting that European regional trade integration is far from exhausted (see Chart 1.1).

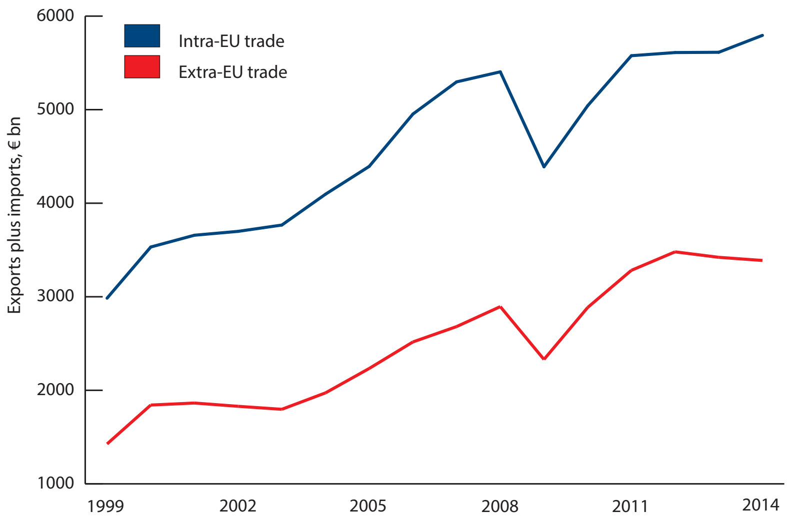


Chart 1.1: Trade between members of the EU and between the EU and the rest of the world

Source: Eurostat.

Moreover, higher trade and investment with developed economies is more likely to raise productivity than trade and investment with poorer countries. This is because of a fact that is often lost on politicians and the public alike – that the biggest gains from trade come not from exports but from imports, which heighten competition, thereby raising incentives for domestic firms to make productivity-enhancing investments and better products for consumers.

Imports and inward investment from developed countries can raise the rate of economic growth (rather than just provide a one-off boost to incomes) through a process known as the 'dynamic gains' from trade. Imports from more productive EU firms encourage British companies to raise productivity and spend more on research and development in order to keep a foothold in the market. The constant pressure of competition from more productive overseas companies raises productivity growth – not just productivity levels.

Trade driven by comparative advantage and the global division of labour between rich and poor countries also reduces the cost of imports and encourages labour and capital to shift to more productive sectors of the economy. But this effect is one-off. Once a British TV manufacturer has been closed under pressure from foreign competitors, and its workers and capital have been redeployed into more competitive UK sectors such as aerospace, there has been a one-time boost to Britain's total income.

Moreover, the history of trade based on comparative advantage shows that jobs lost in manufacturing and industrial work have not always been replaced by jobs in higher value-added activities. Rather, low value-added services sectors with weak productivity growth have grown in number. These trends have contributed to the 'hollowing out' of the British labour market, with more low- and high-paid jobs being created than those which provide middling earnings.

These patterns of international trade prompt the question: has membership of the EU's single market increased Britain's trade, or merely diverted trade away from faster-growing non-European countries and towards Europe? Does the EU constrain Britain's ability to boost its trade with rich countries outside Europe and those developing countries that are reshaping the global economy?

1.2 The impact of EU membership on British trade

The EU has employed three tools to boost trade. First, it has eliminated tariffs on goods. Second, it has established the right of companies and people to sell their goods, services or labour, or to invest, in other member-states – the so-called 'four freedoms'. Third, it has created minimum common regulatory standards, so that potential exporters do not have to bear the cost of complying with 28 different rule-books. The EU requires all member-states to allow goods that comply with EU standards to be sold unhindered across the single market.

Britain's trade with countries outside the EU is growing. Chart 1.2 shows the trends in UK trade in goods with the 11 other member-states that made up the EU in 1986; the existing EU with 28 member-states; non-European OECD members; and emerging economies. After an initial expansion in the proportion of British trade conducted with the EU in the 1980s and 1990s, it levelled off. The proportion conducted with the EU-11 (and the OECD) fell over the last decade, as trade with emerging economies rose. The reason for surging trade with emerging economies is their faster economic growth, as they use Western technology to catch up with the developed world.

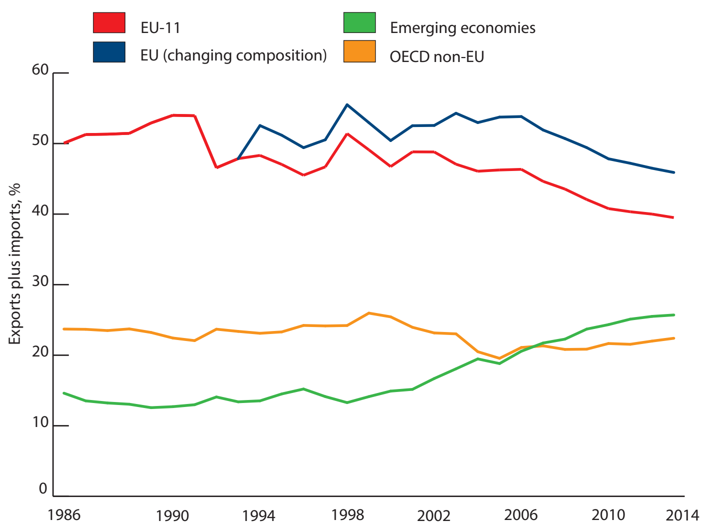


Chart 1.2: Trends in UK goods trade with the EU and the rest of the world

Source: International Monetary Fund, Direction of Trade Statistics.

However, the proportion of UK exports going to the EU will only tell you so much about the EU's impact on the British economy. Some of those exports to the EU have not had much value added to them by UK companies, comprising 're-exports' from other countries, either from within the EU or elsewhere. Similarly, statistics for UK exports to the EU do not take account of the 'Rotterdam effect' – the fact that many UK exports sold to the EU are then shipped on to other countries outside Europe. And third, the figures do not include the intermediate goods and services provided by domestic firms to exporting companies, and so do not give a full picture of the risks to the UK's domestic economy from Brexit.

The World Input-Output Database (compiled by the University of Groningen, together with its international partner institutions) makes a much more precise analysis possible, by measuring the amount of value-added by companies in Britain and overseas.[8]

The database includes 35 industries and 40 countries – all EU member-states plus Canada, the US, Mexico, Brazil, Turkey, Russia, India, China, South Korea, Taiwan, Japan, Indonesia and Australia, which together account for 85 per cent of global GDP and more than 90 per cent of UK trade. It incorporates all of the complex global value-chains between these countries.[9]

Chart 1.3 sets out the shares of UK GDP accounted for by demand from the EU and from the rest of the world. It strips out the 'Rotterdam effect' and imports from the EU that are used by British companies in their production process, but includes production by domestic firms in supply chains serving the rest of the EU.

The share of UK GDP accounted for by exports stood at 22.8 per cent of GDP in 2011, of which just under two-fifths was accounted for by trade with the EU. Between 1995 and 2011, the EU fell in importance, from 9.6 per cent to 8.8 per cent, while that of the rest of the world rose from 11.2 per cent to 13.1 per cent.

However, the impact of EU value chains serving the rest of the world grew in importance over this period, with the result that they added 1 per cent of UK GDP in 2011, up from 0.6 per cent in 1995. Examples of such value chains would be UK firms providing financial services to German automobile firms which then sell cars to China, or UK engineering firms selling technologies to Danish producers of wind turbines which are then sold to Brazil. Taking account of these effects, the share of UK GDP generated by trade with the EU amounted to 9.8 per cent in 2011, the last year of data available. These pan-EU supply chains could be endangered by Brexit.

8: http://www.wiod.org/new_site/home.htm.

9: Marcel Timmer and others, 'An illustrated user guide to the World Input–Output Database: The case of global automotive production", Review of International Economics, 2015.

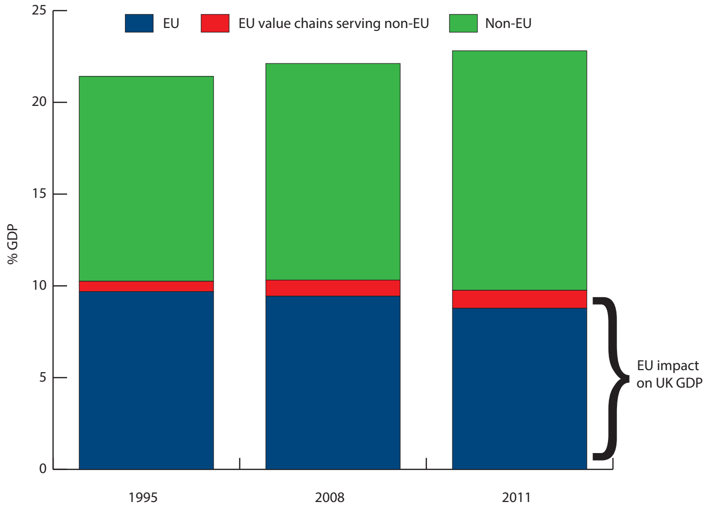


Chart 1.3: EU and non-EU contributions to UK GDP

Source: World Input-Output Database, University of Groningen.

Is this figure big or small? There are two ways to put it in perspective. First, we can compare the equivalent contribution of EU demand to UK GDP with the shares of UK output produced in each of the regions of the country (see Chart 1.4). London's share of UK GDP is twice as large as the amount of activity that is exported to the EU. The South East's share is 50 per cent larger. But every other region contributes less to UK GDP than the share sold to the EU.

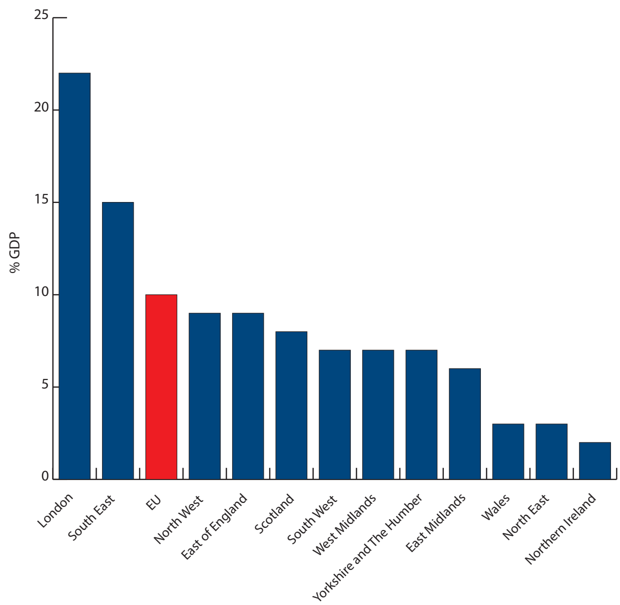


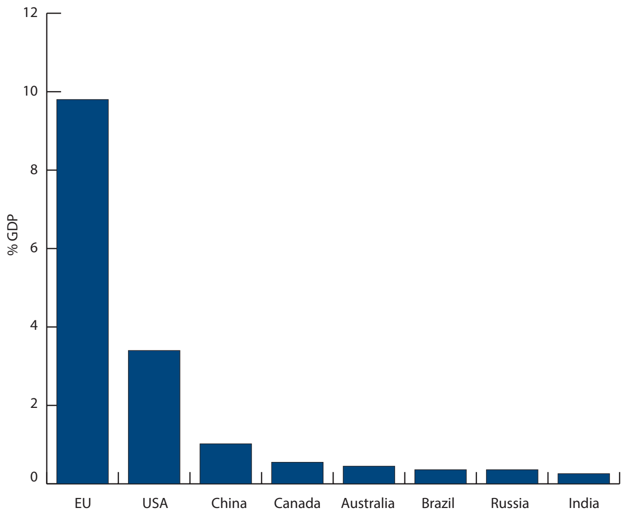
Chart 1.4: EU and UK regions' contribution to UK GDP

Source: Office of National Statistics, Regional Gross Value Added data, and World Input-Output Database, University of Groningen.

Second, the impact of the EU on UK GDP is far larger than that of other countries (see Chart 1.5). For example, it is around three times that of the US (3.4 per cent) and four times that of the 'BRIC' emerging economies (2.3 per cent).[10]

Chart 1.5: EU and other countries' impact on UK GDP, 2011

Source: World Input-Output Database, University of Groningen.



Both the UK's services sector and its manufacturing sector are heavily reliant on EU demand. Forty per cent of overseas demand for UK services companies, and 46 per cent of foreign demand for manufactured goods ultimately comes from the EU (see Chart 1.6). By contrast, the US provides 15 per cent of the overseas demand for UK manufacturing and 17 per cent of the demand for UK services. The BRIC countries provide 8 per cent and 10 per cent respectively. The pattern of services exports suggests that Britain could not easily become an offshore services provider to North America or East Asia.

And British services companies are highly integrated into the EU's manufacturing supply chains, providing transport, marketing, financial and other services to manufacturers. These supply chains have grown in size and complexity (see Chart 1.7). Only 40 per cent of EU demand for UK goods and services comprises direct exports. The remaining 60 per cent – 'indirect demand' on the chart – constitutes EU demand for firms further 'upstream' in domestic UK supply chains, selling intermediate goods and services that UK exporters use in their production

10: Brazil, Russia, India and China.

process. Some of these upstream firms are in the same sectors as the exporters that buy their products, such as components supplied to car manufacturers. Others are not: exporting firms need cleaners and website designers.

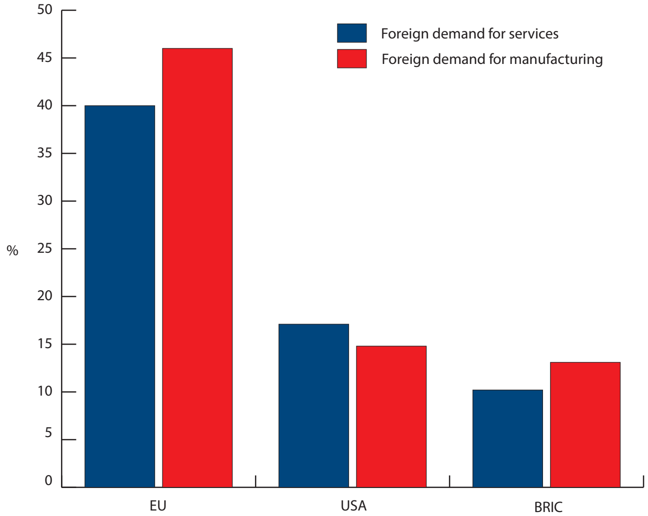


Chart 1.6: The EU dominates foreign demand for UK services and goods

Source: World Input-Output Database, University of Groningen.

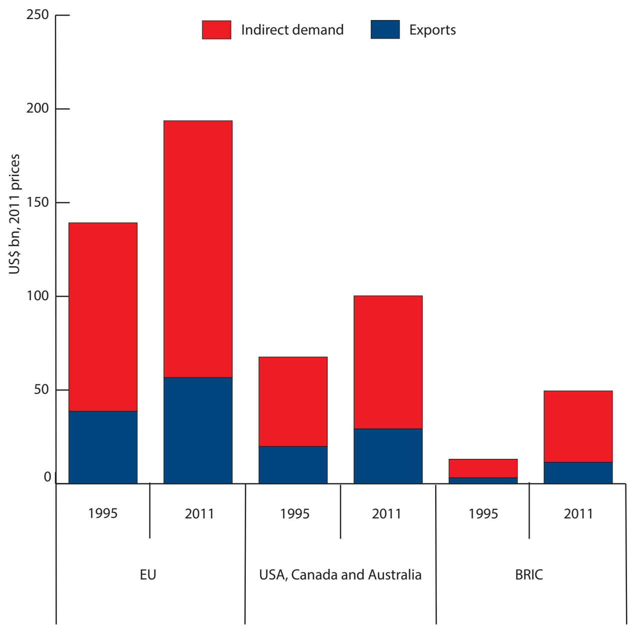


Chart 1.7: The growth of Britain's supply chains serving EU demand

Source: World Input-Output Database, University of Groningen.

These indirect 'multiplier' effects of exports are important to the Brexit question, because the UK tends to specialise in the production of intermediate 'upstream' goods and services more than almost any other OECD economy.[11] Depending on the terms of the divorce, Brexit could put these international and national supply chains at risk. Reduced exports to the EU would have larger ripple effects across the rest of the economy.

1.3 Is the EU responsible for this integration?

The fact that the EU is easily the UK's largest trading partner might have nothing to do with Britain's EU membership. It is unsurprising that a large proportion of Britain's trade is conducted with the rest of the EU: the other members are rich countries on Britain's doorstep, so they would probably be its largest trading partners even in the absence of the single market. The aggregate trade figures do not show the extent to which the single market has increased trade between Britain and other EU member-states by more than would be expected, given their proximity and status as developed economies. Nor do they show if EU membership has reduced Britain's trade with the rest of the world.

There are two ways in which the UK's membership of the single market may constrain its trade with non-European countries. The first is membership of the EU's customs union. Trade is tariff-free between member-states, but the EU sets tariffs on imports from outside the bloc. As a result, EU membership could result in higher tariffs than an independent UK would choose. The second is the way in which the EU removes non-tariff barriers: in doing so, it may regulate at a European level in a way that makes trade with non-European countries more difficult. Together, these two factors may divert British trade from lower cost producers outside the EU, to higher cost ones inside. If more trade is diverted than created, Britain would gain by leaving the single market.

How much of the economic integration between the UK and the EU is down to the existence of the EU itself, as opposed to geographic proximity? Most estimates of the economic effects of EU integration are incomplete. The Bertelsmann Foundation in Germany, for example, found that the UK's GDP was 1 per cent larger thanks to the EU's single market programme, which started in 1992.[12] For its part, the Centre for Economic Policy Research concluded that the EU's single market programme boosted EU GDP by 2.2 per cent.[13] But those estimates do

11: OECD, 'Interconnected economies: Benefiting from global value-chains', 2013.
12: Bertelsmann Stiftung, '20 Jahre Binnenmarkt: Wachstumseffekte der zunehmenden europäischen Integration', 2014.
13: Centre for Economic Policy Research, 'Twenty years on: The UK and the future of the single market', 2012.

not include the gains made before 1992, which were likely to have been substantial, given the comparatively closed and protected nature of the British economy when the country joined the European Economic Community (EEC) in 1973.

The gains made prior to 1992 are difficult to quantify precisely because we do not know how the EU economy would have performed had the EU not freed up trade, eliminated tariffs and reduced national discrimination against foreign workers, products and investors. For their part, economists Andrea Boltho and Barry Eichengreen estimated that the EEC and EC's policies, combined with the EU's single market, were likely to be responsible for gains of around 5 per cent of GDP for longstanding EU member-states.[14]

To capture the effect that membership of the EU has on UK trade, factors that determine the amount of trade between countries must be controlled for: economic size, distance from Britain, whether the trading partner's citizens speak English and so on. If these factors are held constant and Britain still trades more with the EU than with countries outside the bloc, then that additional trade is attributable to membership of the EU.

The CER constructed a 'gravity' model to measure the EU's role in creating and diverting trade between Britain, the EU and its 30 largest trading partners that are not EU members. Together, these countries account for almost 90 per cent of Britain's trade. The CER took data on the total value of goods traded – exports and imports – between Britain and 181 countries between 1992 and 2010. We then took data on the countries' GDP and their real exchange rates, and by using a statistical technique called fixed effects, took into account other factors that affect trade, such as countries' populations, their distance from Britain and so on.

The model estimation shows that the UK's trade with the other EU members is 55 per cent higher than one would expect, given the size of these countries' economies, their distance from Britain and other controls (see Chart 1.3).[15] In 2014, Britain's bilateral goods trade with the EU was worth £372 billion, so this 'EU effect' amounted to around £132 billion.[16] By comparison, the value of Britain's bilateral trade with China was £43 billion that year.

14: Andrea Boltho and Barry Eichengreen, 'The economic impact of European integration', Centre for Economic Policy Research, 2008.

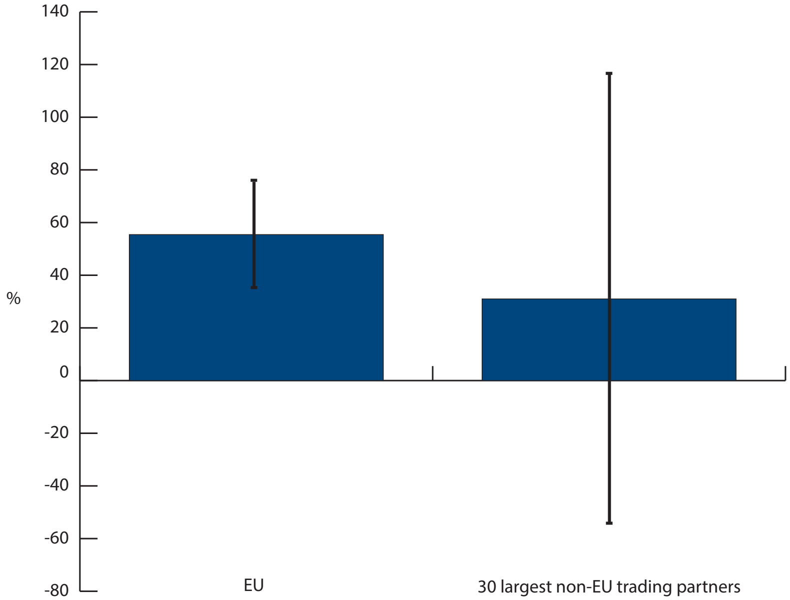
15: This result was statically significant to the 0.0001 level, meaning that there was a 99.999 per cent chance that it was not zero. However, there are large confidence intervals, which are shown by the error bars on Chart 1.3. Confidence intervals show how far the model could be sure that its estimations were accurate (the longer the error bar line, the less certain the estimation). See Appendix.

16: HM Revenue and Customs, UKtradeinfo data.

But is this trade merely diverted from outside the EU? The EU's tariffs might reduce UK trade with countries outside Europe, by making non-EU imports more expensive. The second bar of Chart 1.8 shows that the model found no evidence that British trading patterns have been diverted from outside to inside the EU. In fact, the model estimated that UK membership of the EU might increase its trade with its 30 largest non-EU trading partners, although the effect was not statistically significant. Such a positive effect of regional integration on trade with the outside world is not unheard of: many regional trade agreements have concurrently lowered tariffs to other markets, to prevent trade distortion.

Chart 1.8: Goods trade created and diverted by Britain's membership of the EU

Source: Centre for European Reform calculations. See Appendix A.



This result implies a 35.5 per cent increase in the UK's total trade.[17] If we apply this figure to the 9.8 per cent of UK GDP accounted for by EU's member-states, the gravity model suggests that the impact of EU membership is equivalent to some 3.7 per cent of GDP. This is a lower estimate than that of Boltho and Eichengreen, but is probably a lower bound because gravity models cannot account for all the knock-on activity that exporters generate in domestic supply chains, and it is precisely these effects which the Groningen database allows us to capture in detail.

Of course, the CER's gravity model lumps together many different types of goods. Trade in some goods – notably agricultural products – has certainly been diverted from outside the EU to within it. The Common Agricultural Policy (CAP) is clearly costly: several studies have found that trade in agricultural goods diverted by the CAP outweighs any agricultural trade created within the Union.[18] And while the EU has reduced its average tariff from 5 per cent in 1990 to 1 per cent in 2013, tariffs on footwear and clothes remain high, which makes it difficult for more efficient producers to export to the EU.[19]

Is there any evidence that EU membership has boosted Britain's services exports to the rest of the Union? The UK has a strong comparative advantage in the trade of services, with its leading exports being financial and related business services, such as accountancy, law and consulting. Free movement of capital and unrestricted trade in services constitute two of the four freedoms of the EU's single market, and the EU has made successive attempts to reduce barriers to trade in these areas. Have these attempts worked?

17: A 55 per cent boost to Britain's EU trade implies that 64.5 per cent of the existing trade with EU would have occurred in the absence of the single market. That implies an increase in EU demand for UK output of 35.5 per cent arising from Britain's EU membership.

18: See, for example, André Sapir, 'Regional integration in Europe', Economic Journal, 1992.

19: World Bank weighted average tariffs.

The EU is by far and away the most important market for British services (see Chart 1.9). Britain's services trade with the EU has grown at around one and a half times the rate of EU economic growth since 1999 (see Chart 1.10) – a faster rate than with most other countries and regions. Since fast-growing economies trade more with each other, the only way to tell whether efforts to free up trade are working is to compare the rates of growth in UK exports to particular countries with economic growth in those countries. Services trade with the US grew by a similar amount over this period (around 5 per cent per year), but relative to US economic growth, this was a slightly worse performance than with the EU. Britain's services trade with emerging economies rose rapidly between 1999 and 2015, but growth in Britain's services exports to Brazil, China, India and Russia lagged economic growth in each of the those economies. Indeed, in 2015, the value of Britain's services exports to the EU was nine times higher than sales to Brazil, China, India and Russia combined.

However, while Britain's services trade has grown faster with the EU than with any other region, it is not especially impressive. Given the EU's attempts to liberalise services, trade might be expected to be growing even faster. While the EU has made some progress in lowering barriers to trade – the 2004 services directive reduced them by about one-third – there is more that could be done.

In summary, the evidence accords with theory. Rich, large and neighbouring economies trade more than poor, small and distant ones. The EU's tariff and non-tariff barriers to trade reduce Britain's imports of some products from countries outside the Union. But there is no evidence that the EU diverts more trade than it creates. The gravity estimation clearly shows that the benefits of reduced barriers to Britain's natural trading partners – the many medium-sized, rich economies on its doorstep – outweigh the costs of trade diversion in some sectors, such as agriculture. Britain's economic interest lies in reducing the costs of trade with its largest trading partners, which the CER's model shows that the EU has been effective in doing.

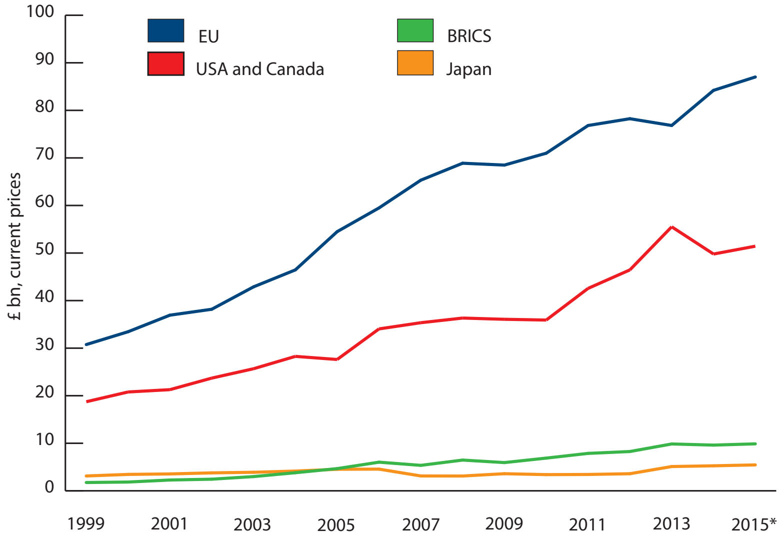


Chart 1.9: UK services exports

Source: Haver.

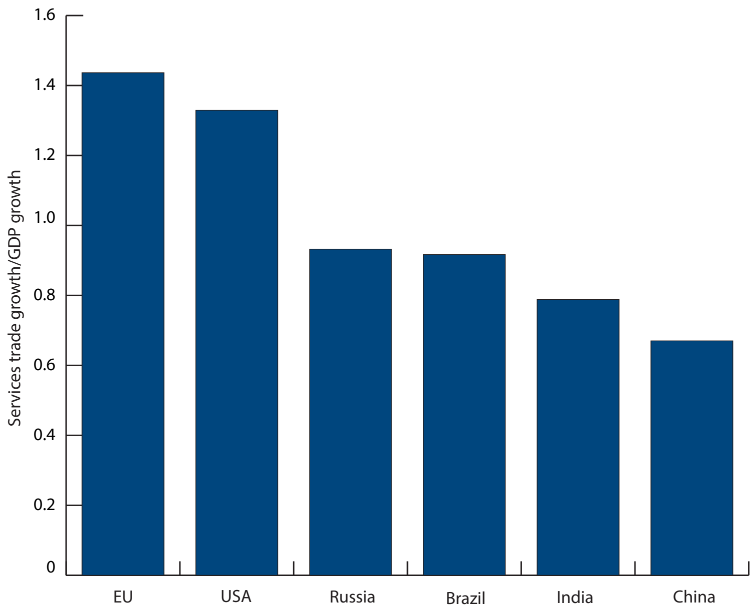


Chart 1.10: UK services trade growth with major partners, 1999-2015

Source: Haver.

1.4 The consequences of exit for British trade

How likely is it that Brexit would lead to sizeable losses? Because the UK economy's integration with the rest of the EU is so high, the effects of higher trade barriers with the EU could be substantial. The Groningen database shows that, for every one per cent reduction in UK exports to the EU, the 'multiplier' impact on other producers in the UK economy which supply those exporters with goods and services is 2.4 per cent. If Britain's exports to the EU were one per cent lower than if it remained a member – an optimistic scenario, even if the UK maintained full access to the single market by joining the European Economic Area – this would lead to a loss of GDP of around 0.5 per cent. That is the same amount as the UK's net contribution to the EU's budget.

In reality, the impact on the UK economy would be of greater magnitude than this. Under the most optimistic scenario – no tariffs are applied on UK goods and non-tariff barriers that grew slowly – researchers at the London School of Economics modelled losses of 1.3 per cent of GDP.[20] Under their most pessimistic scenario, which assumed the UK trading with the EU under WTO rules (see below) they found losses of 2.7 per cent of GDP. And if the long-run hit to UK productivity is taken into account, the LSE team reckon the losses can be as large as 6.3 to 9.5 per cent of GDP. These figures are of similar magnitude to those of Oxford Economics, PwC and the British Treasury.[21]

It will be more difficult to negotiate access to the single market than many Brexit advocates argue. They claim that Britain would have little trouble negotiating a free trade agreement with the EU once it left, because the UK has a large trade deficit with the rest of the Union: if trade barriers grew between Britain and the EU, the EU would lose more export earnings from Britain than vice versa. At the same time, the UK would be freed from the burdens of EU regulation and hence able to boost trade with faster growing parts of the world, by eliminating tariffs and signing trade agreements without the constraints of EU membership. Underpinning this assertion is the belief that the UK is a big enough economy to be an effective trade negotiator in its own right and that any trade agreements Britain signed would be as comprehensive as the EU's single market. These arguments are simplistic and misleading.

20: Swati Dinghra and others, 'The economic consequences of Brexit for trade and living standards', London School of Economics, March 2016.

21: Oxford Economics, 'Assessing the economic implications of Brexit', March 2016; PwC, 'Leaving the EU: Implications for the UK economy', March 2016; HM Treasury, 'The long-term impact of EU membership and the alternatives', April 2016.

The EU is certainly a less important market for the UK than it was, and likely to remain so for as long as the eurozone fails to engineer a sustained economic recovery. The UK's trading relationship with the EU has also become severely imbalanced since the start of the eurozone crisis in 2010 (see Chart 1.11). But the UK would be wrong to assume that it could dictate terms in any negotiation with the EU by virtue of the fact that it is running a trade deficit with the other member-states. First, the EU buys 45 per cent of Britain's exports whereas the UK accounts for little over 8 per cent of exports from the other member-states, on average. The World Input-Output Database shows us that UK demand only accounts for 1.6 per cent of the rest of the EU's GDP. As such, in relative terms, the impact of EU demand on UK GDP is six times larger than the impact of UK demand on EU GDP. So the UK would be in a weak position to negotiate access on its own terms.

Second, half of the EU's trade surplus with the UK is accounted for by just two member-states: Germany and the Netherlands. Most others do not run substantial trade surpluses with the UK, and some run deficits with it. Any withdrawal agreement would require the assent of the remaining 27 members, some of whom buy more from Britain than they sell to it.

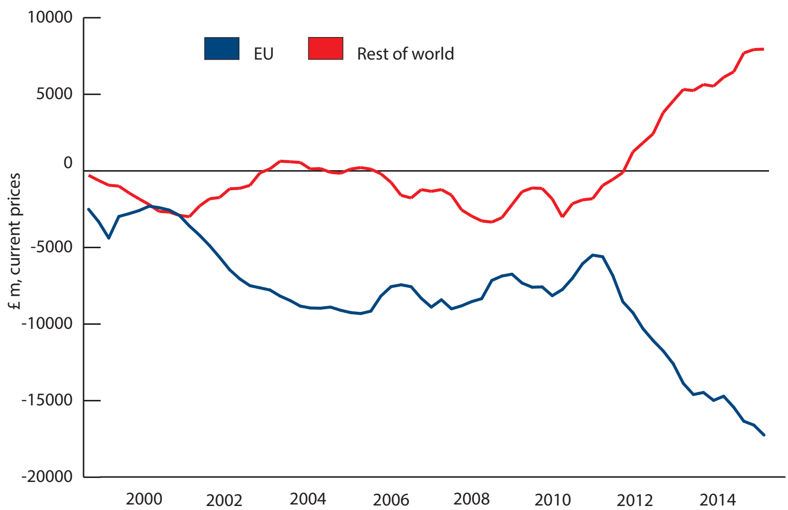


Chart 1.11: UK trade balances

Source: Haver. Four-quarter moving averages.

1.5 Alternative arrangements

If Britain withdrew from full membership of the EU, there would be a number of potential options for managing its trading relationships: membership of the European Economic Area (EEA – the Norway option); a customs union, similar to the one the EU has with Turkey; a basket of bilateral agreements such as that which exists between Switzerland and the EU; a free trade agreement like the ones the EU has with countries ranging from South Korea to Canada; and finally trade with the EU under World Trade Organisation (WTO) rules. None of these options would be straightforward. Only one of them would be politically realistic for a post-EU Britain, and that would have potentially far-reaching implications for the country's trade and investment.

EEA membership: If Britain joined the EEA, British firms would have unimpeded access to the single market. But the UK would have no say over EU trade policy, and in order to qualify for EEA membership, the UK would still have to abide by EU regulations while having very little say in making them. EEA member-states largely experience 'regulation without representation'. And if an EEA member fails to implement rules, the EU can suspend its membership. Indeed, the UK could face increasing regulatory costs as a member of the EEA, because it would no longer be in a position to ensure that EU regulations were proportionate, and would have to abide by whatever the remaining EU members agreed between themselves.

So-called 'rules of origin' would apply to British exports to the EU. Rules of origin are used to determine the country of origin of a product, and therefore how much EU import duty is payable: products which are mostly 're-exports' are liable for tariffs. The administrative costs of working out tariff payments on extra-EU imports can be large. EEA states are not part of the Common Agricultural Policy (CAP) or the Common Fisheries Policy (CFP), but their agricultural exports to the EU face tariffs and can be subject to anti-dumping rules.[22] Finally, the UK would be excluded from the EU's trade deals with other countries, but would have to abide by free movement of labour rules and make contributions to the EU budget (see Chapter 5).

Customs union: An alternative to EEA membership would be a customs union of the kind that Turkey has with the EU. The EU's customs union, in which Turkey takes part, eliminates internal tariffs, but, unlike the EEA agreement, requires member-states to agree

22: Anti-dumping duty is charged in addition to normal customs duty and is applied across the EU. It is designed to allow the European Commission to take action against imported goods that are sold at less than their normal value – that being defined as the price for 'like goods' in the exporter's home market.

common tariffs with countries outside. But the EU-Turkey arrangement is not really a 'union', as tariffs are decided in Brussels, with no Turkish input. Turkey must also follow the EU's preferential agreements with non-European countries, but does not benefit from the trade deals the EU does with other countries, who continue to apply tariffs on Turkey's exports. Britain would have to abide by most of the EU's *acquis communautaire*. British-based manufacturers would be exempt from rules of origin but would have to comply with EU product standards. Failure to do so could lead to the suspension of market access or the imposition of anti-dumping duties. And the customs union agreement does not cover agriculture, services or public procurement. Customs unions are intended as precursors to full EU membership, even if in Turkey's case progress has been very slow since the customs union entered into force in 1995. It is hard to see how this would be the best relationship for the UK after quitting the EU.

Swiss-style: As irritation at 'Brussels interference' is at the heart of the case against EU membership, the UK would find it politically intolerable after leaving the EU to accept hand-me-down legislation as the Norwegians do in the EEA or the Turks do as part of their customs union. A Swiss-style relationship based on bilateral negotiations and agreements could be more palatable. Switzerland's relationship with the EU rests on a series of bilateral sectoral agreements – 20 of them important, another 100 less so – but not all important sectors are covered. Switzerland has free trade in goods with the EU, but unlike the EEA it has no comprehensive agreement with the EU on services. The UK's financial services industry would face the same challenges as its Swiss counterpart; Switzerland has no accord with the EU on financial services, except for a 1989 agreement on non-life insurance.[23]

The Swiss develop their legislation with the EU in mind – the EU grants access to the single market on the basis that Swiss regulation is equivalent. They make substantial contributions to the EU budget (see Chapter 5). But Switzerland has no common institutions with the EU to guarantee such equivalence. The UK would be free to negotiate bilateral trade agreements with non-EU countries, but these could prove less of a benefit than they appear (see 'Trade negotiations' below). Moreover, the Commission (and member-state governments) are increasingly frustrated with the Swiss arrangement, which involves constant renegotiation of bilateral agreements when EU legislation moves on. In all likelihood, Britain would have to remain fully open to workers from EU countries. In 2014, the Swiss voted in a referendum to

23: David Buchan, 'Outsiders on the inside: Swiss and Norwegian lessons for the UK', CER policy brief, September 2002.

introduce immigration quotas on EU citizens, but the EU has refused to negotiate, arguing that freedom of movement is an inviolable part of the Switzerland's preferential access to the single market.

A free trade agreement: The UK could leave the EU and sign a free trade agreement (FTA) with it. Given the importance of the UK market to the EU, the UK might be able to negotiate an FTA. There is a reasonable chance that the tariffs levied by the EU on British manufactured goods would be zero. Unlike a customs union, Britain could set its own trade policies with non-European countries. But an FTA with the EU would not leave Britain free to set its own regulations. As part of any deal with the EU to create an FTA, the EU would make demands on labour market rules and health and safety, and competition policy might be subject to mutual regulatory oversight.

The deeper the trade agreement, the more EU regulation the UK would have to abide by. British manufacturers would certainly have to continue to comply with EU product standards and other technical specifications in order to sell their goods to other EU countries. In all likelihood, UK firms would continue to manufacture to only one set of product specifications – the EU's – in order to avoid the costs associated with duplication. The UK would be subject to anti-dumping measures and rules of origin, which would make it harder for UK firms to participate fully in EU supply-chains. The UK would struggle to sign an FTA which included unrestricted access to EU goods and services markets, unless it agreed to abide by freedom of movement rules and most of the *acquis communautaire*, as well make contributions to the EU budget. In all likelihood, the British government would balk at these terms, since the campaign to leave the EU has focused on concerns over free movement and sovereignty.

The loss of unrestricted access to EU services markets could have formidable implications. Services account for an unusually high proportion of British exports, so the country has much to gain from EU-wide liberalisation. (In 2015, UK exports of goods and services totalled £521 billion, of which £228 billion were services.)[24] The UK's trade in services with non-EU markets might also be impaired if leaving the EU undermined the attractiveness of the UK as a financial hub and as a centre for business consultancy, law and accounting. Britain's membership of the EU is important for many foreign investors in these sectors, but they also export to non-European markets from their UK operations (see Chapter 3 for more details).

24: Estimate based on ONS trade data for the first three quarters of 2015.

Trade under WTO rules: Finally, if the UK balked at the requirements of a free trade area, it could opt to trade with the EU under WTO rules. The UK would not have to comply with EU regulations, but it would face the EU's Common External Tariff (CET) and substantial non-tariff barriers to trade. For example, food imports are subject to an average EU tariff of 15 per cent, while car imports face a 10 per cent tariff, and car components, 5 per cent.

Under WTO rules, UK manufactured exports could be hit hard. For example, the EU is easily the biggest market for British car-makers (almost three-quarters of UK car exports were sold to the rest of the EU in 2015), and the country's car components industry is fully integrated into pan-EU supply chains. Indeed, a higher proportion of UK exports to the rest of the EU take the form of intermediate goods than is the case for Britain's exports to the rest of the world. Such goods would be less competitive within Europe if they faced tariffs. And UK goods exports to the EU would also be vulnerable to anti-dumping duties.

Relying on WTO rules for Britain's tradable services industries would have still more serious implications. The WTO has made little progress in freeing up trade in services, so British firms' access to the EU's services market would be limited.

In summary, a Swiss-type arrangement, a customs union or EEA membership would give the UK at least partial access to the EU market, but would not address the reasons for the UK quitting the EU in the first place. The UK would still have to comply with the *acquis communautaire* in exchange for market access, but it would be powerless to influence the acquis. In the case of the Swiss or Norway option, Britain would have to continue to accept free movement of labour and contribute to the EU budget. An FTA is possible, but its breadth would depend on Britain's willingness to sign up to free movement, budget contributions, and the EU's rules.

The most comprehensive FTA the EU has negotiated is the deal done with Canada, which will eventually eliminate around 98 per cent of tariffs on manufactured goods. However, the EU-Canada deal provides much more limited access to services markets than does EU membership. Moreover, it could take many years to negotiate such a deal (the EU-Canada one took seven). Under the EU's exit rules, negotiations over a withdrawal treaty may be extended by more than the initial period of two years (though only if the remaining EU member-states agree unanimously).[25] The longer the bargaining went on, the greater the damage to the British economy, as uncertainty over tariffs and regulations hampered investment.

25: Jean-Claude Piris, 'If the UK votes to leave: Seven alternatives to EU membership', CER policy brief, January 2016.

1.6 Brexit and foreign investment

The UK is very successful at attracting foreign direct investment (FDI). It is home to a larger stock of EU and US FDI than any other EU member-state and is the preferred location for investment from countries outside Europe. In absolute terms, investment from all sources has risen strongly, but it has increased much faster from the EU than from anywhere else. In 1997 EU countries accounted for 30 per cent of the accumulated stock of FDI, but this proportion has since risen to around 50 per cent (see Chart 1.12). Over this period, the share accounted for by the US fell from 45 per cent to under 30 per cent, and that of the rest of the world from around a fifth to 15 per cent. The stock of EU FDI is now equivalent to almost a third of UK GDP.

Inward investment in services accounted for 60 per cent of all UK FDI between 2003 and 2012 (see Chart 1.13). And nearly half of this was in banking – the services sector that the EU has most comprehensively liberalised. While the single market for services remains a work in progress, Britain has nonetheless been the largest EU beneficiary of the free movement of services and capital, as it has been the location of choice for foreign investors from the US, Switzerland and other EU member-states.

Britain has some advantages that have little to do with the EU. It is an open economy, and it is easy for foreign investors to own British businesses; it has deep capital markets and a large number of publicly-listed businesses; it has a high quality legal system and regulatory culture, and its citizens speak English – all of which make it an attractive place to invest. But it is difficult to believe that it would receive so much inward investment were it not in the single market.[26] After all, many inward investors acknowledge that they are seeking a European base from which to distribute products without the barriers they face when conducting trade from their home markets. Market size is a major determinant of the size of FDI flows, and membership of the EU dramatically expands the market that can be served from the UK.

The UK undoubtedly derives considerable benefits from its openness to foreign investment, but foreign capital is also more mobile than domestic capital. Foreign-owned businesses are more likely than locally-owned ones to relocate activity if they disagree with the direction of government policy. It is difficult to quantify what proportion of the UK's stock of inward FDI in manufacturing and services depends on the country's membership of the EU.

26: HM Treasury, 'EU Membership and FDI', 2010.

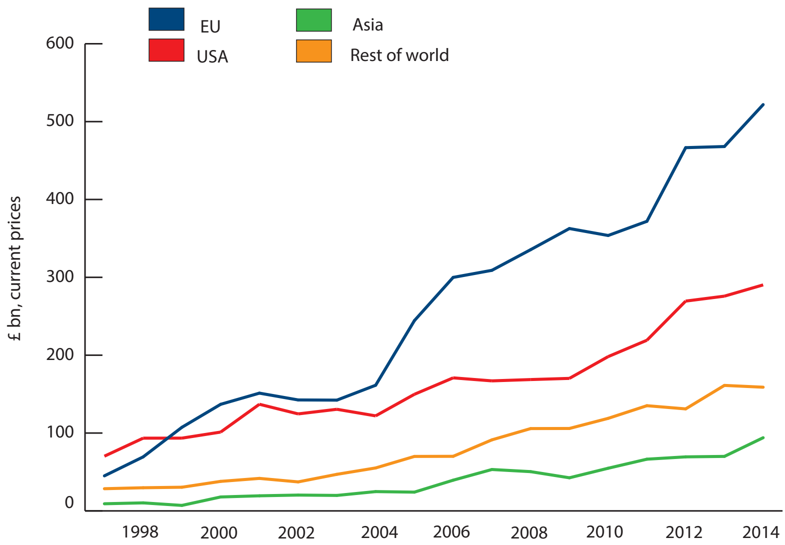


Chart 1.12: The origin of foreign direct investment to the UK

Source: OECD, UK Trade and Investment.

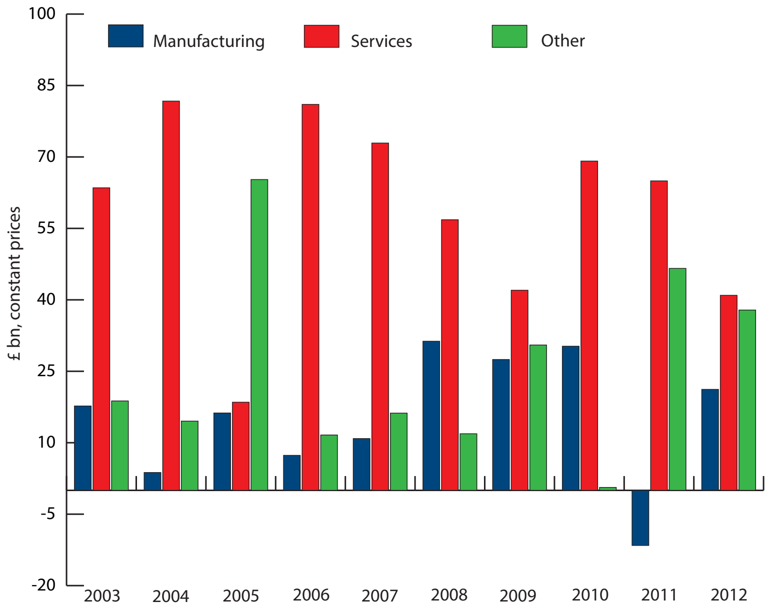


Chart 1.13: Foreign direct investment flows to the UK by sector

Source: OECD.

The vulnerability of foreign investment to Brexit will depend to a large extent on what kind of arrangement replaces EU membership. If the UK opted for membership of the EEA, the impact on foreign investment into the UK might be limited. However, even under this scenario some investors, especially in financial services, could balk at the UK giving up its seat at the table, fearing that EU governments would rewrite rules to favour their own financial centres, to the detriment of London. Also, the ECB might renew its attempt to repatriate the clearing of euro-denominated assets from London to the eurozone. UK-based manufacturers would also have to comply with rules of origin, which would reduce the attractiveness of the UK as an investment location relative to the fully-fledged EU member-states.

If the UK quits the EU and balks at EEA membership – highly likely as the EEA would be even less politically acceptable to the country's eurosceptics than full EU membership – and opts for a free trade agreement with the EU, the impact on investment could be far-reaching. There is little doubt Britain would be able to negotiate free trade in manufactured goods, albeit with a potentially significant delay, but it would be more likely to lose unimpeded access to the EU's services markets. If the delay in signing the agreement were short, the impact on investment in manufacturing might not be that serious. However, the links between services and manufacturing are complex, and the lack of free access to EU services markets would undermine the attractiveness of the UK as a destination for investment in manufacturing.

The impact on investment in services would be more severe. Foreign investment in service industries that serve the domestic market would be least affected, but investment in internationally-traded services would be vulnerable. These sectors rely on large concentrations of highly skilled people, who are expensive to recruit and difficult to move, so investment would not migrate overnight. But the UK would become less attractive as a location for these kinds of businesses, and activity, particularly in the financial sector, would gradually relocate from the UK to elsewhere in the EU (see Chapter 3). And the less open a post-Brexit UK to foreign workers, the more likely firms would be to shift activity into the EU.

The worst outcome for foreign investment would be if Britain opted to trade with the EU under WTO rules. Under this scenario, considerable damage could be done to investment in both manufacturing and services. Perhaps the most vulnerable manufacturing sector would be the car industry – easily the fastest growing bit of UK manufacturing. Factories would not close overnight, but it would be harder for firms to justify new investment in their British plants, and component suppliers could opt not to build up industrial capacity in the UK. Both Nissan and Jaguar Land Rover – the sector's two biggest investors – have already indicated that a UK exit would reduce the attractiveness of the UK as a manufacturing base.

The food industry is also highly integrated into the rest of the EU economy and would be likely to suffer in a similar way. Another major centre for foreign investment in the UK is the computer software industry. The factors which attracted foreign investors in this field to Britain, such as the availability of skilled labour and the English language, will remain if the UK leaves the EU. But would these firms continue to use the UK as a springboard to serve the wider European market if they no longer enjoyed unrestricted access to that market and found it harder to recruit skilled personnel from across Europe?

Brexit could also pose a risk to British firms' investments in Europe. The EU is home to half of the UK's outward FDI, and Britain's investments in other member-states are even larger than the EU's FDI in the UK.[27] Any delay in agreeing bilateral investment agreements between Britain and the EU could lead to discrimination against UK-owned businesses or subsidiaries. For example, an EU government could place limits on the freedom of British retail chains to do business in its jurisdiction.

Finally, the UK would struggle to negotiate comprehensive international investment agreements for the same reason that it would struggle to broker favourable bilateral trade deals: the UK is already very open to foreign capital, so it would have little leverage when it came to such negotiations. It might be able to come to an agreement with small, like-minded economies, but would struggle to gain better access to major emerging economies such as China and India.

1.7 Trade negotiations with non-European countries

What would be the potential benefits of Britain controlling its own trade policy? It is not always easy to find a consensus among 28 countries; some influential member-states are less enthusiastic free-traders than, say, the UK or the Netherlands. Moreover, the European Parliament can exert some influence on the EU's FTAs, since MEPs

27: Grahame Allen and Aliyah Dar, 'Foreign direct investment', House of Commons Library Research Note, March 2013.

must ratify them. As a result, EU trade agreements may be less liberal than the UK would like. Withdrawing from the EU altogether could potentially reduce the prices of imported goods from outside the EU, on the assumption that the UK reduced tariffs to below EU levels – which stand at 1 per cent on average.[28] Indeed, Britain might opt for a unilateral free trade policy.

However, the EU has signed numerous FTAs that have been beneficial to the UK[29] and there are reasons to believe that the UK would be less successful in negotiating comparable agreements on its own. Moreover, there is no guarantee that the UK would opt to reduce tariffs to zero if it quit the EU. For example, the British government might well decide to protect its agricultural sector in an effort to maintain domestic production. Other sectors might also seek and win protection.

Outside the EU's customs union, Britain would be free to sign bilateral trade agreements with non-EU countries. However, this would be much harder than eurosceptics think. Much of the debate in the UK about the implications of a British exit from the EU for the country's trade and investment presupposes the existence of a flourishing multilateral trade system. The reality is rather different. Multilateral trade liberalisation has stalled since the Uruguay Round came into effect in 1995. Large emerging economies, particularly China and India, have assumed greater importance in the trading system and they are less committed to multilateralism than the mid-sized OECD countries they have supplanted. Regional and bilateral trade deals have become more important than multilateral trade policy, and as a result reciprocity has assumed greater importance – to open another market for their exporters, countries must have something to bargain with. Finally, tariffs are no longer as important as non-tariff barriers to trade. These trends have a strong bearing on how the UK would fare outside of the EU.

Indeed, trade costs are a neglected aspect of the debate on Brexit and its implications for British trade. Economists at the World Bank have put together a database that measures how costly trade in goods is between countries. Trade costs can come in various forms. One cost is taxes on imports: tariffs. Another arises from non-tariff barriers, like quotas restricting imports, or national regulations that prevent imported goods, made to different standards, from being sold. Still another is distance. It costs money to transport goods from one country to another, so distant countries will tend to trade

28: On a trade-weighted basis.
29: Holger Breinlich, 'How have EU's trade agreements impacted consumers?', London School of Economics, March 2016.

less than neighbouring ones. The World Bank's researchers have quantified these costs. With their data, it is possible to compare the EU's performance at cutting the costs of trade among is member-states – this, after all, is the point of the single market – with the costs of trading with other countries.

Chart 1.14 shows the World Bank's estimates of trade costs between Britain, the EU, the rest of the OECD and the eight emerging economies with which Britain conducts most trade: China, India, South Africa, Russia, Nigeria, Brazil, Malaysia and Indonesia (listed in order of how much they trade with Britain). Britain's trade with non-European members of the OECD is more costly than it is with the EU: barriers to trade with these countries are equivalent to 98 per cent of the value of the goods traded, compared with the EU's 85 per cent. In other words, these trade costs would add 98 pence to the price of a good produced in Britain for £1. The cost of trade with emerging economies is higher still. And since 1995, the first year for which there is data, costs have fallen less with Britain's most important trade partners outside Europe – both developed and emerging – than with the EU.

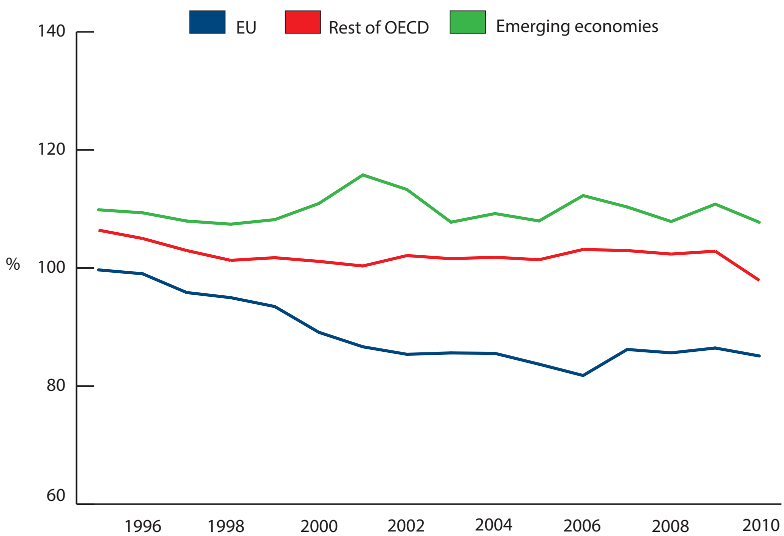


Chart 1.14: Trade costs between Britain and the EU, the rest of the OECD, and emerging economies

Source: CER analysis of World Bank ESCAP database.

Chart 1.15: Countries' contribution to falling UK trade costs, annual average, 1996-2010

Source: CER analysis of World Bank ESCAP database and ONS UK trade data.

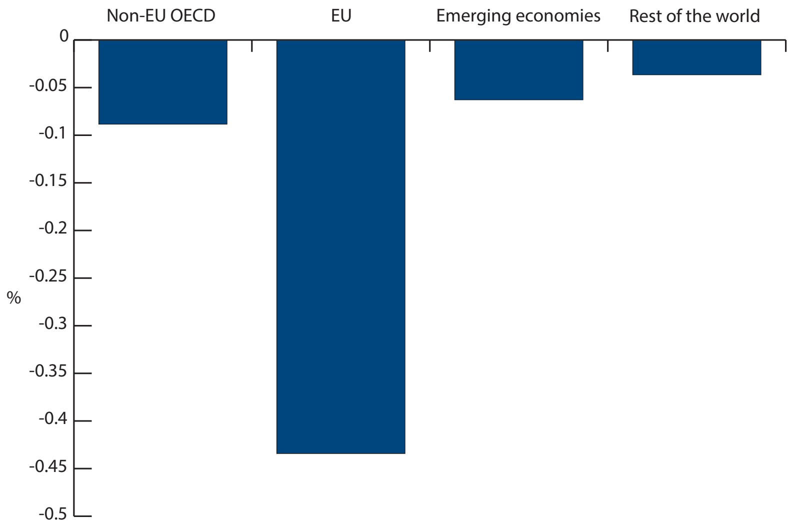
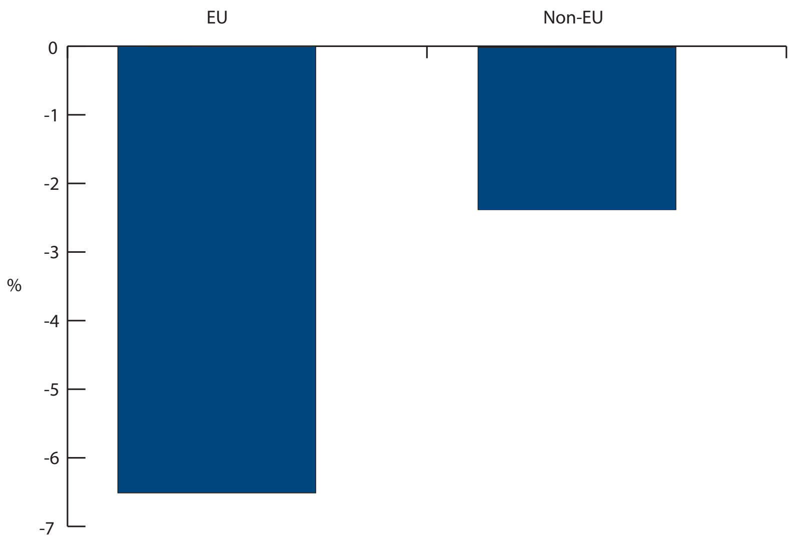


Chart 1.16: Countries' total contribution to falling UK trade costs, 1996-2010

Source: CER analysis of World Bank ESCAP database and ONS UK trade data.



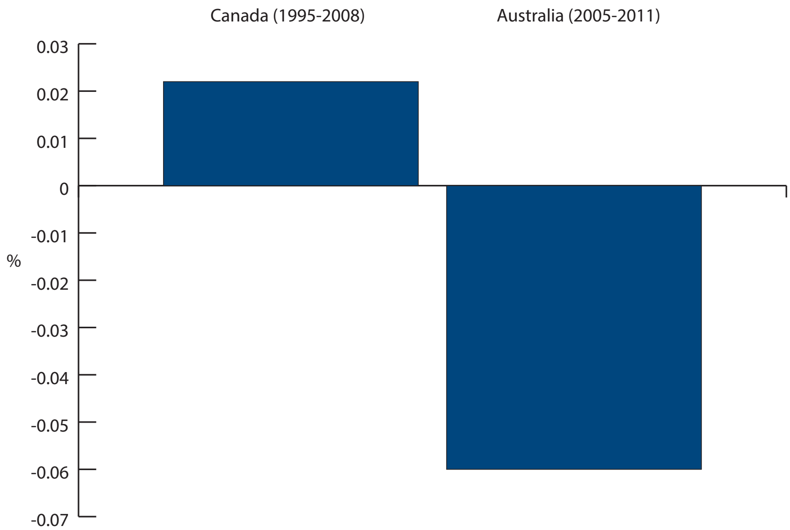
The cost of Britain's trade with the EU dropped by 15 percentage points between 1995 and 2010 – although the decline stopped after 2007. And since the EU is Britain's largest trading partner, this fall is all the more valuable. Chart 1.15 shows by exactly how much. It weights trade costs between Britain and other countries by the amount of trade conducted with them. Since nearly half of Britain's trade is with the EU, that fall has cut the total cost of Britain's trade by 0.4 percentage points a year. The small declines in the cost of trade with the rest of the OECD, emerging economies and the rest of the world are less valuable, not only because they have been smaller, but also because Britain conducts less trade with those economies. Between 1996 and 2010, the rest of the world's contribution to the total reduction of Britain's trade costs was less than one-third that of the EU (Chart 1.16).

This means that any attempts to reduce the cost of trade through FTAs with non-EU countries would have to be very effective to offset any increase in the cost of trade costs with the EU.

This would not be easy. Australia and Canada's free trade agreements with the United States offer a rough guide to the size of the gains that the UK might make by signing a similar agreement with its second largest trade partner. Canada signed the North America Free Trade Agreement (NAFTA) with the US and Mexico in 1994. Australia's FTA with the US came into force in 2005. Chart 1.17 shows the changes in Canada and Australia's total costs of trade that can be accounted for by the US in the years after their agreements. The US accounts for 55 per cent of Canada's trade, but the cost of trading with the US went up slightly between 1995 and 2008 – albeit from a very low base. Most of Canada's trade gains from NAFTA arose from falling costs with Mexico. Australia's trade costs with the US fell after its FTA came into force. But because Australia's trade with the US only accounted for between 7 and 10 per cent of its total trade over the period, the US FTA did not bring down its total cost of trade very much – around 0.06 percentage points a year. The UK conducts a similar proportion of its trade with the US as does Australia – 8.5 per cent – so one could expect similar, small gains from any FTA signed with the US after Britain had left the EU.

Chart 1.17: The US contribution to Australia and Canada's total trade costs after FTAs were signed, annual average

Source: CER analysis of World Bank ESCAP database, Statistics Canada and Australia Foreign Affairs and Trade statistics.



And Britain would find it difficult to sign far-reaching trade deals. The EU has 55 FTAs with third countries and a complex system of trade preferences. If Britain leaves, it will not inherit the EU's bilateral trade agreements; it will have to renegotiate trade agreements with non-European countries from scratch. Some countries would probably be willing to replicate EU FTAs with the UK. But some would not, and the negotiation process would be time-consuming, leaving Britain's exporters facing potentially higher barriers to trade and uncertainty over future market access, which could also hit inward investment. For many countries that do not currently have an FTA with the EU, or are in the process of negotiating one, a trade deal with the UK would not be as important as an FTA with the EU, given the difference in market size. Furthermore, the UK's administrative resources could be overstretched if it had to pursue several negotiations simultaneously, particularly bearing in mind that the UK has not had to negotiate its own trade deals since entering the EEC in 1973, and would therefore need to recruit and train trade negotiators.

Leverage is crucial to forcing open markets, and leverage is about concessions: the non-tariff barriers and tariffs a country is prepared to cut. An open and relatively small economy such as the UK would enjoy little in the way of leverage. The EU's imports from China are seven times larger than the UK's. By virtue of its size (over a quarter of global output and a population of 500 million) the EU is in a strong position when it comes to trade negotiations: the bigger the domestic market, the greater an economy's negotiating power. But even the EU, if it were completely open, would hold little sway in trade negotiations.

Consider the Switzerland-China FTA, signed in 2013. Switzerland has agreed to eliminate tariffs on the vast majority of Chinese imports immediately. China has promised to reduce tariffs on most goods over a five to 15 year period. For example, tariffs on Swiss wrist watches will be gradually reduced from the current rate of 11 per cent to a preferential rate of 4.4 per cent over ten years.[30]

Nonetheless, some argue that the UK would find it easier than the EU to negotiate deeper free trade agreements, including substantive service sector access, because of the openness of its own service sector, its commitment to free trade and its lack of agricultural protectionism. But the CAP is less of an obstacle to multilateral trade liberalisation than it once was because price supports have been phased out, with subsidies now paid to farmers irrespective of the crops they grow or the animals they rear. And it is hard to believe that the UK would, for example, have had more success in prising open India's services market on its own than as part of the EU. With the UK unable to offer much in exchange, would countries bother to negotiate with it?

In conclusion, Britain's interest lies in reducing the cost of trade and investment with its largest trade partners. EU membership clearly helps it to achieve that goal. The CER's model suggests that the country's membership of the EU's single market has boosted its trade in goods with the rest of the Union, and there is little evidence that trade overall has been diverted away from other major trading partners. While the single market for services has not been a great success so far, leaving the EU would not make services trade easier. Damaging trade barriers would arise in many sectors unless the EU and Britain agreed the same level of access to the single market that it currently has – which would require the UK to sign up to free movement, budget contributions and EU regulation.

While it is impossible to know exactly what terms a departing Britain could negotiate, it seems unlikely that all those trade gains would disappear: Britain and the EU might negotiate an FTA, although it is impossible to know how comprehensive it would be. But life would be

30: 'Free trade agreement between the Swiss Confederation and the People's Republic of China', July 6th 2013.

uncomfortable on the outside: the UK would be powerless to push for liberalisation of EU services markets; it would find that, in some sectors, inward investors would switch their money to countries inside the EU; and it would find it very difficult to negotiate trade agreements with non-EU countries as comprehensive as those that the EU agrees.

The idea that the UK would be freer outside the EU is based on a series of misconceptions: that a medium-sized, open economy could hold sway in an increasingly fractured trading system, dominated by the US, the EU and China; that the EU makes it harder for Britain to penetrate emerging markets; and that foreign capital would be more attracted to Britain's economy if it were no longer a part of the single market.

Chapter 2
Regulation

Some EU rules impose more costs than benefits. But overall, European regulation does not prevent Britain from having one of the most lightly regulated economies in the OECD.

EU regulation is intended to create a single market, so that exporters do not have to comply with 28 different standards. After Brexit, if Britain wanted to continue to export to the rest of the EU, its exports would have to match EU standards.

'De-Europeanising' British regulation would not lead to large gains in economic output. Outside the EU, the government would find it difficult to repeal much EU environmental and labour market regulation, even if it wanted to. British workers would balk at losing their statutory right to paid holidays, for example. And if the UK joined the European Economic Area, or persuaded the EU to give it an à la carte relationship with the single market, the EU would insist that Britain continue to sign up to social and environmental rules.

Arguments over regulation are a central feature of the antagonistic British relationship with the EU. Many Britons think that continental Europeans are more inclined to regulate markets than the UK, and that as the EU itself has become so intrusive, the UK is subject to regulations that damage the economy by imposing large and mostly unnecessary burdens on British businesses. Some critics go further, arguing that the costs of regulation have become so great that they now outweigh the – as they see it – relatively modest benefits of single market membership.[31]

31: David Myddelton and others, 'Saying No to the single market', Bruges Group, January 2013.

The EU is to a large extent in the business of regulation. Some rules emanating from Brussels do indeed impose more costs than they confer benefits. The Commission, which proposes EU legislation, has made some progress on its 'better regulation' agenda, as the British government has acknowledged.[32] Nevertheless, its impact assessments are not always up to standard, and a respectable case can be made that some of its proposals conflict with the principle of subsidiarity.[33]

Still, Britain has the power to influence the regulatory process. The Commission proposes regulations and directives; and British MEPs and government ministers amend and vote on them at the European Parliament and Council, alongside representatives of the other member-states. Hence, it is important to build alliances. The British government, in common with Ireland and the Netherlands, the Nordics and some member-states in Central and Eastern Europe, is comparatively economically liberal, and is a sceptical participant in the EU's regulatory process. But many EU member-states have a greater appetite for regulating markets than the UK. The upshot is that the British government must sometimes implement EU rules that are more restrictive than those it would have chosen itself.

There can be no doubt that some EU rules impose more costs than benefits. For example, the cost of recycling waste electrical equipment, mandated by a 2012 directive, outweighs the savings from reduced landfill and recycled materials, according to an impact assessment by the British government.[34] And the Bank of England has found that capping bankers' bonuses at 100 per cent of their annual salary has increased risks in the financial system: banks find it more difficult to slash salaries than bonuses in a downturn, so mandating that bonuses make up a smaller fraction of pay makes banks more fragile.[35]

However, it is an extremely difficult task to add together the economic effects of all EU rules to calculate a 'net cost (or benefit) of Europe'. Some analysts have added up the costs and benefits of major EU regulations that can be found in UK impact assessments. Open Europe, for example, found that EU rules lead to marginally more benefits for the British economy than costs.[36] However, all impact assessments are highly uncertain estimations, and many do not calculate benefits, as these can be difficult to quantify.

32: UK government response, 'Stakeholder consultation on smart regulation in the EU', 2012.

33: Charles Grant and others, 'How to build a modern EU', CER report, October 2013.

34: Department of Business, Innovation and Skills, 'Waste electrical and electronic equipment system impact assessment', October 2013.

35: Marilena Angeli and Shahzad Gitay, 'Bonus regulation: Aligning reward with risk in the banking sector', Bank of England Quarterly Bulletin, Q4 2015.

36: Open Europe, 'Still out of control? Measuring eleven years of EU regulation', June 2010.

The method favoured by the EU's most trenchant critics can be crude: assign largely arbitrary, but invariably inflated costs to regulations; then imply that the UK would face none of these costs if it quit the EU.[37] It is a method designed to produce conclusions that have been determined before the exercise has been carried out.

To understand whether an EU exit would liberate the supply side of the British economy, one must establish why regulations exist in the first place; appraise the extent to which the EU has a legitimate interest in regulation; honestly assess the effects of EU regulation on British economic performance; and consider whether the UK would escape all the regulatory costs attributed to membership if the country chose to leave the EU.

2.1 Why the EU regulates

Regulations can and do impose costs on companies, and ultimately on consumers (because companies often pass on these costs). When they are badly designed, the costs of such regulations can be unnecessary and damaging. But there are legitimate reasons why governments regulate markets. Markets are not perfect: they sometimes fail, producing sub-optimal outcomes. An unregulated market may, for example, generate 'negative externalities' (such as pollution or congestion) because the social costs of activities are not borne fully by those who engage in them. In such cases, governments have a responsibility to intervene to correct the failure. If the end result is that a firm is made to 'internalise' social costs which it had previously managed to 'externalise', the fact that its costs have risen is no bad thing.

The EU also has legitimate reasons to be interested in regulation. One is the single market. Since all 28 member-states regulate their markets, and conflicting regulations can act as barriers to trade, the EU sets the common minimum standards that are necessary for mutual recognition – the animating principle of the single market – to work. This basic premise is widely misunderstood in the British debate. For example, one recommendation of the British government's 'Business taskforce on EU red tape', which was asked to find regulations to scrap, was to push for the full implementation of the EU's services directive.[38]

37: Tim Congdon, 'How much does the EU cost Britain?', UK Independence Party, 2012 and Taxpayers' Alliance, 'The great European rip-off : a background note explaining the new estimated total cost of the EU', March 2009.
38: Department of Business, Innovation and Skills, 'Cut EU red tape: Report from the Business Taskforce', February 2014.

But deepening the EU market for services would be impossible without more EU regulation. Services markets tend to be more highly regulated than markets in goods. Consumers find it more difficult to assess the quality of a lawyer than an apple before they make a purchase, so the state intervenes to ensure legal standards are high. Member-states would not allow foreign companies, operating under foreign rules, to provide services to their citizens without common standards at the EU level.

Confusion also reigns over the reach of EU regulation. Business for Britain, a eurosceptic business campaign, has suggested that UK companies which do not export to the rest of the EU should be exempt from EU regulation.[39] That would be unworkable: many UK firms who opt against exporting are still part of the single market: they compete for British customers with firms from elsewhere in the EU. Meanwhile, some companies do not export directly, but supply parts, components and services to firms that do. By exempting non-exporters from EU rules, the UK would effectively be withdrawing from the single market.

Another reason why the EU has a legitimate interest in regulation is that there are times when collective action at a European level may produce better outcomes than countries acting independently at a national level. In policy areas like climate change, for example, collective action at an EU level should, in principle at least, produce superior outcomes by reducing the opportunity for individual member-states to 'free ride'.

Nonetheless, the EU's member-states retain broad powers to regulate their economies. Some of the costs that firms complain about arise when national legislatures impose regulatory burdens over and above those required by EU legislation (a practice known as 'gold-plating'). And if the EU did not exist, member-states would have to make their own rules: it is misleading to imply that all the regulatory costs associated with EU legislation would simply disappear if the UK left the EU. British banks, for example, would not cease to be regulated. The regulatory burden on them might not even fall, because the era of 'light touch' financial regulation is over: UK standards are now often stricter than those required by the EU.[40]

In short, if a regulatory requirement in force in Britain is to count as a cost of EU membership, at least two conditions must be satisfied. First, it must be shown that its costs outweigh its benefits. And second, it must be proved that the UK would have no such requirements if it left the EU.

39: Business for Britain, 'Setting out the British option: Liberating 95 per cent of UK businesses from EU red tape', January 2014.

40: Philip Whyte, 'Britain, Europe, the City of London: Can the triangle be managed?', CER essay, July 2012.

2.2 The gains from 'de-Europeanising Britain'

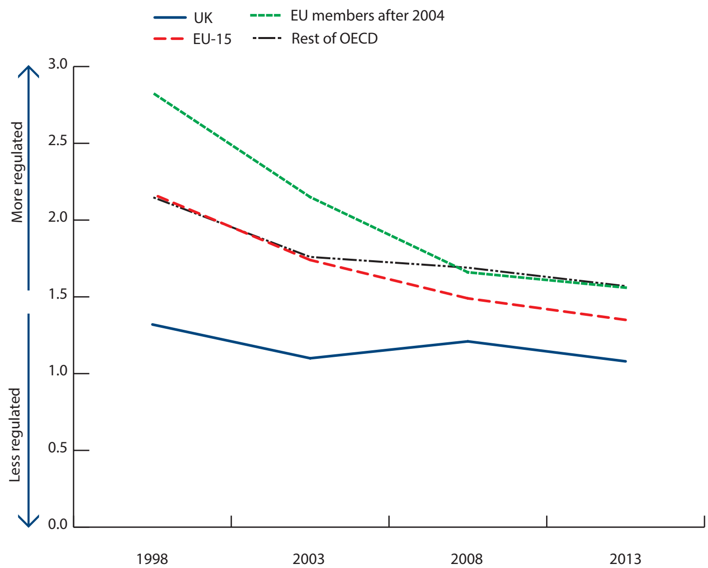
How large might the gains of 'de-Europeanising Britain' be? There are four reasons to believe that they would not be as large as critics of EU membership imply: the EU does not impose rigid harmonisation upon its member-states' economies; some of its most iconic directives, such as the 'working time directive', are not as costly as its opponents argue; the largest supply-side constraints on the British economy are the result of domestic policy failures; and Britain, out of necessity, would be likely to retain many EU rules even if it left the Union.

If Britain quits the EU, it could in theory be free to regulate its own product and labour markets as it sees fit (although if it wanted to continue to export to the continent, its firms would have to match many European standards). There may be some benefits from less costly rules in some sectors. But the comparative indices of the OECD for product and labour market regulation show that British markets are already among the least regulated in the developed world.

Rules at the EU level are designed to create common standards in order to make products more tradable: a lawnmower made in the UK can be sold in Germany without having to be manufactured according to German specifications, for example. Chart 2.1 shows the overall level of product market regulation for the UK, the EU-15, the newer EU states, and the rest of the OECD. EU rules do not appear to impose rigid harmonisation on the union as a whole: under EU directives, member-states are able to impose higher standards on their own firms if they wish. And over time, the level of regulation in other member-states has converged on Britain's liberal approach, rather than the other way round. It is hard to argue that Britain's product and services markets are highly regulated as a result of EU membership.

Chart 2.1: Levels of product market regulation

Source: OECD.



The same story broadly holds true for the labour market (see Chart 2.2). The OECD's indices of employment protection legislation show a greater level of diversity among the countries surveyed, with continental European countries embracing markedly higher levels of employment protection than the English-speaking countries outside Europe. So where does this leave the UK? The answer is that membership of the EU does not prevent the UK from belonging firmly to the Anglophone camp. According to the OECD's indices, employment protection legislation is only slightly more restrictive in the UK than it is in the US or Canada, and less so than in Australia. It is, of course, much less restrictive than in continental European countries like France or Spain.

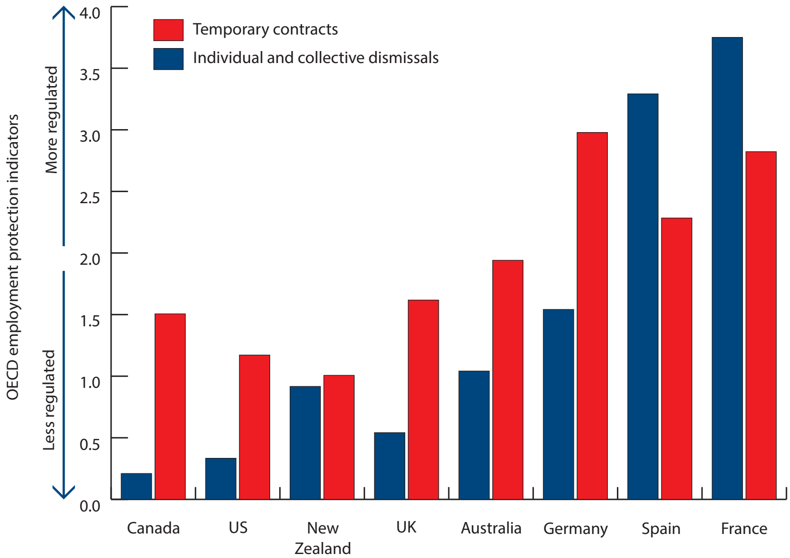


Chart 2.2: Levels of employment protection

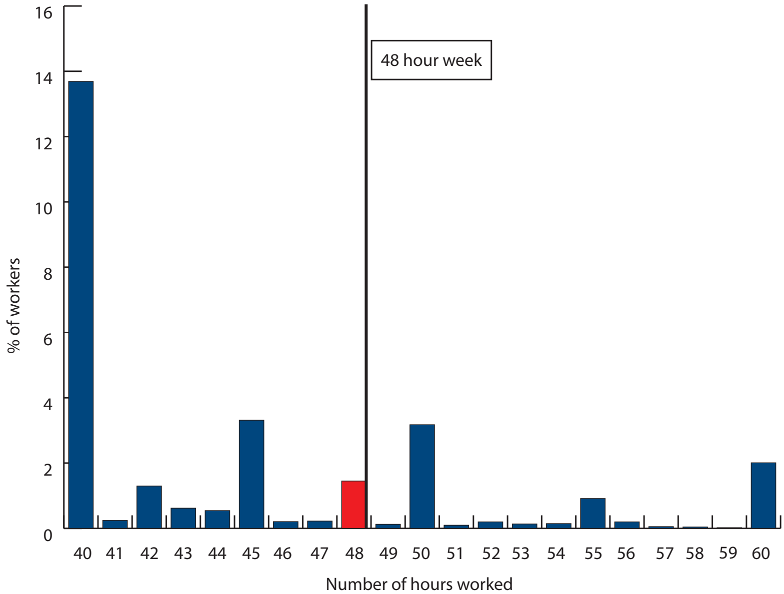
Source: OECD employment protection indicators.

Some totemic EU rules, such as the 'working time directive', have a surprisingly limited impact. This directive violates the principle of subsidiarity: there was no need to regulate working hours or conditions at EU rather than national level, because there was little evidence that EU member-states were trying to steal a march on others by driving down labour standards. Working hours across the EU were in decline even before the introduction of the directive.[41] Nonetheless, the working time directive's negative effects are marginal at best, not least because of the opt-outs the UK has negotiated.[42] Chart 2.3 shows how many British people work more than 40 hours per week. There is a spike at 40 hours: 14 per cent of British workers work 8 hours a day. There are further spikes at 45, 50, 55 hours and so on (because people tend to work 9, 10 or 11 hour days, five days a week). But there is also a spike at 48 hours – the working time limit under the directive. This is evidence that it has an impact on the labour market: there is no other reason why a larger proportion of people work 48 hours rather than 46. But the spike is small, making up only 1.5 per cent of workers. It follows that the gains in economic output that would flow from the abolition of the working time directive would be small: at best, 1.5 per cent of British workers may work a few more hours a week.

41: European Trade Union Confederation, 'Trends in working time', 2010.
42: Katinka Barysch, 'The working time directive: What's all the fuss about?', CER policy brief, April 2013.

Chart 2.3: The British working week, 2013

Source: CER analysis of the UK Labour Force Survey.



The other bugbear, the 'agency workers directive', has also had a surprisingly modest impact. The rules, which came into force in 2011, give employment agency workers the right to the same pay, holidays and working conditions as equivalent permanent workers once they have worked for the same company for 12 weeks. Before it came into force, businesses and the Conservative leadership warned that it would make companies less willing to take on agency workers. But between 2011 and 2015, the proportion of temporary workers who found work through an agency grew from 19 to 20 per cent: the regulations did not lead employers to switch from agency temps to other temporary workers.[43] Chart 2.4 shows that agency employment continued to climb after the rules came into force. The chart also shows that businesses continued to make use of a loophole that allows an exemption from the right to equal pay if workers are formally employed by the agency, not the company they are working for. Two-thirds of agency workers are employed in this way. The largest potential cost of the regulations – equal pay – therefore only applies to a minority of agency temps.

All this suggests that the most valid criticism one can make of the working time and agency workers directives is that, thanks to opt-outs and loopholes, they fail to meet their stated objectives.

43: Office of National Statistics, 'Temporary employees' data, November 2015.

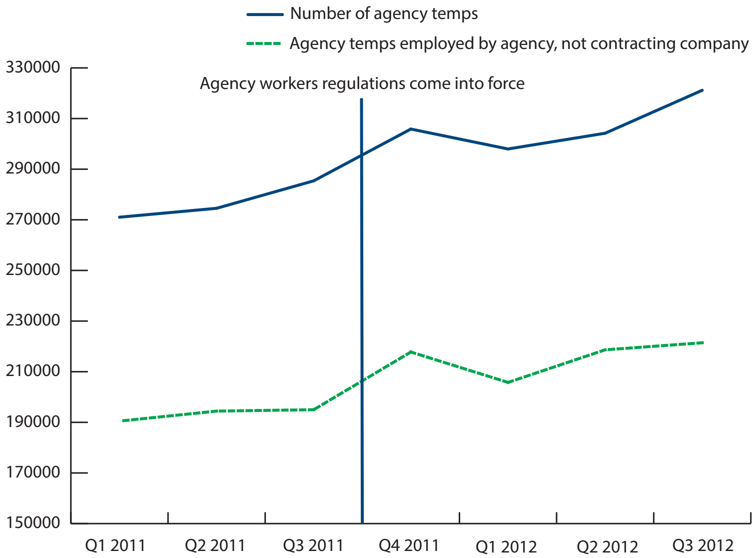


Chart 2.4: The impact of the agency workers directive

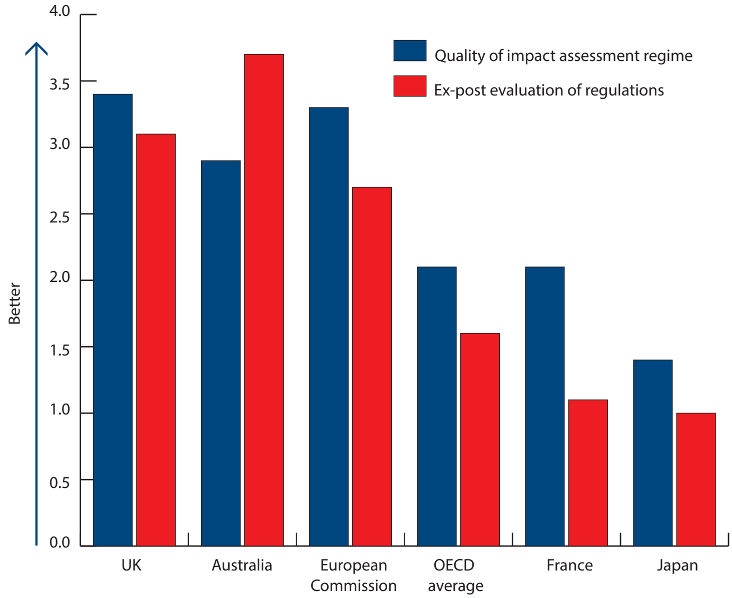
Source: Chris Forde, 'The effects of Agency Workers Regulations on agency and employer practice', ACAS, 2014.

Alongside its labour and product market indices, the OECD has compiled an index of the quality of countries' regulatory regimes (Chart 2.5). Open Europe has argued that after conducting impact assessments, the EU fails to drop many of its proposed laws, and that the quality of the assessments are poor.[44] But the OECD tested the European Commission's rule-making process alongside those of other countries, and found that it is of better quality than the OECD average – and similar to that of UK and Australia, which the OECD ranks highest. There can be little doubt that some proposals are forced through the EU's legislative machinery without proper assessment of the potential costs, but it is not clear, on the basis of the OECD's index at least, that the EU does this more than the UK itself.

44: Open Europe, written evidence to House of Lords, 'Impact assessments in the EU: room for improvement?', March 2010.

Chart 2.5: The quality of regulatory regimes

Source: OECD.



At a macroeconomic level, then, any gains from leaving the EU are likely to be limited: a bonfire of European rules would not transform Britain's economic prospects. European rules are not major supply-side constraints upon the British economy: according to the OECD, the largest of these constraints are the result of poor domestic policy.[45] The OECD is especially critical of Britain's rigid planning rules and its restrictions on making land available for development. These rules help to explain why, despite rapid growth in the population, housing construction is running at half the level of the 1960s; why the average size of British houses is smaller than anywhere else in the EU-15, bar Ireland; why office rents are the highest in the EU; and why Britain's transport infrastructure is so congested and expensive to build.[46]

The OECD also criticises Britain's education system, which is a vital public good, given the importance of human capital to economic prosperity. The UK's record in this area is patchy. It has assets, such as the best of its universities, which are world class. But its rates of literacy and numeracy at age 15 are only around the EU average, as are its rates of graduation from secondary education. Add to this the longstanding weaknesses in vocational training, and the result is that Britain has a comparatively large number of people with low skills – a failing that constrains Britain's labour supply to a far greater degree than EU employment rules.

45: OECD, 'Going for growth country notes: United Kingdom', 2013.
46: Simon Tilford, 'Why British prosperity is hobbled by a rigged land market', CER Insight, 2013; Eurostat housing size data and Royal Institute for British Architects, 'The case for space: The size of England's new homes', 2011.

Is it not possible that the UK could become more attractive as an investment location if it quit the EU? Outside the Union, would the British authorities not be free to reduce the cost of doing business in the UK, by lowering social and environmental standards, for example? Britain would certainly be freer to introduce less onerous regulatory requirements for new technologies, such as nano-technologies, the life sciences, genetically modified agriculture, space vehicles and interactive robots. This could increase the attractiveness of the UK as an investment location for these sorts of activities.[47]

There may, therefore, be some gains from more relaxed standards in particular sectors, especially in technologies that may drive up productivity. But any small benefits that arose from better regulation must be set against the costs incurred by British exporters and the loss of foreign investment that would result from leaving.

Besides, it is far from certain that Britain would reduce most environmental and social standards after an exit. After all, some environmental standards in the UK are more stringent than those required by the EU. Britain has, for example, introduced a far more ambitious system of carbon pricing than that countenanced by the EU as a whole. And any UK government would face fierce domestic opposition to further erosion of labour and social standards. It could, of course, choose to live without any equivalent to the EU's working time directive, but it would be a brave government that explained to Britons why they should lose their statutory right to four weeks' paid holiday a year.[48]

Finally, in order to maintain access to EU markets, Britain on the outside would have to sign up to many of the EU's rules. As a non-participant in the EU's institutions, it would have little say over the rules' drafting – and without the UK's liberal principles informing the regulation-setting process, EU rules may be more restrictive than they are now.

Thus the claim that leaving the EU would be a supply-side liberation for the economy is wishful thinking. The truth is that the factors that weaken Britain's long-term economic growth are overwhelmingly domestic, not European; the impact on output from repealing European legislation would be minimal; and the economy's supply capacity would be impaired if divergent regulations between the EU and the UK curbed trade and investment.

47: David Willetts, 'Eight great technologies', Policy Exchange, 2013.
48: Katinka Barysch, 'The working time directive: what is all the fuss about?', CER policy brief, May 2013.

Chapter 3
The City of London

The City of London would not collapse in the event of Brexit. Its central role in foreign exchange and securities trading, in insurance and asset management, and in financial law and accountancy services would continue, and it would remain the location of choice for many leading private equity and hedge funds.

But some activity would be lost and the costs of an EU exit would outweigh the (largely illusory) benefits of sovereignty over financial regulation. Non-members must either match EU standards, or lose access to the single market.

If Britain quits the EU, it will no longer have recourse to the European Court of Justice to defend itself against eurozone attempts to repatriate financial activity from London. And it will no longer be able to influence the direction of EU financial regulation.

The City of London's[49] pre-eminent position as a European financial centre pre-dated Britain's accession to the EU, but has increased since the country joined. Until recently, EU membership was mostly perceived as a boon to the UK's financial services industry. Not only did it allow London to market itself as a bridgehead to non-EU financial institutions wanting to serve the wider European market; it also allowed continental European banks to concentrate most of their wholesale activities in London. Wholesale finance consists of lending, borrowing and trading between financial institutions, rather than between banks and their customers. Fears that the City of London's position as a financial centre would be gradually eroded if Britain did not join the eurozone have not materialised: to date, the City has thrived outside the currency union.

49: In this chapter, we use 'the City of London' as shorthand for UK financial services. A good deal of activity takes place outside the capital – although the great majority of wholesale finance, the main subject of this paper, is located in London.

Relations between Britain, the City of London and the EU have, however, become more complicated since the financial crisis. Before 2008, British governments could assume that what was good for the City was good for Britain and the rest of the EU. The EU's efforts to remove barriers to trade in financial services were supported by British governments and the City. And while some member-states resented the fact that Europe's largest financial centre was outside the eurozone, British governments could plausibly claim that the City was a European asset whose success was vital to continental European prosperity.[50]

Since 2008, however, any sense of harmony has broken down. In the UK, public attitudes to the City have hardened. Traditional claims made on the City's behalf about its contribution to British jobs, tax revenues and export earnings now have to be set against the costs imposed by the financial crisis, as well as the impact of repeated scandals on the City's reputation for probity (Libor rate-fixing and the mis-selling of financial products being the most infamous). Few people still believe that the interests of the British state and the City of London naturally coincide. Indeed, Britain has led the way in tightening the regulatory screws on finance.

In continental Europe, several factors have conspired to upset the previous balance. First, the financial crisis has generated pressure to regulate finance – particularly firms, products and practices considered to be typical of financial capitalism in its most unrestrained, 'Anglo-Saxon' form. Second, the design flaws exposed by the eurozone crisis are forcing deeper levels of integration in the currency union (reducing British influence in shaping financial regulatory policy at the EU level). Third, the European Central Bank (ECB) tried – and failed – to force some euro-denominated business to be cleared in the eurozone, rather than in London.

Against this backdrop, this chapter assesses the extent to which EU membership has been of benefit to the City, and how the eurozone's banking union or a British exit from the EU might imperil the City's position as Europe's pre-eminent financial centre. First, it examines the drivers of the City of London's growth and its integration with the EU's financial system; it then provides an analysis of the implications of the banking union for London's status as Europe's dominant financial centre; and, finally, it specifies what forms of financial activity might be put at risk if Britain were to leave the EU.

50: Philip Whyte, 'Britain, Europe and the City of London: Can the triangle be managed?', CER essay, July 2012.

3.1 How the City of London came together

Declining transport and communication costs have driven globalisation. But their impact across economic sectors has not been uniform. In manufacturing, for example, supply chains have displayed a tendency towards increased geographical dispersal across the globe. In finance, by contrast, the reverse has often been the case: lower communications costs have coincided with financial services – and wholesale financial services in particular – becoming increasingly concentrated in a small number of 'global cities'.[51] The City of London has been one of the principal beneficiaries of this trend.

In the 1960s, the City of London was still predominantly an international centre for sterling-based transactions. It has since evolved into a genuinely global financial centre, making markets in multiple currencies and providing the full gamut of financial services across borders – from securities and currency trading to bank lending, asset management, insurance, derivatives, trade and maritime finance, and so on. In so doing, the City has carved out for itself a special role in the European time-zone – not just as a hub between Europe, Asia and the US, but also as a provider of services not found elsewhere in Europe.

Although Britain's share of global GDP has declined to about 4 per cent, the City of London itself has become the location for a disproportionate share of financial activity. Globally, the UK accounts for 46 per cent of the market in over-the-counter (OTC) interest rate derivatives and 37 per cent of turnover in foreign exchange. In Europe, the City's size is even more marked: it boasts a higher share of euro-denominated foreign exchange trading than the eurozone, and accounts for 85 per cent of hedge fund assets under management, over 70 per cent of OTC derivatives traded, and 51 per cent of marine insurance premiums.[52] These markets are huge: in some cases annual turnover amounts to hundreds of trillions of US dollars.

Historically, a number of factors have attracted all this activity to the City of London. A non-exhaustive list would include, in no particular order, the following 'pull' factors:

★ The predictability of the legal system.

★ The international status of the English language.

51: Saskia Sassen, 'The global city: New York, London, Tokyo', 1991.
52: TheCityUK, 'UK and the EU: A mutually beneficial relationship', June 2013.

★ A generally accommodating regulatory environment.

★ A critical mass of expertise, both in finance and in ancillary services such as accountancy and law.

★ A tradition of openness to foreign firms and migrants.

★ The perceived integrity of London's markets and participants.

★ A market infrastructure able to support high levels of financial activity.

These 'pull' factors can combine to form a virtuous circle. For example, an international bank's principal reason for moving to London might be the legal system and the market infrastructure already in existence. But by setting up in the City, it brings more skilled workers, which provides more talent for the pool of labour. This renders the City more attractive to other banks.

The City also benefitted from the decision by governments to dismantle controls on the flows of cross-border capital in Europe, in which the development of the single market for financial services played a role. After the breakdown of the Bretton Woods system in the 1970s, the United States, Germany, Canada and the UK unilaterally removed controls on foreign capital. But capital controls were only removed at the EU level in 1988, after the introduction of the single market programme.

As part of that programme, the EU's introduction of the single banking licence allowed a bank based in one member-state to set up a branch in another, yet continue to be regulated by authorities at home. Member-states agreed to common prudential and regulatory minimum standards, to try to prevent a 'race to the bottom'. Nevertheless, the impact was largely deregulatory: countries with higher levels of regulation feared that they would lose financial activity to less regulated financial centres, and so they reduced restrictions on the trading of shares and securities, foreign direct investment in the financial sector, and bank mergers and acquisitions. By 1998, all EU member-states had opened their financial sectors to the degree that the US, Germany, the UK and Japan had in the 1970s and 1980s.[53]

53: According to an index collated by Menzie Chinn and Hiro Ito, based upon IMF measures of financial openness. See their 'What matters for financial development? Capital controls, institutions, and interactions', Journal of Development Economics, 2006.

In 1999, the introduction of the euro provided a further spur to financial integration. The City of London became the largest financial centre for euro-denominated trading, despite the UK choosing not to join the single currency. The British government won access to the eurozone's payments system, TARGET, for banks based in the UK, and in so doing established the principle that institutions based in the single market, but not in the eurozone, should have equal rights to conduct transactions in the common currency.

The principal effect of EU membership for the City has been to provide new European markets for banks and other financial firms based in the UK. But most of the increase in cross-border finance has been conducted in wholesale markets – between financial institutions themselves, rather than between banks and consumers. London is the EU's largest wholesale financial centre, and the rest of the EU has an interest in its financial stability. Furthermore, the euro crisis has prompted the single currency's members to set up a banking union, to shore up a shaky eurozone financial system, and prevent a loss of confidence in a country's banks from leading to a loss of confidence in its government and vica versa. The tension between financial regulation designed to strengthen the eurozone, and the UK's interest in the single market for financial services, has important implications for the UK's decision whether or not to remain in the EU.

3.2 The City's role in the European financial system

The rationale for the fourth freedom of the single market – the free movement of capital – is twofold. First, by allowing financial institutions to move into new markets, it is intended to raise the level of competition, and so drive down prices for consumers. Second, international capital flows allow savings to go to where they may be most profitably invested, giving savings-constrained but potentially fast-growing countries more capital to invest.[54] How much integration has occurred in retail and inter-bank markets, and with which economic consequences?

Retail markets

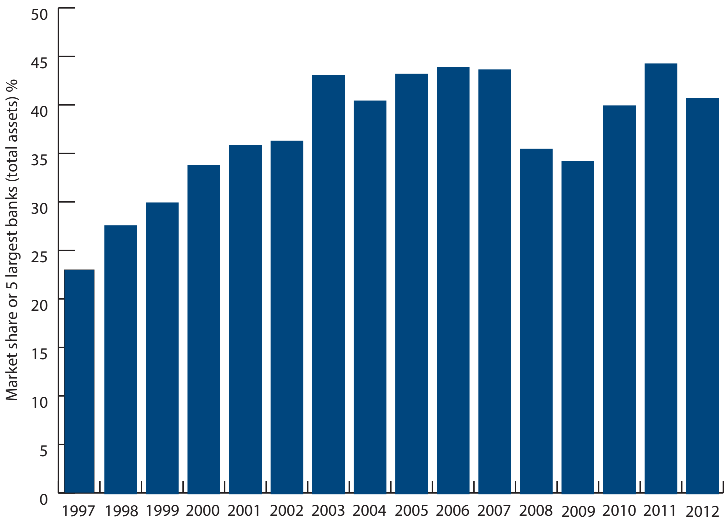
The single market programme has not transformed Britain's retail banking market, which remains highly concentrated in recent years, not less. Four large banks became dominant mortgage and business lenders in the decade before the financial crisis: HSBC, Barclays, Lloyds

54: See, for example, Dirk Schoenmaker and Wolf Wagner, 'The impact of cross-border banking on financial stability', Tinbergen Institute Discussion Paper, 2011; Claudia Buch and others, 'Cross-border diversification in bank asset portfolios', International Finance, 2009; and Barba Navaretti and others, 'Multinational banking in Europe: Financial stability and regulatory implications', Economic Policy, 2010.

and Royal Bank of Scotland. A series of mergers and acquisitions led to a less diverse banking sector, and the market share of the largest banks rose between 1997 and 2007. Since the crisis, the Spanish bank Santander has increased its share of the British retail market by taking over three smaller banks, and Lloyds was broken into two by the government after its bail-out in 2009. But retail finance now exhibits similar levels of concentration to those seen immediately before the crisis (see Chart 3.1).

Chart 3.1: Five largest banks' share of the UK market, 1997-2012

Source: European Central Bank.



Wholesale markets

For Britain, the biggest impact of the single market has been on the City of London as an international financial centre. The development of the single market, as well as the reduction in barriers to capital flows across the developed world, led to larger cross-border flows of savings looking for investments, and the growth of European bond and equity markets. The British government and its officials were leading advocates for the single market programme, and were among its chief architects: the advantages of a liberalised European financial system for the City of London were obvious. UK-based banks now preside over a quarter of all EU banking assets and value-added in financial services.[55]

55: International Monetary Fund, 'Technical note on financial integration and fragmentation in the European Union', March 2013; Bank of England, 'EU membership and the Bank of England', October 2015.

As well as being the global financial centre in the EU, the City of London is also at the centre of the eurozone's financial system. UK-based banks' transactions grew faster with the EU than with the rest of the world between the euro's inception in 1999 and the start of the financial crisis (Chart 3.2). Since the eurozone got into difficulty, however, UK bank lending, particularly to countries in the eurozone's so-called periphery, has fallen sharply (see Chart 3.3).[56] A significant part of the financial integration seems to have been cyclical, rather than structural. Before the crisis, EU banks under-priced macroeconomic risks in the eurozone's periphery, by failing to consider what might happen if their current-account deficits proved unsustainable, and paid the penalty. (A current-account deficits mean that a country is borrowing from abroad and when foreign lending dries up, its current account is forced back towards balance.)

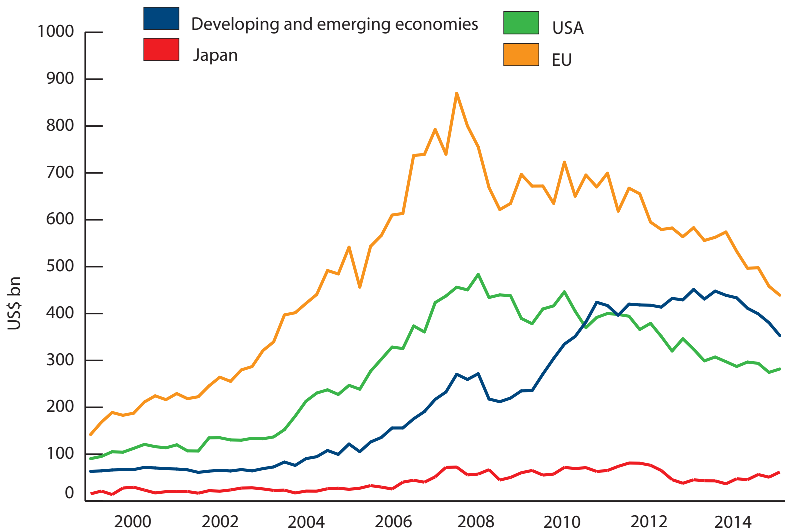


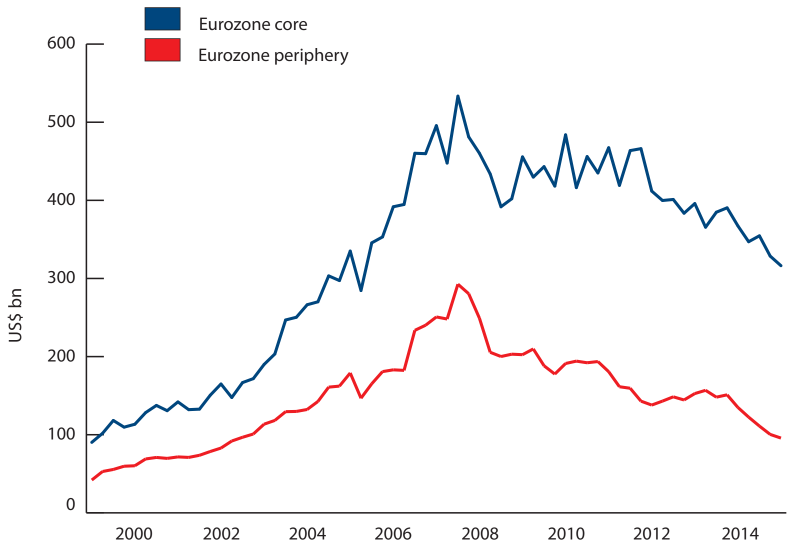
Chart 3.2: UK banks' international lending, 1999-2015

Source: Bank of International Settlements.

56: The 'peripheral' eurozone countries in this chart are Greece, Italy, Ireland, Portugal, Spain, Cyprus, and Malta, as well as the new euro members from Central and Eastern Europe, Estonia, Latvia, Lithuania, Slovakia and Slovenia.

Chart 3.3: UK lending to the eurozone core and periphery, 1999-2015

Source: Bank of International Settlements.



Despite the decline in cross-border lending since the start of the euro crisis, the City remains at the heart of the eurozone's financial system, and is highly integrated with the US. The US and the rest of the EU have an interest in ensuring the City's financial stability, and vice versa. Indeed, international regulation is being harmonised and strengthened. The UK, the EU and the US are becoming less tolerant of financial centres outside their jurisdictions that may impose risks on the financial system as a whole.

As the City of London is at the core of Europe's financial system, but sits outside the eurozone, some compromise between the UK's single market interests and its desire for regulatory sovereignty on the one hand, and the eurozone's financial stability on the other, must be found. The free movement of capital within the EU's financial system requires member-states to share sovereignty over financial regulation. But both the UK and the eurozone need some flexibility to ensure the stability of their financial markets. The resulting conflict between the eurozone's banking union and the City as Europe's largest financial centre will continue to dominate the EU's regulation agenda. But will the banking union render the UK's position in the EU untenable?

3.3 The City and the eurozone

There is a trilemma in international financial economics – between financial stability, internationalised finance and national sovereignty.[57] It is possible to have two of these options, but not three. Financial stability and cross-border finance require rules that are agreed internationally. Equally, poorly co-ordinated national rules together with globalisation of financial markets can result in financial instability. After the crisis, the member-states of the EU, and those of the G20, recognised that international rules were too lax before 2008, and that national regulatory competition to give financial centres a competitive advantage increased threats to the stability of the global financial system.

Britain faces the same trilemma as other countries, but more acutely, since it is home to one of the world's largest financial centres, and is outside the eurozone, but inside the EU. It could seek to leave the EU, and then engage in regulatory competition to encourage more financial firms to set up in the City – but at the risk of reducing financial stability. Other countries would inevitably argue that the City threatened the stability of the world's financial system, and would seek to reduce the threat by preventing British-based banks from having access to their markets.

The eurozone has recently pooled sovereignty over banking supervision – and, to a lesser extent, over the closure or rescue of failed banks – in a banking union.[58] The UK's position on the banking union is that it is necessary to put the eurozone on a more stable footing. But Britain also wants to maintain some regulatory sovereignty, despite the City's role as a eurozone financial centre, and protect the UK's interests in the single market for financial services.[59]

Thus, if the City is to remain open to international capital flows – with its banks having access to international inter-bank markets, its investors buying financial assets in other countries, and its hedge funds providing investment services for international clients – then it must be willing to cede some sovereignty over financial regulation.

As it happens, British regulators have shown little desire in recent years to design regulation to give the City a competitive advantage. Before the crisis, the Financial Services Authority was legally required to consider the City's competitiveness when drafting rules. This

57: Dirk Schoenmaker, 'The financial trilemma', Economics Letters, 2011.
58: Nicolas Veron, 'Europe's radical banking union', Bruegel, May 2015.
59: Philip Whyte, 'What a banking union means for Europe', CER essay, December 2012.

is no longer the case: Britain has, in many ways, been leading the charge towards stricter prudential regulation. The authorities have forced banks to raise capital and to hold more liquidity; banks are now required to draw up recovery and resolution plans (so-called 'living wills'); and the government has agreed to implement most of the recommendations of the Vickers Commission, which will force banks to ring-fence their retail operations from their trading and investment arms.[60]

By contrast, many EU countries have been slower to force their banks to raise capital. The EU directive that aligns the way in which failed banks should be resolved was agreed at the end of 2013, well after British rules had been changed, and was fully implemented only by January 2016.[61] The British considered it a success for their resolution system, which already included many of the same provisions that the EU directive requires.[62] And the EU is more slowly implementing the 2012 Liikanen Report, which sought to ring-fence banks' deposit-taking business from more risky trading activities. Britain's banks have already submitted their ring-fencing plans to the Bank of England.

This is not to say that all recent EU proposals have been welcomed by the City – or the UK government. The draft Alternative Investment Fund Managers Directive (AIFMD), when it was originally proposed by the Commission in 2010, imposed limits on the ability of non-European funds to provide services in the EU. These funds had little to do with the financial crisis, many Britons argued, and the UK government successfully pushed for some (but not all) of the restrictions in the directive to be eased.

The ECB has also tried to force clearing houses that settle large volumes of euro-denominated trades to relocate to the eurozone. In 2011, the British government took the ECB to the European Court of Justice (ECJ) over its location policy, arguing that the move violated single market principles. The ECJ ruled in the UK's favour in March 2015. Britain also went to the ECJ over a plan by 11 eurozone member-states to introduce a financial transactions tax – a small tax on financial trading – and over the EU's decision to place limits on the size of bank employees' bonuses. In the former case, the ECJ ruled that it was too early for it to make judgement as the tax had not come in to force, and in the latter case the Court decided against the UK's claims.

60: Independent Commission on Banking, 'Final report', September 2011.

61: Formally, the Bank Recovery and Resolution Directive (BRRD) entered into force on July 2, 2014. Member-states had until the end of 2014 to adopt the necessary laws, so that they could take effect from January 1, 2015 – with the exception of private creditor bail-in provisions, which entered into force in January 2016.

62: Deloitte, 'European requirements on recovery and resolution', June 2012.

In March 2014, the EU reached agreement on the establishment of a banking union. The ECB has taken over the supervision of the 130 largest banks in the currency union, and has the option to supervise smaller banks if it deems that necessary to guarantee financial stability. The eurozone also agreed to a common framework for the resolution of failed banks, but the provisions for closing one are complex, requiring assent from the ECB, the Commission and the member-states. The common fund to finance the closure of banks is small and will take eight years to reach full capacity. And the participating governments have failed to agree on common European deposit insurance, in the teeth of firm German opposition.

This leaves the UK in a potentially uncomfortable position: the eurozone financial system, while more stable under the current structure than it was before, still poses risks to the European economy, the UK included. But supervisory authority will be concentrated in the hands of the ECB, which will thereby wield considerable influence on supervisory and regulatory policy throughout the EU. The British government fears that financial regulation will be made to satisfy the interests of the eurozone, rather than the EU as a whole.

There are certainly areas in which it is easy to envisage conflict. The resolution of a eurozone headquartered bank with large operations in the City of London is one. The eurozone and the UK government may have opposing interests when it comes to resolution: eurozone authorities will seek control of the bank's assets, even if a part of its balance sheet is under the Bank of England's jurisdiction. There are unresolved questions about how banks that get into trouble in London will access ECB liquidity – the conflict at the heart of the ECB's drive to pull euro activities into its remit. Eurozone member-states may also seek to impose caps on the exposure of a eurozone bank to its sovereign, in an attempt to break the link between governments and banks. They might demand that UK banks do the same, to level the playing field.

However, these moves would hardly amount to an unbearable threat to the City's competitiveness – and hence a reason for Britain to leave the EU. The regulatory focus on both sides of the Channel has been on bank safety; and the difference in regulatory philosophy between the UK and the eurozone is not as wide as is often implied. There have been few attempts to roll back the freedoms of the single market, and when there have, as in the case of the ECB's location policy, the UK has recourse to the ECJ because it is an EU member.

For its part, the financial transactions tax may never come into being, since the participants are divided on how comprehensive it should be, and the Council's legal service has concluded that the tax infringes EU treaties. After Estonia pulled out of the planned tax in December 2015, there are now only ten countries pursuing it, dangerously close to the threshold of nine member-states that must participate for the tax to be legal under the EU's 'enhanced co-operation' procedure. On April 30th 2014, the ECJ ruled that the British government's case against the tax was premature, as the member-states involved had not yet decided on how the tax would work. Yet the judges said that this did not stop another challenge once the details had been finalised.

The British government has also won a 'double majority' voting system in the European Banking Authority (EBA), which is an important institution in setting financial market rules for the EU. Under the system, some measures require a majority of both eurozone members and those outside the currency union. If more EU member-states join the euro, such that there are only four euro-outs left, the voting rules will be revisited, as it would end up granting the outs disproportionate power over financial regulation. But most of the nine non-eurozone member-states (including Denmark, Sweden, Poland, the Czech Republic) will not join the single currency for many years, if ever, and in the medium term, the double majority system will help prevent eurozone interests from assuming precedence over those of the single market.

The February 2016 deal that concluded Britain's renegotiation of its EU membership provided further safeguards against the eurozone compromising the integrity of the single market. The deal explicitly outlaws discrimination based on the official currency of a member-state, and underlines that financial regulation may need to be more uniform in the eurozone than across the EU as a whole.[63] It mostly reflects the pre-existing political and legal reality and does not provide the UK with more power over the future direction of financial regulation at the level of the EU. No doubt there will be further clashes between the UK and the eurozone in the future. But the deal provides the basis for a compromise solution to Britain's financial trilemma. Britain and the EU have agreed to share sovereignty where necessary to create a common market with shared institutions and rules to

63: Charles Grant, 'Cameron's deal is more than it seems', CER Bulletin 107, April/May 2016.

safeguard financial stability, while preserving some sovereignty for the UK where European integration is not essential.

The days when the UK set the agenda on EU financial regulation are over. Eurozone policy-makers will focus on the single currency's financial stability, and extending the single market will be less of a priority. This may make life uncomfortable for Britain in some ways, but it is difficult to argue that eurozone financial integration poses a major threat to the City. Insofar as it makes the European financial system safer, it is to be welcomed.

3.4 The City and Brexit

The financial trilemma set out above makes clear that Britain cannot have full sovereignty over financial rules and play host to a European – and global – financial centre at the same time.

The UK has a strong comparative advantage in financial and related business services, and generates a large trade surplus in this sector. It is in ordinary times an important source of tax revenue for the British treasury, although the cost of recapitalising the banks in the aftermath of the financial crisis has revealed the size of taxpayers' exposure to banks that are too big to fail. It is perhaps unrealistic to expect Britain not to seek regulatory advantage for a major exporting industry based within its borders. But it is likely that, upon leaving the EU, the City of London would be less open to the rest of the world, not more, unless it signed up to EU financial rules – and even then, access to the EU's internal market would be restricted.

Advocates of a British exit believe that it would not be a disaster for the City. This is probably true. Much of the City's business is global, rather than merely regional. It is the world's largest centre for foreign exchange trading. And, like New York and Tokyo, it is a hub for trade in securities for firms all over the world.

Upon exit, there might be some competitiveness gains for the City if the UK rescinded those rules that it considers damaging. The 2013 EU rule limiting bankers' bonuses to twice their annual salary would be one. Britain might choose lower capital requirements for insurers than the EU has imposed under the Solvency II directive. But the EU is in the process of reviewing its post-crisis regulations. Some changes to Solvency II have already been made to lower the capital requirements for certain types of assets. Thus Britain's regulatory costs may not be much lower outside the EU.

Moreover, marginally lower regulatory costs would have to be set against reduced access for City-based firms to EU markets. In any withdrawal negotiation with the EU, the UK would have to make a bargain, because the EU insists that, in exchange for access to EU markets, so-called third countries – those outside the club – must have regulation and supervision of their financial sectors that is equivalent to that of the EU.

The Markets in Financial Instruments Directive (MiFID II), which came into force in July 2014, allows third-country firms to sell services to professionals and other institutions in the EU directly only if the European Commission determines that the legal and supervisory regime of the third country is broadly equivalent to the EU's. The exporting firm must also be on the register of permitted third country firms at the European Securities and Markets Authority (ESMA). During the negotiations over MiFID II, amid strong pressure from the British government, the Commission's original proposal for testing the equivalence of regulation was watered down. This had insisted upon 'line-by-line' equivalence tests for third country rules. In its final, agreed form, the test is whether the regulatory outcomes (rather than the regulation itself) in third countries are equivalent.[64]

MiFID II also mandates that third-country firms must set up a branch in member-states to sell services to ordinary consumers if regulators so demand. This branch must be regulated and supervised by that firm's home authorities, in co-operation with the supervisors of the host country, with which a co-operation arrangement must exist. The branch will also have to meet EU capital requirements.

If Britain were such a 'third country', the costs of doing business in the EU would increase for both British and foreign-owned institutions operating in the UK. This would have an impact on decisions about where to locate some of their activities:

British financial institutions. For British banks to continue to be able to sell investment services or retail products to clients in the EU, British rules and supervisory requirements would have to be deemed equivalent. And as a non-member, the UK would not have the power to stop the EU tightening the rules on third country access by insisting upon line-by-line

64: Norton Rose Fulbright, 'MiFID II / MiFIR series: Third countries', October 2014.

equivalence tests. There would be a substantial risk of it losing access to the single market, or have to sign up to EU rules without any say in how they were drafted, in order to preserve some access.

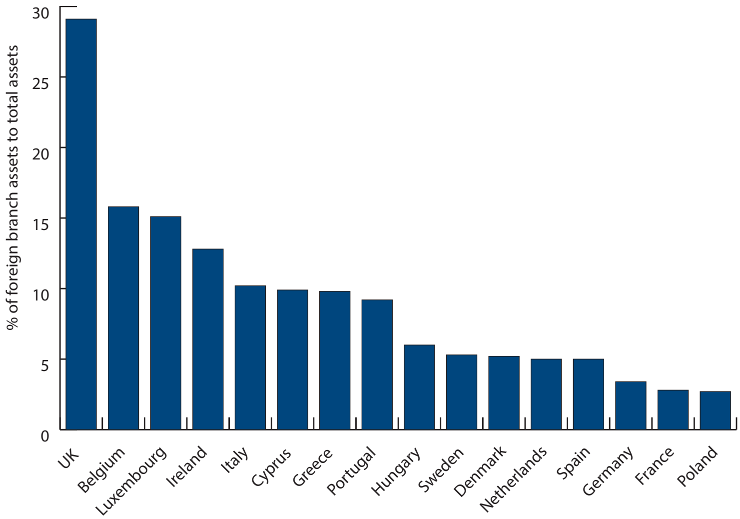
European banks in London. EU banks and other European financial institutions based in London may also face higher costs in trading with the EU. Many choose to establish branches, rather than fully capitalised subsidiaries supervised and regulated by the UK authorities, because it reduces funding costs (see Chart 3.4). Each subsidiary must comply with the capital and liquidity rules of the country it operates in, which makes intra-bank transfers of funds difficult. Branches need only comply with their home country rules, and are supervised jointly by their home authorities and those of their host.

Banks from the rest of the world. The UK could, of course, still allow EU banks to set up branches in London and recognise EU member-states' rules as equivalent to its own. But banks from outside the EU – alongside British banks – might lose their EU banking 'passport', meaning that they would no longer be free to set up a subsidiary in London and then branch out to other EU member-states. In order to use a banking 'passport', a non-EU bank must set up a subsidiary somewhere in the EU. To continue to maintain a range of operations across the EU, they would have to set up another subsidiary, probably in Paris, Dublin or Frankfurt. And they would have to satisfy three regimes under MiFID II: that of their home country; any further supervisory requirements that the British authorities required as a condition for setting up a subsidiary in London; as well as the supervisory requirements of the EU member-state in which they established their EU subsidiary.

It is impossible to know with any sort of precision how large an impact a British exit would have on the location decisions of non-EU banks, as much depends upon future EU decisions on third country access. As the City of London would continue to be an international centre for wholesale financial markets, some non-British banks might continue to bear the increased supervisory costs of three different supervisory regimes. But others might opt to move some of their business from London to the EU in order to reduce their regulatory burden.

Chart 3.4: Foreign branch assets as a proportion of total banking assets

Source: Bank of England, 'Supervising international banks: the Prudential Regulation Authority's approach to branch supervision', February 2014.



What types of financial activity are most at risk?

There are two areas of financial activity where more precision is possible about the consequences of exit: euro-denominated trading, and hedge and private equity funds serving clients in the EU.

The ECB would be highly likely to force London clearing houses that settle euro-denominated trades to relocate to the eurozone should the British leave. The ECJ has ruled that the ECB has no legal authority to mandate relocation, but the EU may change the necessary legislation if the UK left the EU, allowing the ECB to move ahead. And the ECB's location policy would give it wide latitude to deal with 'offshore' centres, as the City would be in the event of British exit. The ECB's draft policy said that 'key technical facilities' and information systems of any clearing house with a large proportion of euro-denominated business must be located in the eurozone. The City would thus be likely to lose this business to Paris or Frankfurt.

Nor would the UK gain much regulatory sovereignty over hedge and private equity funds by leaving the EU. The AIFMD requires them to comply with EU capital requirements, pay guidelines, and other rules if they are based outside the EU's borders. Those funds that wanted to continue to market their services in the EU would have to comply with these rules should Britain leave (under the AIFMD, non-EU regulations must be equivalent to those of the EU for cross-border provision of services to be legal).[65]

65: PwC, 'The AIFMD outside the European Union', May 2013.

The UK would be likely to find itself in a similar situation to that of Switzerland. Swiss financial institutions only have limited access to the EU, and must set up branches and subsidiaries inside the Union – usually in London – in order to be able to sell services to EU customers. To maintain their limited right to sell services across the Swiss border, they must constantly update their regulations to ensure that they are seen as equivalent by the EU. In order to maintain the City's market access, the UK would come under heavy pressure to do the same upon exit.[66]

In summary, the regulatory sovereignty that would supposedly be gained would be largely illusory: in order to maintain access to EU financial markets, the UK would have to align its regulations with the EU. It would have little influence on the design of those rules, so it might even lose regulatory sovereignty upon exit, since the EU makes third countries sign up to EU rules in exchange for market access. As Britain would not be represented in the Council of Ministers or the European Parliament – the EU's co-legislators – such restrictions would be more likely to happen. And as it would no longer be a member of the EU, the UK would not be able to use the ECJ to defend its rights.

What is more, it cannot even be taken for granted that the UK would be more outward-facing and laissez-faire upon leaving. The British authorities' regulatory stance towards the financial sector has changed dramatically since the financial crisis: a British exit would probably not lead to a bonfire of red tape. And since hostility to immigration from the EU is one reason for Britain's equivocation about its EU membership, and the City's pre-eminence is partly founded upon its skilled foreign labour, banks may find it more difficult to recruit the workers they need if Britain decides to leave the Union.

Finally, the EU's nascent capital market union offers opportunities for the City inside the EU ¬– but less so on the outside. By integrating capital markets, the EU hopes to provide more funding opportunities for firms and allow financial risks to be more easily shared across the Union, by weaning Europe off its bank-based model for financing businesses. As European policy-makers have repeatedly pointed out, the 'capital markets union' would work better with the UK inside the EU, as City firms are the dominant actors in European capital markets.

In conclusion, the City of London is at the core of the EU's financial system, and indeed that of the eurozone. Its interests lie in a

66: University of Kent Centre for Swiss Politics, 'Switzerland's approach to EU engagement: A financial services perspective', April 2013.

comprehensive banking union to strengthen the eurozone's financial system, deeply integrated capital markets across the EU, and strong EU institutions – the Commission and the ECJ – to ensure that eurozone integration does not lead to regulatory protectionism. Leaving the EU would deprive Britain of guaranteed access to these institutions.

Britain's eurosceptics are right that the City would not collapse in the event of an EU exit, at least not for the foreseeable future. Its central role in foreign exchange and securities trading, in insurance and asset management, and in financial law and accountancy services would probably continue, and it would remain the location of choice for many leading private equity and hedge funds. But some activity would be lost if Britain left the EU and the costs of an EU exit would outweigh the (largely illusory) benefits of sovereignty. The EU's new regimes for third countries are making the choice a stark one: third countries must either match EU standards, or lose access to the EU market. It is difficult to believe that this principle would not apply should the EU and the UK negotiate a British exit.

Chapter 4
Migration

Immigrants from the rest of the EU are, on balance, a boon for the UK, not a burden. There is little evidence that they take jobs from Britons. And the limited evidence that they reduce the wages of low-skilled British workers suggests that any impact is small. Britain's EU migrants are young and more likely to be in work than Britons, and thus pay more in taxes than they receive in benefits and public services. They do, however, push up housing costs – a problem Britain must confront.

Contrary to popular opinion, EU immigrants are far less likely to take up benefits than the British population. 'Benefit tourism' is a canard: the great majority of EU immigrants come to Britain to work.

If Britain left the EU, it would be more likely than not to curb immigration from the rest of Europe. But as baby-boomers retire and jobs are created at the high- and low-skilled ends of Britain's labour market, demand for immigrant labour is likely to grow, not shrink.

The free movement of people – one of the 'four freedoms' of goods, capital, services and labour – is a fundamental principle of the EU's single market. By participating in the single market, member-states open their labour markets, knowing that the others will reciprocate. However, since the EU's enlargement to the east in 2004, many Britons feel that the reciprocal arrangement has broken down: free movement is no longer perceived to be an arrangement that works for the mutual benefit of both Britons and other Europeans.

EU migration is a central issue in a referendum campaign, and so this chapter considers the extent to which Britons' fears about EU migration are supported by economic evidence; what the potential demand for EU labour over the next decade might be; and how closed to immigration Britain might become if it leaves the EU.

In Britain's last referendum campaign on membership of the then European Economic Community (EEC) in 1975, its free migration rules barely featured. Most of the other member-states were wealthier than Britain, and few people thought that European migrants would come to Britain in large numbers looking for work. Anti-immigrant sentiment may have been prevalent at the time, but it centred primarily on non-European migrants from Britain's former colonies.

Since 2004, however, the free movement of European labour has become highly controversial. The UK, expecting the resulting influx to be relatively modest, was one of just three EU countries not to impose transitional restrictions on migrants from the member-states that joined in that year (the so-called A8, comprising the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, and Slovenia). In the event, migration from A8 countries was much larger than the UK had anticipated: by 2015 there were around 1.7 million citizens of the A8 in the UK, some 1.2 million of whom were in work.[67]

On average, per capita income in the member-states that joined after 2004 is around 60 per cent that of Britain (at PPP exchange rates).[68] Such a large income disparity makes the UK an attractive destination for workers from Central and Eastern Europe. Many are employed in British jobs that pay the minimum wage, or just above, but their earnings are much higher than they would receive at home. In addition, EU rules require the UK authorities to offer European immigrants broadly similar access to state benefits and services. As a result, many Britons believe that immigrants from the EU take jobs from British workers, or reduce their pay, and that they unfairly receive financial benefits and public services, funded by British taxpayers. Does the evidence support these views?

4.1 EU migrants and Britons' employment prospects

The EU's free movement rules are based on liberal economic theory: if a worker can earn more money in another country, it is better for that worker and the foreign employer for migration to be unhindered. Migration expands Europe's economy as a whole, as workers move to where they can be most productively employed. Yet free movement poses a dilemma for the British government. While immigration might make the country's economy larger, it may have no impact on the incomes of the pre-existing British population – or it may, in theory, reduce them. The government is caught between competing priorities:

67: Migration Observatory, 'EU migration to and from the UK', University of Oxford, October 5th 2015.
68: Eurostat, GDP per capita data, 2014.

that of boosting economic output and helping businesses (which like to have a larger supply of labour from which to choose), and that of protecting workers, whose individual prospects may worsen as a result of immigration. In short, immigration may raise national income, but the economic case should rest on its impact on Britons' incomes.

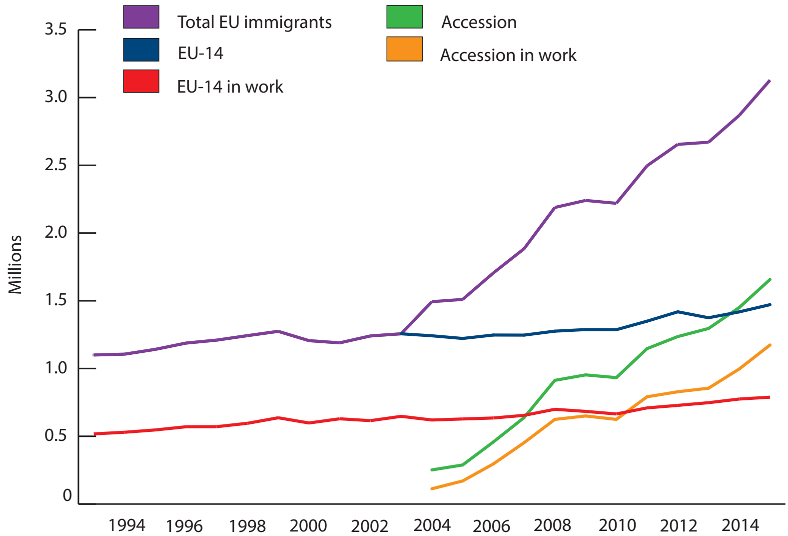
Increased immigration inevitably raises output, unless every immigrant displaces a British worker. More people will be working in Britain, so output will be higher. But if migration depresses Britons' wages or pushes up the native unemployment rate, the average British worker could be worse off, even if GDP is higher overall.

Therefore, central to any cost-benefit analysis will be whether EU migrants take jobs from Britons, or reduce their wages: in essence, are immigrants competing with Britons or are they complementary to them? If they are complementary, immigrants will make the host population more productive, by doing work that Britons do not want to do or do not have the skills for, or by introducing new ideas or technology. They may free British workers to specialise. This process would then raise the wages of immigrants and British workers, who would both become more productive. But if immigrants compete with British workers more than they complement them, British workers could be worse off.

Many British people think it is obvious that workers from Central and Eastern Europe take jobs away from low-skilled Britons and depress their wages. It is certainly true that immigration from new member-states has has been large. The number of people in England and Wales who were born elsewhere in Europe stands at around 3.1 million (see Chart 4.1). Of these, 1.5 million come from the old EU-15, and the European Economic Area countries – Norway, Liechtenstein and Iceland – whose citizens are all free to work in the UK. (Henceforth, this group will be referred to as 'Western Europeans'.) The remaining 1.6 million come from the new accession countries: the 'Eastern Europeans'. Since 2004, the number of Western Europeans has risen, but not nearly as sharply as the number of Eastern Europeans. There were 620,000 people from elsewhere in Western Europe in work in Britain in 2004. By 2015, that number had risen to 790,000, with higher inflows from countries hit by the eurozone crisis.

Chart 4.1: Rapid growth in EU immigration from 2004

Source: Migration Observatory, University of Oxford.



These two groups of immigrants have different average ages and levels of education. Western Europeans are slightly younger than the average Briton: their median age is 39, compared to 41 for British citizens. Immigrants from Central and Eastern Europe are much younger: their median age is 33, and 78 per cent are under 40 years old.[69]

Both western and eastern European immigrants are more highly educated than the average Briton – more have finished secondary education, and more have university degrees.[70] But their involvement in the British labour market is very different.

Immigration from Central and Eastern Europe added 3.6 per cent to the British labour force between 2004 and 2015. Compared to Western Europeans, many did not speak English well, and being young, many lacked marketable skills, despite being comparatively highly educated.

So the majority found jobs in low-skilled, low-paid work. Chart 4.2 shows the proportion of Britons, western and Eastern Europeans in different occupations. In rough terms, the more highly-skilled and better-paid jobs are on the left, and the lower-skilled jobs on the right. Western European immigrants tend to be working in more highly skilled jobs than Britons: 28 per cent are professionals, compared to 20 per cent of British citizens. By contrast, a higher proportion of

69: Labour Force Survey, Q1 2015 data.
70: Madeleine Sumption and Will Somerville, 'The UK's new Europeans: Progress and challenges five years after accession', Equality and Human Rights Commission report, 2009.

Eastern Europeans work in skilled trades (especially construction) than do Britons, and an even higher proportion work in low-skilled manufacturing and services jobs.

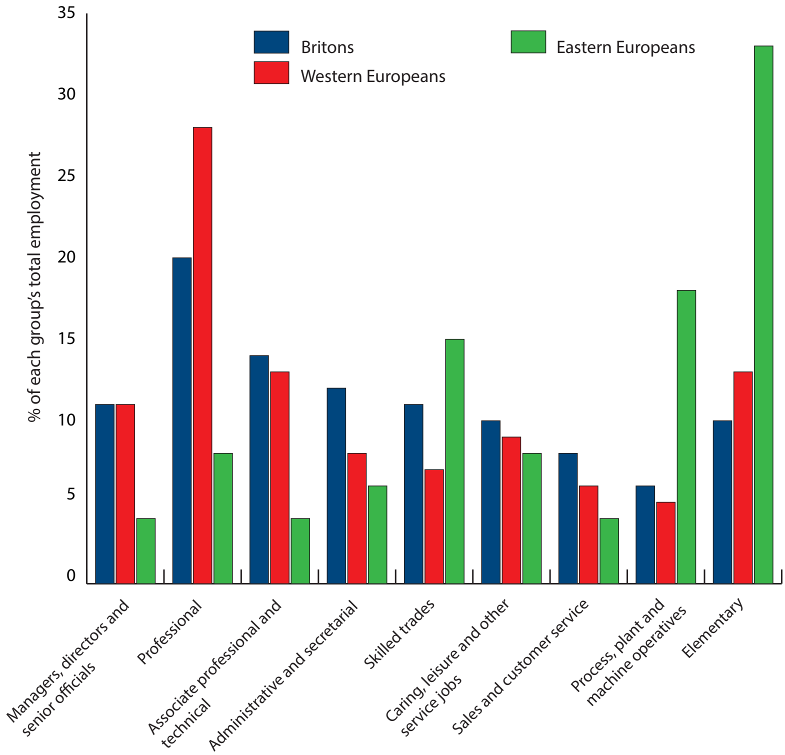


Chart 4.2: Britons and EU migrants' employment in different sectors

Source: Labour Force Survey, Q4 2014-Q1 2015.

But has this influx in fact put downward pressure on the wages and job prospects of British workers? Various studies have tried to determine the impact of immigration on the employment prospects and wages of British workers. In a new analysis, the Centre for European Reform has taken a range of reputable studies, and, using their estimates, worked out the implied impact of immigration from the EU – rather than immigration as a whole, which most of these studies have measured. (Our method and the studies' details can be found in the appendix.)

Taken together, these estimates are the best evidence we have about the effects of the surge of immigration from the EU after 2004. Ultimately, the evidence suggests that the impact on native Britons' wages and unemployment has been small.

Chart 4.3 shows the impact of EU immigration upon the unemployment rate of the UK-born. Three studies found no 'statistically significant' impact, meaning that the study's authors could not tell if the result was greater than zero. When we take the estimates in Jonathan Portes and Simon French's 2005 study, and apply them to the numbers of immigrant workers from the EU between 2004 and 2015, we find that EU immigration raised the unemployment rate among the UK-born by 0.27 per cent.

It is likely that any unemployment effect dissipates after a year or so, as the labour market adjusts. In a flexible labour market such as the UK's, jobs are being constantly created and destroyed, so most British workers displaced by immigrants find other jobs. A 2007 study by Sébastian Jean and Miguel Jiménez suggests that, for each year between 2004 and 2015, immigration from the EU raised UK unemployment rate by 0.16 per cent in the short term, before falling back to zero.

Britain's Migration Advisory Committee found a much larger impact than any of the other studies. But it only found an unemployment effect when all immigrants were included in their analysis – and then only in years where the economy was operating below its full potential, between 2009 and 2015. The committee found no impact when they limited their analysis only to immigrants from the EU. We include the implied effect of EU immigration under both of their estimates in the chart – a 0.7 per cent rise in the unemployment rate when all immigrants are included, and zero when their analysis is limited to EU migrants only.

The best evidence we have, then, suggests that to the extent EU free movement raises unemployment among the UK-born at all, the effect is small; it goes away after a few years as the labour market adjusts; and is strongest in recessions.

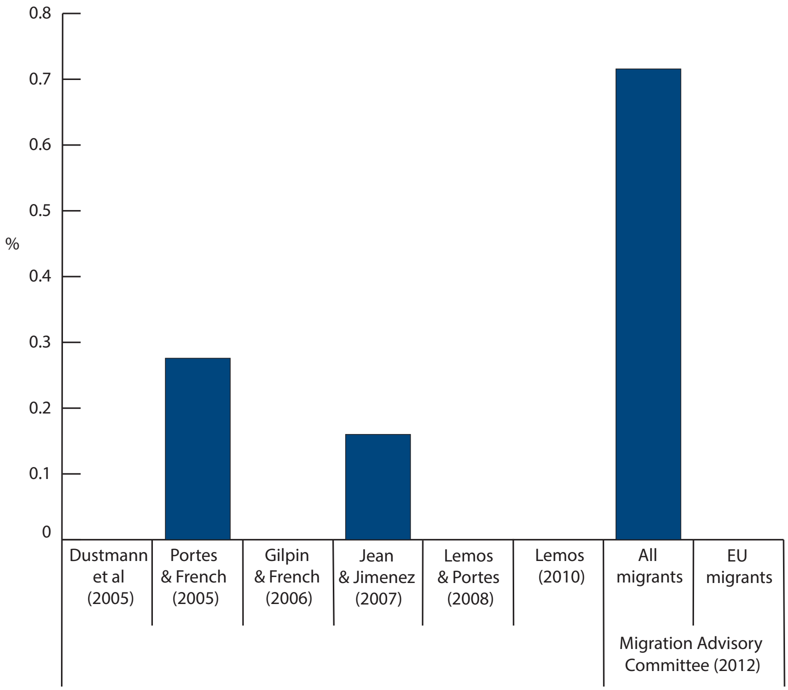


Chart 4.3: Impact of EU immigration on UK un-employment

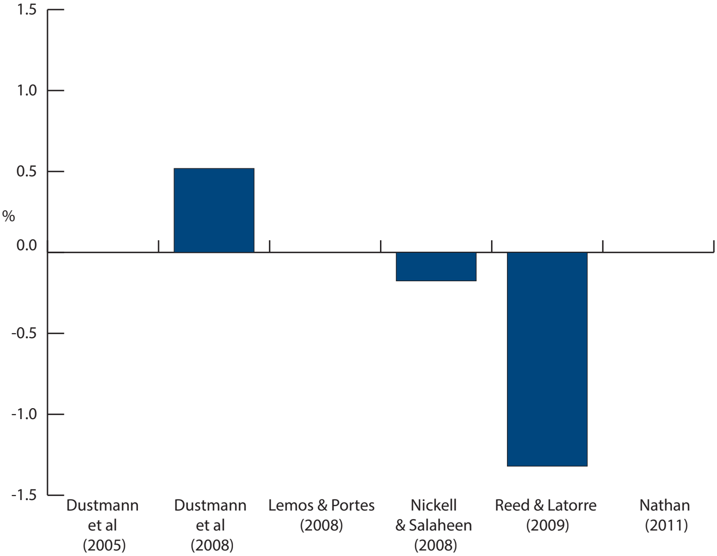
Sources: see Appendix B.

Economic theory suggests that the effect of immigration on wages is more complicated. Low-skilled workers have made up the bulk of immigration from the rest of the EU since 2004, so we would expect Britons at the bottom end of the labour market, who are competing with those immigrants, to see downward pressure on their wages. Whether this reduces average wages depends on the extent to which immigrants are complementary to British workers, and allow the latter to specialise and be more productive: for example, cheaper childcare could be provided by immigrant workers, which would allow British citizens to work more hours.

Chart 4.4 lays out the impact of EU immigration on the average wages of the UK-born population. The best that we can say is that the results are inconclusive: again, three studies find no statistically significant impact, while one finds a small boost to average wages, and two find small reductions.

Chart 4.4: Impact of immigration on UK average wages

Sources: see Appendix B.



Has free movement boosted wage inequality in the UK? Chart 4.5 maps the best estimates we have on the effects on the wage distribution. Sarah Lemos and Jonathan Portes found no effect on the wages of the bottom 50 per cent. The estimates of Christian Dustmann and colleagues at University College London suggest that EU migrants have reduced the wages of the poorest decile by 1 per cent, while raising the wages of the 5th and 9th deciles by a similar amount. The work of Stephen Nickell and Jumana Salaheen caused a stir in 2015 because it found that immigration reduced the wages of Britons working in 'skilled production' roles – electricians and plumbers, for example – and those working in semi- and unskilled services work, like retail and childcare. But the impact is small. In skilled production roles, it amounts to a cut of 0.3 per cent between 2004 and 2015, and in low-skilled services jobs, 0.7 per cent. By comparison, the increases in the national minimum wage between 2004 and 2015 amount to nearly 4 per cent in real terms. And the government's tax increases and benefit cuts between 2010 and 2019 will reduce the incomes of the poorest tenth of Britons by 10.6 per cent, according to the UK's Institute for Fiscal Studies.

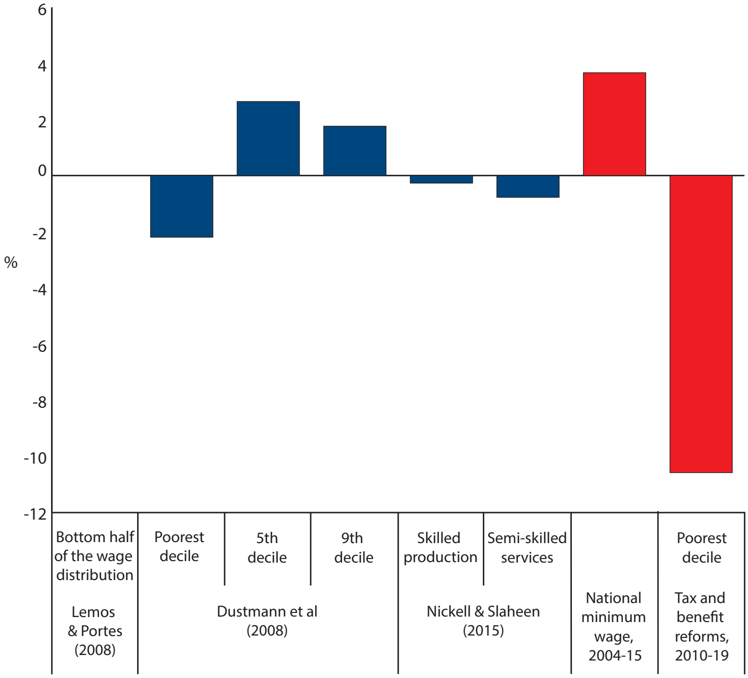


Chart 4.5: Impact of EU immigration on the UK wage distribution

Sources: see Appendix B.

However, the authors of these studies do not isolate the longer-run effects of skilled immigrants on productivity. One cause of long-run economic growth is the quality of the human capital stock: the more highly skilled the workforce, the higher its productivity, which raises output. Thus western European immigration is likely to have had a mildly positive impact on British output by improving the composition of the workforce.

But what impact has this had on the employment prospects for highly skilled natives? While direct evidence on the impact of skilled Europeans on the UK economy is hard to come by, the evidence for high-skilled immigrants in general suggests that they are complementary to, and not substitutes for, British workers, and are thus likely to raise the latter's wages.

The strongest reason why highly skilled immigrants are complementary is that they bring with them knowledge and technical expertise that allows British workers to become more productive. In the United States, for example, skilled natives are more likely to work as managers and executives, while skilled immigrants are more likely to work as scientists, engineers and statisticians. These skills are in short supply in the domestic labour market.[71] As Chart 4.2 above shows, the same is true of Britain. For example, highly skilled immigrants work disproportionately in developing and deploying information technology, which tends to raise the productivity of other workers.[72] Multinational companies operating in Britain bring in workers from other countries in intra-company transfers to a greater degree than elsewhere in the EU. This allows firms to make use of the worker's knowledge about their home country's market.[73] Gianmarco Ottoviano and colleagues at the London School of Economics found that immigrants employed in the services sector raised British firms' exports to their home country.[74]

In sum, low-skilled immigrants from the EU do not appear to reduce the wages of their British counterparts by much, whereas high-skilled immigration is likely to increase Britons' productivity, although we cannot be sure by how much. And overall, free movement has only small effects on Britons' wages and employment.

4.2 The changing shape of the UK labour market

Over the last three decades, the British labour market has 'hollowed out'. Most new jobs have been created at the upper end of the skills scale, and in low-skilled services work. Technological change and trade are the main causes. The microchip has enormous disruptive power, replacing semi-skilled labour with information technology and machinery. For instance, employment in book-keeping and skilled manufacturing, which computers and computerised machinery can do more productively, has been in decline. Many manufacturing jobs have been lost to countries with lower wages. Meanwhile, the number of highly skilled jobs has been on the rise. So has work in services such as personal care, retail and hospitality. Such work is not so easily replaced by technology (see Chart 4.6).

71: Giovanni Peri and Chad Sparber, 'Task specialisation, immigration, and wages', 2008.

72: David Autor and others, 'Computing inequality: Have computers changed the labour market?', 1998; Timothy Bresnahan and others, 'Information technology, workplace organization and the demand for skilled labor: Firm-level evidence', 2003.

73: Marion Frenz and Grazia Ietto-Gillies, 'The impact on innovation performance of different sources of knowledge', 2009.f

74: Gianmarco Ottoviano and others, 'Immigration, trade and productivity in services: Evidence from UK firms', London School of Economics, May 2015.

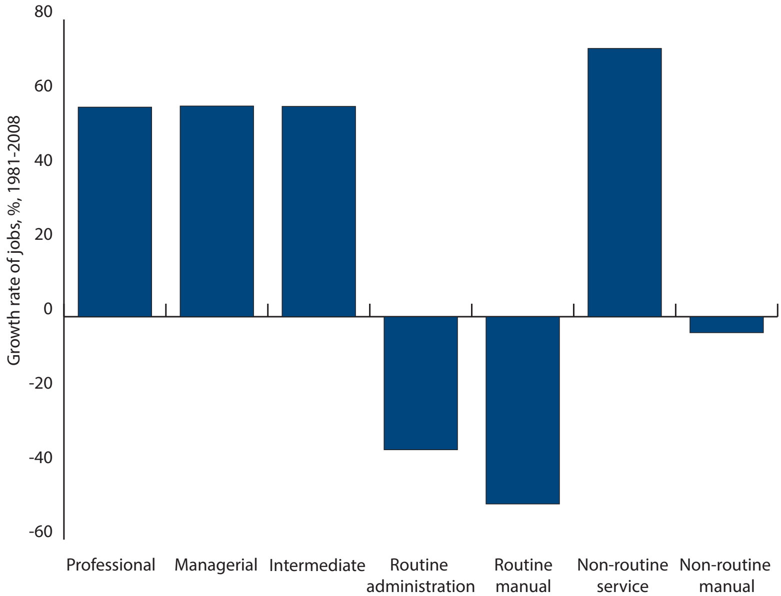


Chart 4.6: Growth in jobs by occupation, 1981-2008

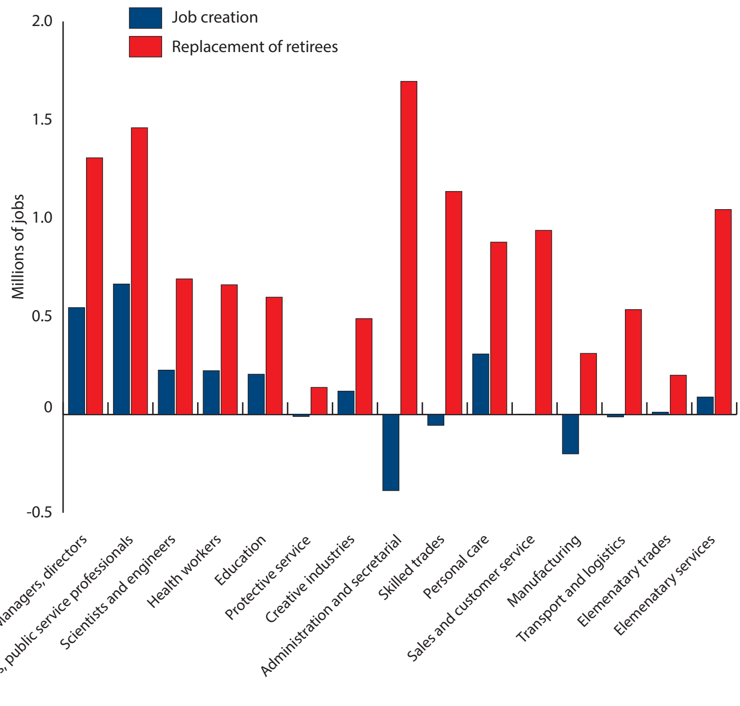
Sources: Craig Holmes and Ken Mayhew, 'The changing shape of the UK job market and its implications for the bottom earners', Resolution Foundation, March 2012.

As demand for high-and low-skilled work has been growing, so has the demand for immigrants from the rest of the EU who can do the work. Typically, Western Europe provides a supply of workers in highly skilled managerial, financial and public services occupations, while Central and Eastern Europe supplies workers for lower-skilled jobs in construction, manufacturing, and services.

It is difficult to predict the future patterns of demand for skills. But there is little reason to believe that this pattern of demand for immigrant labour will change. If anything, it is likely to get stronger, if British demographic change is taken into account. The UK Commission on Employment and Skills estimates that 1.5 million jobs are going to be created by 2020 in management, business, science and technology, and in the public services – occupations in which Western Europeans are highly represented (see Chart 4.7). The number of new low-skilled jobs, apart from those caring for the increasing ranks of the elderly, will decline: manufacturing and administration will see further job losses over the next decade.

Chart 4.7: Job creation and the replacement of British retirees, 2010-2020

Source: UK Commission on Employment and Skills, 'Working futures, 2010-2020', 2012.



However, the chart also shows how many workers will be needed to replace retirees in different sectors. Britain's baby boom generation is on the verge of retirement, leaving behind a smaller working age population. Some jobs will have to be filled by immigrants. Demand for workers to replace retirees will be strong in low-skilled administration and services, in manufacturing, and in skilled trades, occupations in which Eastern Europeans are over-represented. In these sectors, the rate of retirement will outstrip the rate at which employment is falling. Meanwhile, Western Europe is one source of workers to replace highly skilled retirees, as well as filling new jobs created in skilled sectors of the economy.

4.3 The impact of European immigration on welfare, houseing and public services

The benefits identified above must nonetheless be set against the impact on welfare, public services and housing. EU immigrants' fiscal impact is benign: they are net contributors to the British treasury. In its 2013 International Migration Outlook, the OECD lists three factors that determine whether an immigrant is a net contributor or net beneficiary. First, the age of immigrants: young immigrants of working age are likely to be net contributors until they are between 40 and 45 years of age, as they receive little health and no pension expenditure (two of the UK government's three biggest expenditure items). Second, their employment rate: if the immigrant employment rate is higher than the native population's, then they are less likely to receive welfare benefits – and if immigrants have come to work, rather than to be reunited with their families, they are more likely to be net contributors. And third, their skill level: if immigrants are highly skilled, they are more likely to be employed, pay more in taxes, and receive fewer benefits.

EU immigrants are on average younger than Britons; they are more likely to be in employment; and they are overwhelmingly in Britain to work rather than to join a family member. It should therefore be no surprise that they are net contributors to Britain's public finances. Christian Dustmann and Tommaso Frattini of University College London found that EU migrants contributed 34 per cent more in taxes than they received in benefits between 2001 and 2011.[75] While this effect is small – 0.25 per cent of GDP – the fiscal effects of lower immigration in the longer run could be substantial. According to the UK's fiscal watchdog, the Office for Budget Responsibility (OBR), the UK's national debt would be 40 percentage points higher in 2062 if net migration is reduced to zero from 140,000 per year (the OBR's central and conservative estimate).[76]

David Cameron's biggest victory in his February 2016 EU deal was minor curbs to migrants' access to benefits. The British government had made 'benefit tourism' from the EU a central issue in the renegotiation. Yet there is little evidence that such tourism exists.

Since 2010, the British Labour Force Survey has recorded the month when immigrants first arrived in the country, the length of their unemployment, if they do not have a job, and which benefits they are

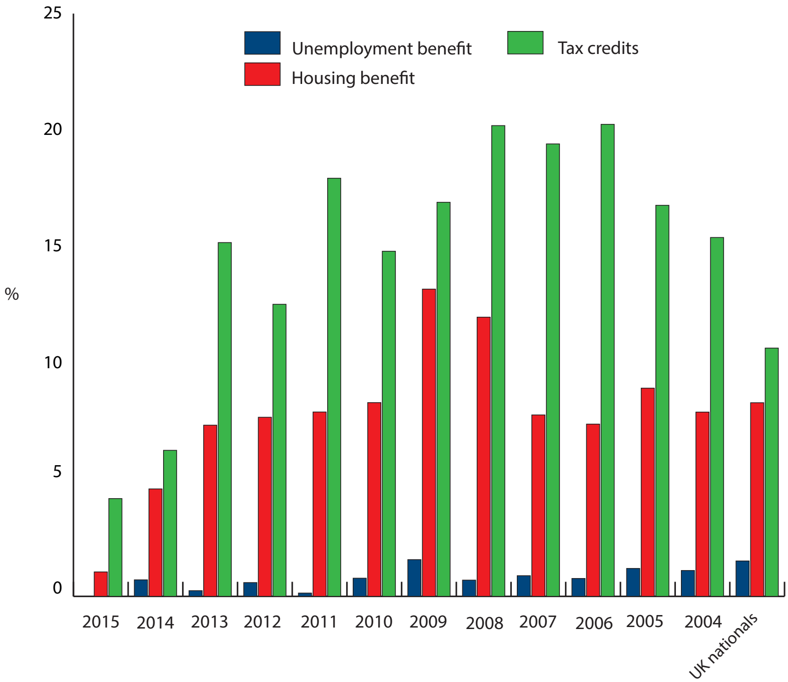
75: Christian Dustmann and Tommaso Frattini, 'The fiscal effects of immigration to the UK', UCL Centre for Research and Analysis of Migration, November 2013.
76: Office for Budget Responsibility, 'Fiscal sustainability report', July 2013.

taking up. Thus the scale of the benefit tourism problem can be tested: by finding the records of all EU migrants who arrived after that date, it is possible to check how many are claiming benefits soon after arriving in the country.

The results demonstrate that benefit tourism, if it exists at all, is a tiny problem. Chart 4.8 shows the proportion of EU and EEA nationals claiming benefits in 2015, broken down by their year of arrival in Britain. Recent EU nationals, who arrived in 2014 or 2015, are much less likely to claim unemployment benefit, housing benefit or tax credits than UK nationals. The longer an immigrant is in the UK, the more likely they are to claim benefits – although these are far more likely to be benefits for people who have children or are on a low income than for the unemployed. But this is hardly surprising: as immigrants integrate and make the UK their home, they use the welfare system much as Britons do. The idea that immigrants come to live on welfare is misplaced.

Chart 4.8: EU nationals claiming benefits, by year of arrival in Britain

Source: Labour Force Survey, Q1-Q4 2015.



However, those immigrants from Central and Eastern Europe who settle in the UK, rather than returning home after a short period of work, are young and increasingly having children. Immigrants from other countries are also contributing to a rise in the birth rate. This will require increased spending on education and will result in stronger demand for housing.

Britain's population has grown by 20 million since 1960; a rise of nearly 50 per cent.[77] Immigrants and their higher birth rate make up the majority of this population growth. While immigration is one reason for the large increase in the number of British households, so too is the rise in the number of British households headed by one adult: Britons are increasingly living on their own, or as single-parent families. Meanwhile, the country has failed to build enough housing to keep up with demand, especially in fast-growing areas like London and the south-east of England. As a result, house prices and rents have risen faster than incomes, putting downward pressure on Britons' living standards, as an increasing proportion of their disposable income is spent on housing.

Until the accession of the Central and East European member-states in 2004, immigration from the EU made up a small part of Britain's population growth. Since then, however, net immigration from the EU has made up 45 per cent of the total net inflow.[78] Newer member-states are catching up, but will be poorer than Britain for many years, and so incentives for people to move to Britain will remain strong. Immigration has also picked up from peripheral eurozone countries – Spain, Ireland and Portugal, in particular – where unemployment is high. Thus EU immigration will continue to raise demand for British housing in the future.

But by how much? Using the UK Department of Communities and Local Government's (DCLG) data on housing demand, which are based upon assumptions about fertility, life expectancy and immigration, it is possible to make a rough estimate.[79] According to their (very conservative) assumptions, long-term net immigration to England, where the vast majority of immigrants live, will be 157,000 per year to 2033. This translates into an extra 83,000 extra households formed each year by migrants, each of which needs somewhere to live. If we assume that EU net migration continues at the average rate seen between 2004 and 2014 – 87,000 per year – the DCLG's assumptions about the number of immigrants per household suggest 51,000 extra EU

77: World Bank, World Development Indicators.
78: Migration Observatory, 'The impact of migration on UK population growth', 2012.
79: DCLG, 'Household projections, 2008 to 2033', 2010. Data for England only.

immigrant households a year. That equates to 22 per cent of projected household formation in England.

However, recent studies have found that immigration has caused local house prices to fall.[80] There are two reasons for this. First, migrants tend to live in more cramped conditions than do Britons. Second, the researchers found that when immigrants move into a local area, Britons move away, and so demand for housing falls in the short term. However, Britons will push up prices in the areas they move to, and in the long run, migrants are likely to move into less crowded accommodation. This will push up housing costs – unless Britain builds more houses – especially in the south-east of England.

The British government does not systematically record migrants' use of public services: neither the NHS nor the British school system records their users' country of birth. It is therefore not possible to know how much pressure immigration puts on these services in regions with high levels of immigration. Fast rates of population growth in some parts of the country means that demand for services will outstrip supply, unless the government invests more heavily in additional capacity. But immigration can help to improve the supply of public services as much as it raises demand for them. The NHS makes heavy use of skilled immigrant labour, for example.

So what policy should the government pursue? The most rational would be to take advantage of the labour market benefits of EU immigration by keeping the border open; reform planning laws and property taxes to boost housebuilding; and use some of the extra revenues that immigration brings to invest in public services and infrastructure. These policies will be politically challenging, requiring the government to confront a hostile public and media, and challenge the privileged position of homeowners, whose interests lie in higher house prices. But these policies would maximise the benefits that EU immigration brings.

80: Filipa Sá, 'Immigration and house prices in the UK', 2011 and Nils Braakman, 'Immigration and property prices in England and Wales', 2013..

4.4 Closing the drawbridge

If, upon leaving the EU, the UK's immigration policies were set with the needs of its economy in mind, the British government would allow free immigration from the EU to continue. This would maintain the inflow of labour that employers demand, providing workers to fill newly created jobs and to replace retirees. As low-skilled immigrants from the rest of the EU do not displace British workers, and higher-skilled workers probably make them richer and more productive, this would be rational – if very difficult politically.

If Britain joined the EEA, it would retain access to the single market but only in exchange for abiding by its rules, including free movement, and paying budget contributions. But this may be politically impossible as those constraints would be the main reasons why Britain had voted to leave. The same constraints apply to Switzerland, which has only partial access to the single market.

Upon exit, it would be sensible to allow all EU migrants resident in Britain to remain. This would help to secure the rights of Britons living abroad. And under international law and a 2004 EU directive, it would be illegal to remove 'acquired rights' of residence in Britain or vice versa – although rules governing access to rights to work, access to welfare and public services could be changed for future migrants. Indeed, the British government could redirect EU immigrants through Britain's current immigration system for non-EEA migrants. This system allows entry into Britain by awarding would-be immigrants 'points' for possessing certain qualifications, skills and capital. Since 2010, the British government has been trying to cut net migration to below 100,000 a year, so it has tried to reduce the number of non-EU migrants allowed through the system. In all likelihood, if Britain chose to quit the EU, the numbers of EU migrants allowed into the country would be far lower.

There are five 'tiers' within the system, of which the first three are relevant to this analysis. Tier 1 allows very highly skilled people entry if certain conditions are met. Entrepreneurs must hold between £50,000 and £200,000 in cash in a bank account. Investors must show they can invest £1 million or more in the UK. Other Tier 1 migrants must be scientists, engineers or artists who have very good qualifications and can show that their careers have been highly successful. At the time of writing, the quota for this tier is 4,900 people a year. If the UK were to leave the EU and reroute highly skilled Europeans through Tier 1, it would have many fewer entrepreneurs, scientists, engineers and managers, unless it increased the quota.

Tier 2 deals with skilled migrants – such as teachers and lawyers – whose job usually requires a university degree. Would-be immigrants must have an offer of a job earning more than £20,000, and the employer must have advertised the job to UK residents and found no one suitable. Migrants earn extra points if their job is on the list of occupations in short supply, drawn up by the government's Migration Advisory Committee. The total number of visas issued each year is around 45,000.[81] Yet 34,500 graduate immigrants from the rest of the EU come to Britain each year.[82] If Britain made EU immigrants go through the Tier 2 route, and did not raise the quota, Britain would take in far fewer skilled immigrants than at present.

The third tier governs low-skilled immigration. It is now closed, as the government says that Britain's demand for low-skilled workers is currently sated by immigration from the EU. It could re-open it upon leaving the EU, but as one rationale for Brexit would be to reduce the inflow of low-skilled workers, this is unlikely.

The most plausible outcome of an EU exit must therefore be that Britain would be more closed to immigrants of all skill levels than it is now. This would make the country worse off, and would require higher taxes and spending cuts to help deal with the costs of an ageing population.

It should also be borne in mind that over 1.8 million Britons live elsewhere in the EU. Spain and Ireland house around 400,000 each (Spain's figure is far higher if Britons who live there part-time are included), and there are 150,000 and 175,000 in Germany and France respectively.[83] Britain's EU membership is, of course, a major benefit to these migrants. The EU offers a much larger choice of jobs than the UK labour market alone, which leads to higher incomes and a better quality of life for many Britons who choose to live in other member-states. It is also a major destination for British retirees: there are over 400,000 living in other EU member-states.[84]

In the event that the UK decided to leave the EU, some settlement would have to be negotiated with other EU member-states, to ensure that British emigrants could continue to live there. The outcome of such a negotiation may not be as straightforward as one might assume.

81: Migration Observatory, 'Non-European labour migration to the UK', University of Oxford, January 2015.
82: Office of National Statistics, Long-term International Migration Survey and Labour Force Survey.
83: World Bank, Global Bilateral Migration Database.
84: CER analysis of Department of Work and Pensions state pensions data.

Retired immigrants are on average a net drain on the public finances because of their heavy use of healthcare. In any bilateral negotiations with Britain, the fact that free migration is more costly for France and Spain than it is for Britain would not go unnoticed, and Britons who move abroad after Brexit may find that access to healthcare is expensive: currently, the Spanish government pays for British migrants' visits to GPs.

Britain could seek to negotiate with western European countries bilaterally, to allow existing migrants to stay and future migrants to move unhindered. This would probably be the simplest solution, if the UK were to insist on closing the door to Central and Eastern Europe. But Britain cannot control the outcome of such negotiations, which may lead to migration opportunities for Britons being curtailed.

In summary, leaving the EU would make it easier for future governments to restrict immigration. This may have some political benefits, but it would have harmful economic effects. Many Britons presume that EU migration is zero-sum: a job taken by an immigrant is one less for a British national. The idea that immigration might have benefits – that, for example, an immigrant might raise native workers' income – is rarely considered.

Yet economists have found little evidence that immigration from the EU endangers Britons' employment prospects. Demand for immigrant labour is likely to be robust in the future. And both immigrant groups are net contributors to the public finances.

However, EU immigration will be a significant cause of rising housing costs in the future, unless the government manages to ensure more houses are built. And while EU immigrants are net contributors to the public finances, they also raise the demand for school places.

If Britain left the EU, the most rational policy for the government to pursue would be: take advantage of the labour market benefits of EU immigration by keeping the border open to them; liberalise planning laws and property taxes to boost housebuilding and use some of the extra revenues that immigration brings to invest in public services and infrastructure.

But since a vote to leave the EU would be a public rejection of free movement, it is far more likely that Britain would reduce immigration in a period when demographic and economic change makes access to European labour a significant benefit. Ultimately, Britain must decide in the referendum whether the economic benefits of free EU migration are a reason to stay in Europe. The evidence suggests that they are so.

Chapter 5

The EU budget

Each year between 2014 and 2020, Britain's net contribution to the EU budget is projected to be around 0.5 per cent of GDP. The economic effects of EU spending in the UK are mixed. The budget's farm subsidies push up food prices and lead to environmental damage. But EU economic development funds boost growth in poorer regions of the UK, and British scientists and researchers win more EU funding than any other member-state.

If Britain left the EU's orbit entirely, it would save 0.5 per cent of its GDP. But if it seeks continued access to the single market along Norwegian or Swiss lines, it will have to make a contribution to development funds. If the UK were to withdraw to the EEA and pay into the EU budget on the same basis as Norway, it would reduce its contribution by 9 per cent. If it were successful in negotiating an agreement like Switzerland's, its contribution would fall by 55 per cent.

Outside the EU, the British government would find it difficult to cut farm subsidies and development funds. All OECD countries subsidise their agricultural sectors. And Wales and Northern Ireland are large net beneficiaries of the EU budget: if EU spending were not replaced by funds from Westminster upon exit, their economies would shrink.

The EU budget is one of the few areas in which the benefits of a British exit are easily quantifiable. By far its largest components are the Common Agricultural Policy (CAP) and structural funds, which each constitute around 40 per cent of the total. First introduced in 1963, the CAP was the fruit of a bargain between West Germany and France after the Treaty of Rome. West German manufacturers would have access to French markets, while in exchange, West Germany would help to subsidise French farmers' incomes. While it was sold as a way to align the six founders' various national subsidy schemes, and thus promote fair competition, France was a large net beneficiary: inefficient farms were supported by a system of quotas and subsidies that raised European food prices. Since the 1990s, the system has been reformed to reduce its costs to consumers and the environment, but it still raises food prices, damages the environment and hampers economic development in poor countries outside Europe.

Structural funds are spent on the economic development of the EU's poorest regions. From the start, the architects of the EU recognised that the four freedoms might have a centripetal effect: the most efficient producers would win larger market shares as national markets were opened to foreign competition. These producers would have higher profits, invest more, and pay their workers higher wages, concentrating wealth in the regions that were already most advanced. To counteract these forces, the EU provides money from the budget to invest in infrastructure, and to a lesser degree, education and training in poorer regions.

5.1 Ending British participation in the EU budget

Britain has been a net contributor to the EU budget in every year since it joined (bar one – 1973). It has a small and relatively efficient agricultural sector. While it has quite severe regional disparities of economic development, it is a richer member-state than the EU average, which means that its net contribution to the EU budget has risen to 0.5 per cent of GDP. Over the next budget period, between 2014 and 2020, the UK's net contribution is projected to be between £8 to 10 billion each year.[85]

Therefore, if the UK left the EU entirely, Britain would save 0.5 per cent of GDP per year. And upon exit, the government could decide to raise consumers' incomes further by reducing tariffs and quotas on agricultural produce imported from outside the UK to zero. In 2012, the EU's tariffs and quotas raised agricultural prices by 18.6 per cent, according to the OECD.[86]

Britain could also abolish farm subsidies. Since the late 1990s, quotas and subsidies linked to farm output have been cut, as they resulted in surplus 'mountains' of butter and 'lakes' of wine, and distorted prices. They have been replaced with direct payments to farmers, largely based upon farm size (see Chart 5.1). Subsidies that are not linked to production are less distorting of prices. But they reduce efficiency: farmers do not have to constantly improve productivity to remain competitive. Many do not use the highest-yielding crops on their land, and invest less than they should in new technology. Subsidies and tariffs also encourage over-production in Europe – the latter by rendering agricultural imports to the EU more expensive – when the environment would be better served by allowing land to return

85: Office of Budget Responsibility, 'Economic and fiscal outlook', July 2015.
86: OECD Producer and consumer support estimates database.

to the wild.[87] And they hamper economic development in those poor countries outside the EU that have a comparative advantage in agricultural exports.[88] However, all countries in the OECD subsidise their farmers to a certain degree, and it is unlikely that Britain would cut subsidies to zero if it left the EU.

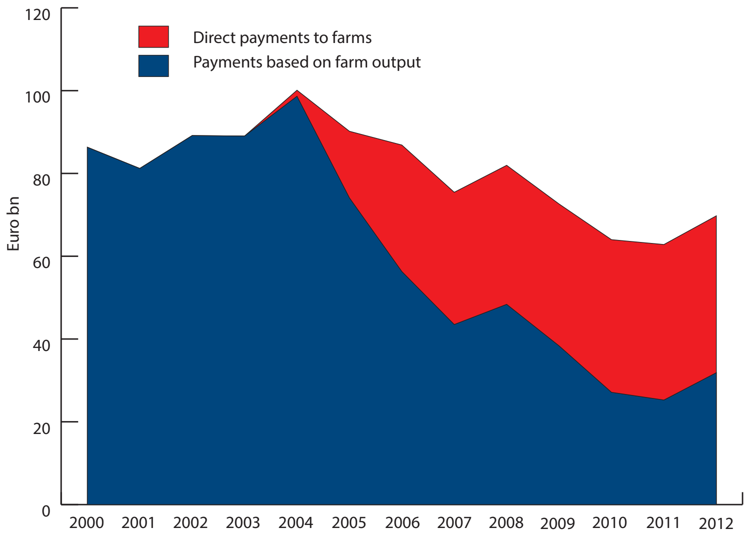


Chart 5.1: EU farm subsidies by type

Source: OECD agricultural policies and support data.

Upon exit, the UK would face a choice over whether to replace the EU's structural funds with national regional development spending. Some academics have criticised the EU's structural funds in the past for failing to boost economic growth.[89] But their studies' method was based upon a comparison of EU regional spending with countries and regions that did not make similar investments. As growth rates in poorer European regions were no better than poorer regions in countries outside the EU, they concluded that regional spending is a failure. But they were hardly comparing like with like: countries and regions outside Europe have very different characteristics to those in the Union. More recent studies have focussed on regions that were poorer, but ineligible for 'convergence' funds as they were just over the GDP per capita limit that the EU sets (75 per cent of the EU average).

87: OECD, 'Agricultural policy monitoring and evaluation: OECD countries and emerging economies, European Union', 2013.

88: Ian Bateman and others, 'Bringing ecosystem services into economic decision-making: land use in the United Kingdom', Science, July 2013.

89: Xavier Sala-i-Martin, 'Regional cohesion: Evidence and theories of regional growth and convergence', European Economic Review, 1996; and Michele Boldrin and Fabio Canova, 'Europe's regions: Income disparities and regional policies', Economic Policy, 2001.

Researchers then compared them with regions that fell below the limit. Their conclusion: EU structural funding does raise growth in recipient regions.[90] Sascha Becker and colleagues at the University of Warwick found that, on average, one euro of EU investment translated into €1.20 of regional GDP growth. However, there was wide variation in how much growth EU investment generated. The best performers were regions in countries that were well governed, and had high educational standards – namely, poor regions in richer, western member-states, like the UK.[91]

It would be sensible for Britain to cut agricultural subsidies if it left the EU. The case for regional investment is less clear cut. Given that regional investment raises regional output, it might be economically rational to replace EU funds with British ones. Critics of regional policy, however, would point out that educating and training people in poorer regions of the UK and encouraging them to move to areas where there are more job opportunities would be a more productive use of public money than investment in infrastructure.[92] A reorientation of any repatriated funds away from infrastructure towards education might bring the highest return on public investment.

5.2 The regional impact of ending EU spending in Britain

However, policy decision-making rarely rests upon pure economic analysis. Farm subsidies and infrastructure investment by their nature are regional expenditures, and so the pain of reducing this spending will be concentrated in certain regions. This means that people in those areas will urge Westminster to replace EU funds with national spending if the UK leaves the Union.

Which regions would suffer the largest losses if EU subsidies and spending were not replaced? Northern Ireland, Scotland and Wales will receive much more subsidy per head than England under the current round of CAP funding. Northern Ireland receives four times as much CAP spending per capita as England, and Scotland and Wales receive three times as much. (See Table 5.1.) In the budget negotiations, the Council agreed to reorientate funding towards the least developed regions of the EU – defined as those with a GDP per capita below 75

90: Maaike Beugelsdijk and Sylvester Eijffinger, 'The effectiveness of structural policy in the European Union', Journal of Common Market Studies, 2005; and Sjef Ederveen and others, 'Funds and Games: The Economics of European Cohesion Policy', CEPS, 2002.

91: Sascha Becker, 'EU structural funds: Do they generate more growth?', Chatham House, December 2012.

92: Henry Overman and Stephen Gibbons, 'In unequal Britain who you are is much more important than where you live in determining earnings', British Politics and Policy at LSE blog, November 2011.

per cent of the EU average – which are mostly in the eastern member-states. As West Wales and the Welsh Valleys are the only two British regions that qualify, the devolved Welsh government receives more EU funds per head than Scotland, Northern Ireland or England.

	England	Northern Ireland	Scotland	Wales
CAP total spending	£2,184 m	£317 m	£614 m	£353 m
CAP spending per capita	£31	£145	£96	£96
Structural funds total spending	£735 m	£54 m	£95 m	£255 m
Structural funds spending per capita	£13	£30	£18	£83

Table 5.1: CAP and structural funds spending per year, 2014-20

Sources: Alan Matthews, 'The CAP budget in the MFF', capreform.eu; House of Commons Library, 'CAP Reform 2014-20: EU Agreement and Implementation in the UK and in Ireland', November 2013; UK Department of Business, Innovation and Skills, 'Making European funding work better for the UK economy', January 2013.

It is possible to work out which of the constituent countries of the UK is a net contributor to or a net beneficiary from the EU budget.[93] Each country's net contribution can be estimated by first, working out what proportion of tax they pay to the Treasury, and thus how much of the UK's contribution to the EU they pay – and second, how much European spending they receive.[94]

The results are in Table 5.2. Overall, the UK's net contribution will be 0.5 per cent of its GDP in the 2014-20 period. England's net contribution per capita will be larger than the UK's. Scotland and Northern Ireland's is rather smaller. But Wales, which receives sizeable regional funds, is a big net beneficiary, receiving annual payments from the EU budget of £206 million or £90 per capita. So too will Northern Ireland, which receives £94 per capita. Were the UK to leave the EU, Wales and to a lesser extent Northern Ireland would be likely to ask Westminster for continued agricultural support and development funding.

93: This method is the same as that of the House of Commons Library team, but projects it forward to the 2014-20 period. It takes the average GVA growth of each country between 1997 and 2012, and projects that forward into the 2014-20 period.

94: Each country's payment to the EU is calculated by dividing the UK's contribution to the EU by how much private sector economic output that country generates (which offers an estimate of how much each country contributes to the UK tax take).

Table 5.2: Annual net contributions to the EU budget, by UK country, 2014-20

	UK	England	Northern Ireland	Scotland	Wales
Gross payments, m	£16,907	£14,582	£340	£1,417	£567
Less UK rebate, m	-£3,844	-£3,271	-£102	-£299	-£172
Less public sector receipts, m	-£5,078	-£3,217	-£409	-£781	-£670
Net contribution, m	£7,985	£8,094	-£171	£337	-£276
Net contribution per capita	£117	£140	-£94	£64	-£90

Sources: Sources: HM Treasury, 'European Union finances', 2013; Office of National Statistics, Workplace-based GVA data. The UK rebate has been divided between the constituent countries of the UK by their share of the UK population.

Furthermore, if the UK were to retain some links with the EU in order to benefit from access to the single market, it would find it difficult to avoid payments to the EU budget. The Swiss and Norwegian models of association with the EU come with fiscal costs. If the UK were to join the EEA, it would leave the CAP, but EEA member-states participate in other EU programmes, such as research and policing. EEA member-states also contribute to the development of the member-states that joined the EU after 2004, as does Switzerland. In recent years, Norway has paid £524 million annually (£106 per capita) and Switzerland £420 million (£53 per capita).[95] Since the UK net contribution amounts to £117 per capita, if it withdrew to the EEA and paid into the EU budget on the same basis as Norway, it would reduce its contribution by 9 per cent. If it were successful in negotiating an agreement like Switzerland's, its contribution would fall by 55 per cent. (Of course, the Swiss have much less access to the single market than the EEA states.)

The UK wins a bigger share of research funding than any other member-state. Researchers based in the UK received 16 per cent of EU R&D funding and 20 per cent of its grants for scientific research in the last budget period – the country contributed 11 per cent of the EU's total budget.[96] Should Britain leave, more research funding will have to be made available to make up the shortfall, to avoid damage to the country's scientific base.

In sum, as with all other areas, the EU insists that the prize – access to the single market – comes at a cost. To trade freely with the EU, Switzerland and Norway must make contributions to the EU's spending priorities. Some of these priorities, such as the CAP, make little economic sense. However, if Britain seeks a looser relationship with the EU, but one which includes full access to the single market, it will have to pay for it.

95: House of Commons Library, 'Leaving the EU', July 2013.

96: Russell Group, 'Response to the Government Review of the Balance of Competences between the UK and EU: Research and development', 2013.

Conclusion

Britain is deeply divided over its membership of the EU. Most business people and economists see access to EU markets as beneficial. The government does too, hence its attempts to defend Britain's single market interests against the eurozone, which it fears may gang up on EU countries that are not members of the currency union. But many Conservative parliamentarians, some business leaders and many voters would prefer Britain to withdraw, arguing that Britain's economy would be liberated by doing so, and that the UK could in any case negotiate access to European markets if it were outside the Union.

This report has shown these assumptions to be doubtful. The trade-off that the UK must make is quite simple: it is between regulatory sovereignty – which would not transform Britain's growth prospects – and unimpeded access to the EU's single market.

Eurosceptics are wrong to say that the EU offers little market access for a good deal of red tape, or that it constrains Britain's trade with fast-growing economies outside Europe. The EU has no tariffs and quotas on internal trade, while common rules have further reduced trade costs. These policies work: Britain's membership of the EU has led to increased trade with the other member-states. At the same time, there is no evidence that membership of the EU constrains Britain's trade with the rest of the world.

The EU's efforts to promote trade in services have been half-hearted – a shame for Britain, given that it has a comparative advantage in this sector. Nonetheless, the UK is the largest recipient of foreign direct investment in the EU – and much of this investment is in the services sector. Half of Britain's FDI stock is owned by companies with headquarters in other EU countries. A sizeable chunk of the rest is from non-European companies who seek a base for their European operations in a lightly-regulated economy. The EU's single market has brought sizeable benefits to Britain that it could not have won without sharing some sovereignty in the European institutions.

If it leaves the EU, Britain will face an invidious choice: access to the single market, but less influence on the rules that govern it; or freedom from the rules, but loss of access to the single market. If Britain joins the EEA, it will have to sign up to all new single market rules with little hand in their drafting. Even Switzerland, which has a set of bilateral agreements with the EU, has limited access to those areas of the single market whose rules it cannot stomach, such as financial services. Britain could trade with the EU under WTO rules in order to regain regulatory sovereignty. But its exporters would face EU tariffs and higher non-tariff barriers, and would have to comply with EU product standards if they wanted to sell their wares on the continent. And as Britain has one of the least regulated economies in the world, according to the OECD, any economic gains from repealing the EU's rather limited social legislation would be small.

The UK would be free to negotiate trade agreements with countries outside the EU. But it would not inherit the EU's existing bilateral trade agreements that are already in existence: it would have to negotiate new ones. So, upon exit, it would have less access to markets outside the EU, not more. And it is hard to believe that Britain would find it easy to forge new deals. To persuade a trading partner to start negotiating, it would need to be able to offer something attractive. Britain's economy is far smaller than the EU's – and would be less of a priority for the US or China. The UK is already very open to imports and inward investment, so it would have little to offer in return for its demands that other countries reduce tariffs and other trade barriers. Britain benefits from the EU's size in trade negotiations, which gives it something to bargain with.

The alternatives to EU membership are unsatisfactory: they either give Britain less control over regulation than it currently enjoys, or they offer more control but less market access. In a referendum, Britain will have to choose between national sovereignty and unimpeded access to EU markets. While membership of the EU is as much about broader, political questions as economics, the economic case for staying in the Union is clear.

Appendix A: The CER's gravity model

In the 1960s, Dutch economist Jan Tinbergen discovered that there is a close analogy between Newtonian physics and trade flows. Newton discovered that the gravitational force between two objects is proportional to their mass and the distance between them. Tinbergen found that trade flows between two countries are proportional to their GDP and the distance between them.

Since Tinbergen's discovery, trade economists have refined the gravity model so that it is possible to estimate the impact of trade agreements on the size of trade flows. There are two ways to do so.

One is to try to add as many determinants of trade into the model as possible, including population growth; measures of distance; whether one country has been the colony of another; whether two countries speak the same language; whether a country is landlocked; and so on. Once all of these factors are isolated, it is possible to determine whether trade between two countries that have signed a trade agreement is larger than the model predicts. This would provide evidence that EU membership is creating trade between the UK and the other members of the Union.

The problem with this approach is that it is very difficult to add all of the determinants of trade into the model. Some are unobservable. Trade between two countries is strongly affected by policy – such as the extent to which an economy is protected from foreign imports. The extent of protection is difficult to quantify. Without taking these effects into account, the model can produce biased results.

Therefore, the CER has used a 'fixed effects' model. We took panel data from 181 countries between 1980 and 2010. Using data for the same countries over many years, it is possible to control for the variables that affect trade that are not observable.

The equation for the model is:

$$\ln(X_{ijt}) = \beta 1 \ln(Y_{jt}) + \beta\, 2 \ln(R_{jt}) + \beta 6 EU_{j} + \beta\, 7 TT_{j} + u_{jt} + \varepsilon_{ij}$$

Where X is bilateral total trade in deflated US$ between the UK and country j
Y is country j's GDP measured in constant 2005 US$
R is the nominal exchange rate of country j's deviation from purchasing power parity
EU is a dummy variable for EU members, with new members coded as 1 the year they joined
TT is a dummy variable for the UK's 30 largest non-EU trade partners
u signifies time-varying country-specific fixed effects
ε is an error term

The data sources were: IMF Direction of Trade Statistics for trade data; World Bank Development Indicators for GDP in 2005 dollars; the Penn World Tables for the nominal exchange rate's deviation from purchasing power parity; and the CEPII Geodist database for the measures of distance, and the dummy variables for colony and common language. The IMF trade data was deflated using the Fund's US dollar GDP deflator.

Standard errors were adjusted for heteroscedasticity.

Appendix B: The impact of EU immigration on the UK labour market

Effects on unemployment

Study	Time period	Finding	EU data	Result
Christian Dustmann and others, 'The impact of immigration on the British labour market', University College London, 2005	1983-2000	No statistically significant effect of non-UK-born on UK-born employment rates	N/A	None
Jonathan Portes and Simon French, 'The impact of free movement of workers from Central and Eastern Europe on the UK labour market: Early evidence', Department of Work and Pensions, 2005	2003-2004	A 1 percentage point rise in the ratio of A8 national 'worker registration' inflows to the working-age population resulted in a 0.09 percentage point increase in the Jobseeker's Allowance claimant rate	Between 2004 and 2015, the ratio of A8 working-age nationals to UK working-age population increased by 3.06 percentage points (LFS, Nomis)	0.28 percentage point increase in JSA claimant rate
Nicola Gilpin and others, 'The impact of free movement of workers from Central and Eastern Europe on the UK labour market', Department of Work and Pensions, 2006	2004-2005	No statistically significant effect of A8 nationals on the Jobseeker's Allowance claimant rate	N/A	None
Sebastian Jean and Miguel Jimenez, 'The unemployment impact of immigration in OECD countries', OECD, 2007	1984-2003	A 1 percentage point rise in the non-UK-born share of the working-age population in year 1 increased the UK-born unemployment rate by 0.4 percentage points in years 2 and 3, but had no impact on the UK-born unemployment rate in subsequent years	The EU-born share of the UK working-age population increased by 0.4 percentage points a year between 2004 and 2015 (LFS, Nomis)	Short-term impact of 0.16 percentage point rise in the UK-born unemployment rate in years 2 and 3, which then dissipates after three years

Study	Time period	Finding	EU data	Result
Sarah Lemos and Jonathan Portes, 'New Labour? The impact of migration from Central and Eastern European countries on the UK labour market', IZA, 2008	2004-2006	No statistically significant effect of A8 nationals on the Jobseeker's Allowance claimant rate	N/A	None
Sarah Lemos, 'Labour market effects of Eastern European migration in Wales', University of Leicester, 2010	2004-2006	No statistically significant effect of A8 nationals on the Jobseeker's Allowance claimant rate	N/A	None
Migration Advisory Committee, 'Analysis of the impacts of migration', 2012	1995-2010	An increase of 100 in the inflow of working-age non-EU born migrants leads to a reduction in native employment of 23 during periods of a negative output gap	The number of EU immigrants increased by 1.001 million between 2009 and 2015, when the UK had a negative output gap, which leads to a rise in UK unemployment of 230,011. The average UK unemployment rate between 2009 and 2015 was 2.3 million (Migration Observatory, ONS)	0.71 percentage point rise in UK-born unemployment rate
Migration Advisory Committee, 'Analysis of the impacts of migration', 2012	1995-2010	Inflows of working-age EU migrants did not have a statistically significant impact on native employment over this period	N/A	None

Effects on average wages

Study	Time period	Finding	EU data	Result
Christian Dustmann and others, 'The impact of immigration on the British labour market', University College London, 2005	1983-2000	No statistically significant effect of non-UK-born on UK-born average wages	N/A	None
Christian Dustmann and others, 'The labour market impact of immigration', University College London, 2008	1997-2005	A 1 percentage point increase in the non-UK-born/UK-born ratio increased average wages by approximately 0.2 to 0.3 per cent	Between 2004 and 2015, the EU-born/UK-born ratio rose by 2.07 percentage points (Migration Observatory, ONS)	0.52 per cent rise in average wages
Sarah Lemos and Jonathan Portes, 'New Labour? The impact of migration from Central and Eastern European countries on the UK labour market', IZA, 2008	2004-2006	No statistically significant impact of A8 nationals on UK-born average wages	N/A	None
Howard Reed and Maria Latorre, 'The economic impacts of migration on the UK labour market', Institute of Public Policy Research, 2009	2000-2007	A 1 percentage point increase in the non-UK-born share of the working-age population reduced the UK average wage by approximately 0.3 per cent	Between 2004 and 2015, the EU-born/UK-working age population ratio rose by 4.4 percentage points (LFS, Nomis)	1.32 per cent fall in average wages
Stephen Nickell and Jumana Salaheen, 'The impact of immigration on occupational wages: Evidence from Britain', Federal Reserve Bank of Boston, 2008	1992-2006	An increase of 1 percentage points in the non-UK-born share of the workforce in a particular occupation reduced average wages of that occupation by approximately 0.04 per cent in the subsequent year	Between 2004 and 2015, the EU-born/UK-working age population ratio rose by 4.4 percentage points (LFS, Nomis)	0.18 per cent fall in average wages

Study	Time period	Finding	EU data	Result
Max Nathan, 'The long-term impact of immigration on British cities: Diversity, wages, employment and prices', London School of Economics, 2011	1994-2008	No significant impact of change in non-UK-born share of population on the average wages of the UK-born	N/A	None

Effects on the wage distribution

Study	Time period	Finding	EU data	Result
Sarah Lemos and Jonathan Portes, 'New Labour? The impact of migration from Central and Eastern European countries on the UK labour market', IZA, 2008	2004-2006	No statistically significant impact of A8 nationals on wages from the 1st to the 5th decile of the wage distribution	N/A	None
Christian Dustmann and others, 'The labour market impact of immigration', University College London, 2008	1997-2005	A 1 percentage point increase in the non-UK-born/UK-born ratio reduced average wages by approximately 0.5 per cent in the 1st decile of the wage distribution; increased average wages by approximately 0.6 per cent in the 5th decile of the wage distribution; and increased average wages by approximately 0.4 per cent in the 9th decile of the wage distribution	Between 2004 and 2015, the EU-born/UK-born ratio rose by 2.07 percentage points (Migration Observatory, ONS)	1.03 per cent fall in wages in the 1st decile of the wage distribution; 1.24 per cent rise in the 5th decile of the wage distribution; and 0.83 per cent rise in the 9th decile of the wage distribution
Stephen Nickell and Jumana Salaheen, 'The impact of immigration on occupational wages: Evidence from Britain', Bank of England, 2015	1992-2014	A 1 percentage point increase in the non-UK-born/UK-born ratio employed in skilled production jobs reduces wages in that sector by 0.06 per cent; and in semi- or unskilled services jobs, by 0.13 per cent	Between 2004 and 2015, the EU-born/UK-born ratio employed in skilled production rose by 4.9 percentage points; and in semi- and unskilled services, by 5.8 percentage points (LFS)	Wages in skilled production fell by 0.27 per cent points; and in semi- and unskilled services by 0.77 per cent
Adam Corlett and Matthew Whittaker, 'Turning point? The minimum wage in 2014 and beyond', Resolution Foundation, 2014		The national minimum wage increased by 3.7 per cent between 2004 and October 2015 in real terms		

Study	Time period	Finding	EU data	Result
Adam Corlett and Matthew Whittaker, 'Turning point? The minimum wage in 2014 and beyond', Resolution Foundation, 2014		The national minimum wage increased by 3.7 per cent between 2004 and October 2015 in real terms		
Andrew Hood and Paul Johnson, 'Are we "all in this together"?', Institute for Fiscal Studies, March 21st 2016		The government's tax increases and benefit cuts between 2010 and 2019 will reduce the incomes of the poorest tenth of Britons by 10.6 per cent		

★

Other publications

- ★ **Europe after Brexit: Unleashed or undone?**
  Policy brief by Ian Bond, Sophia Besch, Agata Gostyńska-Jakubowska, Rem Korteweg, Camino Mortera-Martinez and Simon Tilford
  (April 2016)
- ★ **Shaping 21st century trade: TTIP, global standards and multilateralism**
  Policy brief by Christian Odendahl and Rem Korteweg
  (April 2016)
- ★ **Brexit and EU regulation: A bonfire of the vanities?**
  Policy brief by John Springford
  (February 2016)
- ★ **If the UK votes to leave: The seven alternatives to EU membership**
  Policy brief by Jean-Claude Piris
  (January 2016)
- ★ **Cameron's EU reforms: Will Europe buy them?**
  Policy brief by Agata Gostyńska-Jakubowska
  (December 2015)
- ★ **Big data, Big Brother? How to secure Europeans' safety and privacy**
  Policy brief by Camino Mortera-Martinez
  (December 2015)
- ★ **We don't need no federation: What a devolved eurozone should look like**
  Report by Christian Odendahl
  (December 2015)
- ★ **The EU Energy Union: More than the sum of its parts?**
  Policy brief by Dieter Helm
  (November 2015)
- ★ **Cameron's EU gamble: Five reforms he can win, and ten pitfallshe must avoid**
  Policy brief by Charles Grant
  (October 2015)
- ★ **Gain or more pain in Spain?**
  Policy brief by Simon Tilford
  (October 2015)
- ★ **The Undiplomats: Right-wing populists and their foreign policies**
  Policy brief by Yehuda Ben-Hur Levy
  (August 2015)
- ★ **Offline? How Europe can catch up with US technology**
  Policy brief by John Springford
  (July 2015)
- ★ **A ten-point plan to strengthen Westminster's oversight of EU policy**
  Policy brief by Agata Gostyńska-Jakubowska
  (May 2015)
- ★ **Do the UK's European ties damages its prosperity?**
  Policy brief by Philip Whyte
  (April 2015)
- ★ **Cleaning the neighbourhood: How the EU can scrub out bad energy policy**
  Policy brief by Stephen Tindale
  (April 2015)
- ★ **Disunited Kingdom: Why 'Brexit' endangers Briatain's poorer regions**
  Policy brief by John Springford
  (April 2015)
- ★ **Frozen: The politics and economics of sanctions against Russia**
  Policy brief by Christian Odendahl, Ian Bond, Jennifer Rankin
  (March 2015)

The economic consequences of leaving the EU

The final report of the CER commission on Brexit 2016

The CER invited leading economists, commentators, business people and EU experts to form a commission to consider the economic consequences of leaving the EU. This is the commission's final report.

The EU's critics claim that its rules do little to enhance British trade with the continent, that they hold back Britain's economy and that they limit its trade with fast-growing economies outside Europe. Yet this report shows that trade, investment and financial flows between Britain and the continent are much larger than would be the case if the single market did not exist. It finds that EU rules do little damage to Britain's economy and that they do not account for its lacklustre trade with emerging economies. If Britain voted to leave the EU, it would face an invidious choice in the subsequent negotiations: full access to the European single market, with little influence on the rules that govern it; or freedom from those rules, with less access to the market.

CENTRE FOR EUROPEAN REFORM