

DIRECTORATE GENERAL FOR INTERNAL POLICIES POLICY DEPARTMENT A: ECONOMIC AND SCIENTIFIC POLICY

Brexit and the Future of the Euro

IN-DEPTH ANALYSIS

Abstract

This paper discusses the potential implications of Britain's exit from the EU for the future of the euro. The British economy has not yet been negatively affected by the referendum result and the impact of the depreciation of sterling on the euro area economy should be limited. Of greater concern are the longer-run economic and political implications of the UK leaving the EU. The evidence points towards the likelihood of a "hard Brexit" in which increased trade barriers between the UK and the EU harm both British and European economies. That said, the risks are asymmetric: It is the UK economy that is going to suffer more, particularly with the likely reduction in financial sector employment. Over the longer term, the greater risks to the EU are political in nature rather economic. The Brexit referendum illustrates that the European Union is less popular than many imagine. It also shows that blaming the EU for a wide range of economic problems can be an effective populist political strategy for anti-EU political groups. The political threats to the continued existence of the EU appear to be higher now than ever before.

IP/A/ECON/2016-YY
PE XXX.YYY

November 2016

EN

This document was requested by the European Parliament's Committee on Economic and Monetary Affairs.

AUTHOR

Karl WHELAN, University College Dublin

RESPONSIBLE ADMINISTRATOR

Dario PATERNOSTER
Policy Department A: Economic and Scientific Policy
European Parliament

B-1047 Brussels

E-mail: Poldep-Economy-Science@ep.europa.eu

LINGUISTIC VERSIONS

Original: EN

ABOUT THE EDITOR

To contact the Policy Department or to subscribe to its monthly newsletter please write to: Poldep-Economy-Science@ep.europa.eu

Manuscript completed in November 2016 © European Union, 2016

This document is available on the Internet at: http://www.europarl.europa.eu/xxxxxxx

DISCLAIMER

The opinions expressed in this document are the sole responsibility of the author and do not necessarily represent the official position of the European Parliament.

Reproduction and translation for non-commercial purposes are authorised, provided the source is acknowledged and the publisher is given prior notice and sent a copy.

CONTENTS

EXECUTIVE SUMMARY	4
1. INTRODUCTION	5
2. SHORT-RUN MACROECONOMIC EFFECTS	6
3. LONGER-RUN MACROECONOMIC EFFECTS	9
3.1. What Form Will Brexit Take?	9
3.2. Economic Effects of a Hard Brexit	11
4. THE BIGGER PICTURE: THE FUTURE OF THE EURO	12
4.1. A More Integrated and Cohesive EU?	12
4.2. Political Risks to the Euro	13
REFERENCES	14

EXECUTIVE SUMMARY

- This paper discusses the potential implications of Britain's exit from the EU for the future of the euro.
- The British economy has not yet been negatively affected by the referendum result and the impact of the depreciation of sterling on the euro area economy should be limited.
- Of greater concern are the longer-run economic and political implications of the UK leaving the EU. The evidence points towards the likelihood of a "hard Brexit" in which increased trade barriers between the UK and the EU harm both British and European economies.
- Proposals for the UK to remain part of the single market while restricting freedom of movement of people are unlikely to come to pass. The UK's anti-EU political factions are unlikely to accept the lack of sovereignty entailed in such an arrangement and many EU member states are unlikely to accept restrictions on freedom of movement.
- Many EU member's governments will not be disposed to giving the UK a good deal on Brexit, on the grounds that such a deal would encourage populist anti-EU groups in their own countries
- These economic effects of a hard Brexit will be asymmetric: It is the UK economy that
 is likely to suffer more, particularly with the likely reduction in financial sector
 employment.
- Over the longer term, the greater risks to the EU are political in nature rather economic. The Brexit referendum illustrates that the European Union is less popular than many imagine.
- The Brexit result also shows that blaming the EU for a wide range of economic problems can be an effective populist political strategy for anti-EU political groups.
- Trump's victory in the US presidential election also suggests that the problems associated with globalisation, combined with the weakness of advanced economies since the global financial crisis, have created an environment in which electorates are willing to select new and risky options in the hope that they will produce a better outcome than an economic and political status quo that is viewed as failing to deliver for ordinary people.
- The political threats to the continued existence of the EU appear to be higher now than ever before.

1. INTRODUCTION

The UK referendum vote to leave the European Union is perhaps the most momentous event in the EU's history. After decades of increased European integration with Europe's elites planning a future of "ever deeper union", one of the largest member states has decided to exit from the European Union altogether. The exact impact that this development will have on the future shape of the EU is highly uncertain but the effects are likely to be profound.

This paper discusses the potential implications of Britain's exit from the EU for the future of the euro. Section 2 discusses the narrow question of the shorter-run macroeconomic impact and argues that the effects on the euro area economy over the next year are likely to be small. Section 3 considers the longer-run economic implications for both the UK and EU of the British decision to leave.

Finally, Section 4 addresses the crucial question of the impact of Brexit on the future existence of the euro as a common currency. One argument that has been aired in the wake of the British referendum has been that the UK leaving the EU opens an opportunity for the rest of the EU to take additional steps towards economic integration in a way that will help to put the euro on a sounder economic footing. While this is possible, I argue that this kind of integration is unlikely. Conversely, Britain's exit is likely to fuel political movements throughout Europe that threaten to bring an end to the EU, and with it, the euro.

2. SHORT-RUN MACROECONOMIC EFFECTS

The first macroeconomic impact of the news that the UK public had voted to leave the EU was a sharp decline in the value of the pound on foreign exchange markets. Against the euro, the pound dropped immediately from epsilon1.30 to below epsilon1.20 and has continued to fall in value since then with one pound worth epsilon1.17 at the time of writing. See Figure 1 below.

The foreign exchange market reaction provided a summary of the many different negative channels through which financial markets believe Brexit will affect the UK economy. Currency traders need to be forward-looking: They need to anticipate what the demand for a currency will be in the coming years and even macroeconomic news about events that will not happen for a number of years can have a significant impact on the current value of an exchange rate. Financial markets likely anticipated a reduction in the demand for sterling in the coming years due to reduced financial activity in the City of London as well as lower interest rates on sterling-denominated assets due to easier monetary policy because of a weaker UK economy.

Figure 1: The UK-Euro Exchange Rate
Source: ECB Statistical Data Warehouse²



6

¹ For a discussion of models of how financial markets price exchange rates, see chapter 7 of my collected lecture notes on macroeconomics.

http://www.karlwhelan.com/Macro2/Whelan-Lecture-Notes.pdf

² https://www.ecb.europa.eu/stats/exchange/eurofxref/html/eurofxref-graph-gbp.en.html

Despite warnings of the possibility of a swift recession following the referendum vote, there is little sign of the UK economy contracting at present. Retail sales have continued to grow and the labour market has remained strong. Still, a range business and consumer confidence indicators have declined, indicating unease about the future. There have also been a significant number of stories of multinational firms reconsidering investments in the UK economy. These could translate into a recession in 2017 but at present it appears that the depreciation in sterling and the additional easing in monetary policy from the Bank of England have acted to counteract an immediate slump.

For now then, the principle short-run macroeconomic impact of the Brexit vote on the euro area economy has been the fall in the value of sterling relative to the euro. This development will have made it easier for British firms to export to those countries that use the euro while euro area firms will now find it less profitable to export to the UK. While this will have a negative impact on the euro area economy, it is unlikely this effect will tip the euro area economy back into recession because the UK accounts for a relatively small fraction of exports from the euro area. Indeed, as shown in Figure 2 below, the nominal effective exchange rate of the euro (calculated by the ECB by weighting each exchange rate by the amount of trade that occurs between the euro area and the relevant countries) has not increased by much this year. Figure 1 also shows that the sterling-euro exchange rate is similar now to what it was in 2013.

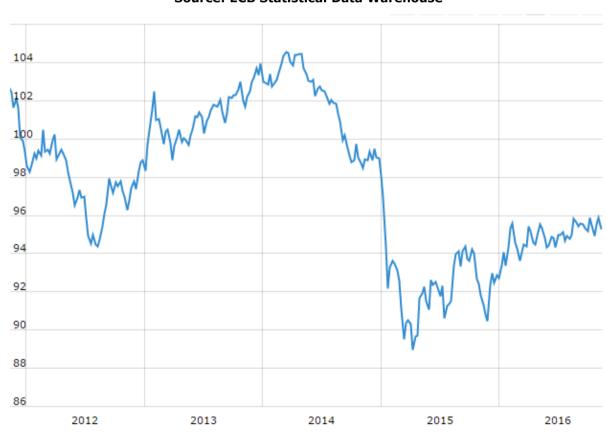


Figure 2: The Nominal Effective Exchange Rate of the Euro Source: ECB Statistical Data Warehouse³

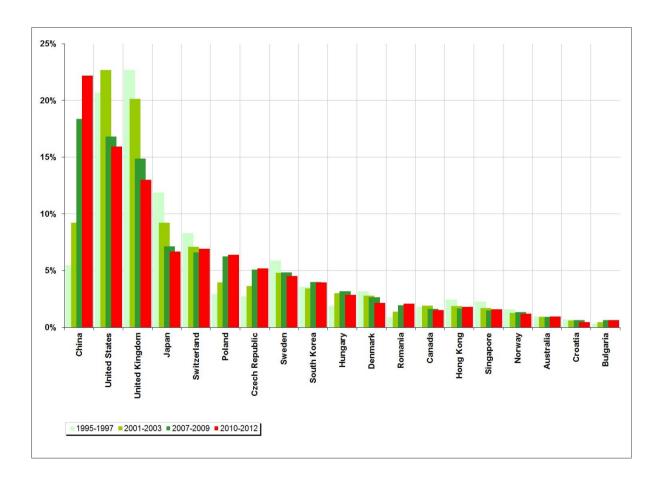
³ https://www.ecb.europa.eu/stats/exchange/effective/html/index.en.html

The reason for the limited impact of the sterling exchange rate on the nominal effective exchange rate is the relatively low weight given to the UK. The exchange rate between sterling and the euro gets a weight of only 13 percent in this calculation, making it the third most important foreign currency behind the Chinese yuan (22 percent) and the US dollar (16 percent). Indeed, this is part of a trend that has seen trade with the UK become less important over time. See Figure 3 below for the weights used over time in this calculation.

It is possible, of course, that the negative effects on sentiment currently visible in the UK could translate into a wider euro-area slump in confidence. The current euro area recovery is relatively shallow and it may not take much to stop it in its tracks. However, for now, Brexit does not appear to be inducing a wider European slump and should not be a major factor in the ECB's decision-making processes in the coming months.

Figure 3: Trade Weights for the Nominal Effective Exchange Rate

Source: ECB



8

3. LONGER-RUN MACROECONOMIC EFFECTS

The short-run effects of the Brexit referendum on the UK economy have been limited. While there is a dramatic increase in uncertainty about the future of the UK economy, for now the negative impact of this uncertainty has been limited while the decline in sterling and the Bank of England's easing of monetary policy are having a positive effect.

Over the longer-run, however, the UK leaving the EU is likely to have a sizeable impact on its economy as well as the economy of the rest of the EU. The size and nature of this impact depends upon the nature of the arrangements that the UK and EU settle on in the coming years.

3.1. What Form Will Brexit Take?

There are many uncertainties surrounding the form that Brexit is likely to take. Brexit could happen in a few different ways. One way is that two years after the UK notifies its intention to withdraw from the EU under Article 50, no negotiation has been concluded with the EU and the EU chooses not to extend the negotiations. At that point, the European Treaties will cease to apply to the UK and the UK will need to negotiate new arrangements with the EU from the outside. A second way is an agreed conclusion of negotiations under Article 50. It is unclear what exactly will be negotiated under this process. Article 50 states

"In the light of the guidelines provided by the European Council, the Union shall negotiate and conclude an agreement with that State, setting out the arrangements for its withdrawal, taking account of the framework for its future relationship with the Union."

This suggests that the mechanics of the withdrawal are to be the key focus of negotiations, with the future relationship merely being "taken into account", which may not mean much. Indeed, the current tone in comments from EU member state governments (and Commissioner Barnier) is that Article 50 negotiations will be narrowly based with little emphasis on negotiating transitional arrangements or planning for a new trade relationship. A more optimistic scenario would suggest that the stakes for all sides are too high to go this route and that the future relationship of the UK with the EU will necessarily be a central part of these negotiations. However, the more complex the negotiations become, the less likely it is that they will come to a successful conclusion before the two-year limit described in the Treaty and agreement on an extension of the negotiations, though feasible under Article 50, requires unanimity and this may be hard to achieve.

My current assessment is that the UK is likely heading for a "hard Brexit" with an exit that will ultimately see access for UK firms to the European market significantly curtailed and vice versa.

Soft Brexit Options

The essential element of any "soft Brexit" scenario is the UK retaining full access to the EU single market. This could happen, for example, if the UK chose to retain membership of the European Economic Area. This option is extremely unlikely to be pursued as a long-term solution. It is impossible (and perhaps meaningless) to "read the minds" of the 52 percent of the British public that voted to leave the EU, so we do not know which non-EU set of arrangements would have widespread approval. Prime Minister Theresa May appears to have decided, however, that the key thing the public voted for was control of immigration to the UK. While very little about the British government position on Brexit is clear, freedom of movement between the UK and the EU does appear to have been explicitly ruled out.

Another form of "soft Brexit" is one in which the UK negotiates a new form of agreement retaining access to the single market but restricting freedom of movement. This new type of "continental partnership" has been proposed in a recent Bruegel paper by the all-star team of Jean Pisani-Ferry, Norbert Röttgen, André Sapir, Paul Tucker and Guntram Wolff.

There is much to commend the proposal from an academic economic perspective but my assessment is that, politically, this kind of arrangement is unlikely to be approved. From the UK side, a deal of this sort is still likely to involve too much acceptance of rule-making from Brussels (this time without an explicit UK involvement in the decision-making process) to be accepted by the anti-EU elements of the Conservative party and UK press. The proposed continuing contributions to the EU budget are also likely to be unpopular in light of the promises made to the UK public about contributions to this budget would be spent on other items.

From the EU side, approval of a "continental partnership" would require the backing of a qualified majority of the European Council and a majority of the European Parliament. It is also possible that a wide-ranging deal would require approval from every national parliament in the EU. This level of approval means a deal of this sort is unlikely to be put in place over the next few years. Freedom of movement is an important element of the membership of the single market for many member states, particularly those in Eastern Europe. Other countries will also be keen to avoid the perception that the UK is getting an "a la carte" form of associate membership of the EU, where they will get to pick and choose the elements of European integration that they like while leaving aside those they do not like. Thus some will view driving a hard deal with the UK as necessary to discourage populist anti-EU groups in their own countries and to encourage other EU member states to remain in the union.

Harder Brexit Options

On the other side, there is a hard Brexit, in which the UK does not have access to the single market and trades with the EU on the same terms as other states that are outside the EEA.

One complication to this kind of arrangement is the UK's current status with the World Trade Organisation. It is commonly been presumed that a "hard Brexit" would see Britain face the same kinds of trade restrictions as other WTO members that are not in the EU. However, this would require the UK to renegotiate its status as a WTO member. The UK is a member of the WTO but the terms of its membership are set by its status as an EU member state. These terms would have to be renegotiated, by consensus, with over 160 members of the WTO. The simplest starting point for such a process would be for the UK to propose to retain the EU's schedule of trade concessions as its own. Even that process however, could still be fraught with potential stumbling blocks and delays if some countries decided that concessions agreed with the EU should not necessarily be applied to the UK as a stand-alone country.⁴

These complications suggest that one possible route for the UK out of the EU may retaining full access to the single market via temporary EEA status (thus retaining freedom of movement for a period). This temporary period could allow the UK time to negotiate new terms of WTO membership on the basis of continuing the EU's existing set of WTO schedules. This could then be followed by a period in which the UK could negotiate new trade deals with the EU and the rest of the world which could then lead to the elimination of freedom of movement. The advantages of new international trade deals with the rest of the world have been widely promoted by pro-Brexit politicians but it would come with downsides in relation to trading with the EU. In particular, it would require leaving the EU's

-

⁴ See Ungphakorn (2016)

custom union and thus the application of "rules of origin" regulations to British exports to the EU, which are time-consuming and bureaucratic.

Another possibility is what could be termed the "Turkey option", which would see the UK negotiates to remain part of the EU's customs union but without any agreement on freedom of movement. This would provide less access to the European markets than full membership of the single market but would be less disruptive than the WTO rules option. Membership of the customs union would mean no need to apply regulations relating to rule of origin but as Andre Sapir (2016) points out: "Leaving the EU but remaining a member of the EU customs union would mean that the UK would have little or no autonomy and no say in setting its trade policy." Sapir concludes that the UK is unlikely to choose this option.

Ultimately, in the absence of any clear public plan from the UK government, this is all speculation but the evidence to date points against continued membership of the UK in the single market over the long run. Indeed, the consistent discussion of trade deals with non-EU countries by pro-Brexit UK ministers points towards the UK ultimately moving outside of the wider customs union as well as the single market.

3.2. Economic Effects of a Hard Brexit

So what would be the economic effect of a hard Brexit? International trade is not a zerosum game, so it is likely that there will be economic losses for both the UK and the EU if, for example, the UK traded with the EU under standard WTO trade rules.

The importance of the UK market for exports from Europe has been regularly cited by the pro-Brexit British politicians as a reason why the EU will be anxious to do a free trade deal with the UK even if the UK does not agree to freedom of movement of people or other elements of the single market. This assessment misses that the costs of a hard Brexit are likely to fall asymmetrically on the UK. The EU is a far more important export market for the UK than the UK is for EU as a whole. To quote some figures provided to me by Martina Lawless and Edgar Morgenroth of the Economic and Social Research Institute (ESRI), 44 percent of the UK's goods exports are sold to the EU. ⁵ Conversely, for the countries that make up the continuing EU, the UK accounts for only 7 percent of goods exports. Lawless and Morgenroth estimate than the imposition of standard WTO tariffs would result in UK exports dropping by almost 10 percent, while EU exports would drop by about 2 percent.

Underlying these aggregate figures, there would be many different groups of winners and losers and important changes in the structure of the UK economy. The direct effect of lost exports on GDP would be partly offset by lower imports and more domestic spending on home-produced goods. Trade between the UK and EU in food-based sectors would drop sharply while sectors like motor vehicles would probably also see substantial reductions in trade. These reallocations would see imported products replaced in UK by less efficiently produced domestic products, resulting in higher costs of living and lower real household incomes. Dhingra, Ottaviano, Sampson and van Reenan (2016) estimate the likely reduction in average incomes in the UK due to trade following Brexit being governed by World Trade Organisation (WTO) rules at 2.6 percent.

There are a number of uncertainties around estimates like this but, my guess is that they are perhaps under-estimating the cost of a hard Brexit to the UK economy. Dhingra, Ottaviano, Sampson and van Reenan include estimates of the effect of non-tariff barriers on UK trade in their analysis but, relative to the effect of tariffs on trade in goods, the effect of regulatory non-tariff barriers are less certain. If the UK leaves the EU's customs union, these non-tariff barriers may include substantially increased times for processing goods through ports, which could add substantially to trade costs.

⁵ See Lawless and Morgenroth (2016).

It is also difficult to quantify the likely effect on services of the UK's exit from the single market. Of particular importance here is the role of financial services. While London will continue to be a major centre for global financial services, the early signs are that many financial institutions are looking to redeploy resources out of London and towards other European cities. One particular type of business that is clearly under threat is eurodenominated clearing. This type of business had been under threat in recent years due to the ECB preference that euro-denominated clearing activities take place within the euro area and the UK's role in this business was only saved due to a European Court of Justice ruling that pointed to the requirement to allow free movement of capital inside the EU. Once the UK has left the EU, this defence no longer holds. The Financial Times has reported that there could be 83,000 job losses in banking and related sectors over the next seven years if euro-denominated clearing is forced out of London.⁶

A hard Brexit would also likely change the patterns of foreign direct investment (FDI) seen in the UK and EU. The UK may see some increase in FDI due to firms locating inside the UK to avoid tariffs. However, to the extent that some multinationals have located in the UK with a view to serving the wider European market as well as the UK, this will see some multinationals re-locate their operations back inside the EU.

Overall, there are not likely to be many economic winners from a hard Brexit. Both the UK and the EU are likely to be negatively affected by higher trade costs, though the hit will be smaller for the EU than for the UK. It is possible that the EU may see additional benefits that could partially or fully offset higher trades costs, such as increased employment and tax revenue from the financial sector but it is difficult at this point to quantify these effects.

4. THE BIGGER PICTURE: THE FUTURE OF THE EURO

The negative economic effects of higher trade barriers is one reason to be concerned about Brexit. That said, the size of these effects should not be over-emphasised. The negative impacts will likely be spread over years. The result will be to depress economic growth rates that are already on a disappointing long-run trend but the outcome is unlikely to be too dramatic. The greater reason to worry about Brexit is that it represents an important step on a political path that could end up with the disintegration of the euro and possibly also the EU.

4.1. A More Integrated and Cohesive EU?

Not everyone is worried about the effect of Brexit on the future of the EU. Indeed, the Brexit vote triggered a wave of opinion pieces arguing that the UK leaving the EU could lead to a stronger European Union. The argument goes that the UK was an opponent of greater European integration and that an EU without UK obstructions could pursue a more cohesive set of policies focused on deeper integration. In particular, it is argued that the absence of the UK would make it easier to pursue policies that will help to make a success of the euro as a common currency, e.g. a common deposit insurance scheme or a shared unemployment insurance programme.

I do not agree with this positive viewpoint. This viewpoint is unnecessarily negative about the role the UK has played in the EU. The UK's lack of enthusiasm for certain aspects of integration had led to a form of "two-speed" Europe, in which the UK had a number of derogations from some aspects of integration. However, the UK did not obstruct the key reforms that were put in place to support the euro such as the introduction of the European Stabilisation Mechanism or the appointment of the ECB as the single supervisor of the European banking system.

⁶ https://www.ft.com/content/b3e34540-a9a1-11e6-809d-c9f98a0cf216

This viewpoint also over-states the political appetite among the remaining EU countries for deeper integration and reform. There is little support in countries such as Germany for steps towards fiscal integration, with concerns that the EU will turn into a "transfer union". These concerns extend to policies such as a common European deposit insurance fund, which would provide a considerable boost to financial stability. Deeper political reforms to the EU that would require revisions to the European Treaty are also highly unlikely to even be suggested over the next few years given the absence of agreement and the requirement for unanimity across all member states.

Those who cheer the UK's exit from the EU also perhaps under-estimate the positive role played by the UK in European economic policy. The UK has traditionally been a strong advocate of growth-enhancing economic reforms such as completing the single market and (ironically) maintaining free trade with the rest of the world. Without the UK's voice at the debating table in the EU, the likelihood of growth enhancing reforms in the coming years is reduced.

4.2. Political Risks to the Euro

Rather than a step towards a newly thriving EU, a more realistic assessment is that the Brexit vote represents a possible step towards the end of the EU as we have known it, including the end to the euro as a common currency.

From a political perspective, Brexit represents an important signal that the European Union is less popular than many imagine. It also shows that blaming the EU for a wide range of economic problems can be an effective populist political strategy for anti-EU political groups. It is simplistic to suggest that Donald Trump's victory in the US presidential election can be viewed as a pointer to what will happen in future European elections. However, it does suggest that the problems associated with globalisation, combined with the weakness of advanced economies since the global financial crisis, have created an environment in which electorates are willing to select new and risky options in the hope that they will produce a better outcome than an economic and political status quo that is viewed as failing to deliver for ordinary people.

If there is one thing we have learned from Brexit and Trump's victory, it is that we should be mistrustful of consensus political forecasts. At present, it is assumed that Marine Le Pen is unlikely to win the French presidential election next year. But if she does, a referendum on EU membership may be triggered and who knows what the outcome could be? Italy—with higher unemployment and almost no GDP growth over the past 15 years—probably provides even stronger ground for populist movements. Again, the political consensus is that the Five Star Movement will not form a government in Italy in the next few years. But if they do, there would likely be a referendum on Italian membership of the euro. Even in countries without strong populist movements, the problems related to the ongoing refugee crisis will continue to put pressure on centrist pro-European parties. In time, Brexit may be seen as the first step in a wider unwinding of the European Union.

From a more practical perspective, a British exit from the EU will provide a roadmap for others to potentially follow. The enormous uncertainties surrounding exiting the EU are an important reason to be wary of calling for such an action. However, the British have decided to be "guinea pigs" to allow the rest of the EU to see how the process works. In a few years from now, we will be a lot clearer about how the process of exiting the EU works in practice.

Even if the UK economy does not prosper from leaving the EU, the economic downsides will probably be less dramatic than many pro-EU commentators have warned. All of the economic evidence also suggests that placing restrictions on freedom of movement is likely

to prove damaging to the UK fiscal budget and wider economy. However, the British public has largely ignored the evidence on the economic benefits of immigration and are unlikely to pay any more attention to evidence that reduced immigration has had negative effects. Populists and nativists across Europe will probably point to the UK economy as an example of the feasibility and desirability of eliminating free movement of people.

These comments should not be interpreted as a forecast that the EU is about to break up or that the euro is doomed. We have come through a period in which the economic contradictions of a common currency across many different countries have threatened to end the euro. Those specific threats have receded somewhat in recent years thanks to welcome (if delayed) actions from the ECB. However, there are multiple scenarios in which the euro ceases to exist and the political disintegration of the EU is one of those scenarios. The political threats to the continued existence of the EU appear to be higher now than ever before.

REFERENCES

- Dhingra, Swati, Gianmarco Ottaviano, Thomas Sampson and John Van Reenen (2016).
 The consequences of Brexit for UK trade and living standards, LSE Centre for Economic Performance.
- Dustmann, Christian and Tommaso Frattini (2014). "The Fiscal Effects of Immigration to the UK" *The Economic Journal*. Available at
 - http://www.cream-migration.org/files/FiscalEJ.pdf
- Lawless, Martina and Edgar Morgenroth (2016). The Product- and Sector-Level Impact
 of a Hard Brexit, forthcoming working paper, Economic and Social Research Institute,
 Dublin.
- Pisani-Ferry, Jean, Norbert Röttgen, André Sapir, Paul Tucker and Guntram Wolff (2016). Europe after Brexit: A proposal for a continental partnership, Bruegel.
- Sapir, Andre (2016). Should the UK pull out of the EU customs union? Bruegel. http://bruegel.org/2016/08/should-the-uk-pull-out-of-the-eu-customs-union/
- Ungphakorn, Peter (2016). "Nothing simple about UK regaining WTO status post-Brexit" International Centre for Trade and Sustainable Development. Available at http://www.ictsd.org/opinion/nothing-simple-about-uk-regaining-wto-status-post-brexit

⁷ See, for example, Dustmann and Frattini (2014).