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Macroprudential Risk Management Problems in Brexit

Brexit is not only a historical chapter of the British – EU relationship, but it also carries immense challenges for financial market stability in the short and medium run for the 28 member states of the European Union. The scale of these challenges depends heavily on the outcome of EU-UK negotiations. The European Systemic Risk Board plays a critical role in macroprudential supervision, a crucial policy challenge for the EU. However, there are doubts as to whether it will fulfill its mandate. The EU27 faces major problems in terms of prudential supervision after Brexit since a very large part of their wholesale banking markets are in the UK and thus will not be regulated by the EU after 29 March 2019. Indications point to a considerable risk of a new transatlantic banking crisis in the future.

A 2016 referendum in the United Kingdom resulted in a narrow majority in favor of what is referred to as Brexit: the departure of the UK from the European Union on 29 March 2019, after 45 years of EU membership. It is already clear, and has been emphasised at the 2018 meeting of British Prime Minister Theresa May and US President Donald Trump in Davos, that the UK and the US are working towards a British-American transatlantic trade and investment partnership agreement that is expected to help the UK to overcome the dampening effects of Brexit on long-term economic growth.

After reaching an agreement on the transitional period for Brexit in March 2018 that confirmed the UK's continued activity in the EU single market until 2020, negotiations headed into a final stage in which future EU-UK trade relations should be framed within a sectoral free trade agreement. EU chief negotiator Michel Barnier emphasised that financial services will largely be left out of the free trade agreement.[1] Thus, the UK will encounter a considerable disadvantage as it has been running a sectoral current account surplus in financial services vis-à-vis the EU27 that has partly offset its high structural current account deficit in goods with the EU for many years. For the EU27, Brexit will create a particular problem due to the fact that 90% of the EU27's wholesale banking market is located in the City of London. London's financial district is strong in derivatives – designed as a hedging instrument against certain risks – as well as in foreign exchange trading of US dollar and euro contracts and the arrangement of big loans for EU27 multinational companies. After Brexit, the majority of the EU banking wholesale market, as well as many insurance contracts for EU27 countries, will be based outside of the Community. And this means that EU legislation will only apply (with certain exceptions) until the end of the transition period, 31 December 2020. While the Brexit-related analysis of many authors has focused on trade issues,[2] the financial market perspective

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1 J. Rankin: The UK cannot have a special deal for the City, says EU Brexit negotiator, in: The Guardian, 18 December 2017, available at https://www.theguardian.com/politics/2017/dec/18/uk-cannot-have-a-special-deal-for-the-city-says-eu-brexit-negotiator-barnier.

2 See P. Holmes, J. Rollo, A. Winters: Negotiating the UK's post-Brexit trade arrangements, in: National Institute Economic Review, Vol. 238, No. 1, 2016, pp. 22-29; and S. Dhingra, G. Ottaviano, T. Sampson: A hitch-hiker's guide to post-Brexit trade negotiations: options and principles, in: Oxford Review of Economic Policy, Vol. 33, No. S 1, 2017, pp. S22-S30.

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has been largely neglected despite possible financial instabilities in the medium term. The Annual Report of the Bank for International Settlements in 2017 has, however, pointed out that political instability could increasingly affect financial market dynamics.[3]

Even if Brexit is fully implemented, there is still hope that an EU-UK free trade agreement for goods could be achieved. Considerable volatility is anticipated in financial markets in the coming years given the fact that Brexit takes the UK and the EU into unchartered waters. Macroprudential supervision institutions in the EU28 and also relevant policy units at the International Monetary Fund (IMF) and the Bank for International Settlements (BIS) will carefully consider the potentially serious challenges ahead in financial markets. Macroprudential risk means a systemically relevant interplay of various potential risk elements that could affect the banking system, stock market dynamics or commodity pricing. Adequate policy responses should then reduce that risk in an appropriate way to control the underlying dynamics. Bank of England research has shown that foreign financial developments are often powerful predictors of domestic banking crises.[4] From an EU perspective, global credit growth and certain banking and financial market indicators (from the US in particular) play a role with regard to the stability of banks in EU countries; and the international effect is larger for financially open economies. Clearly, most EU28 countries are financially open. American and other foreign banks in London actively offer financial services to EU28 countries in the current single market framework. (London banks in the EU single market benefit from "passporting" rules that allow banks from the UK to offer services to clients across the other 27 countries.)[5] There are EU27-UK banking links that have two important post-Brexit perspectives:[6]

- London banks will relocate to EU countries for certain activities; but some banks – particularly, major US banking subsidiaries in the UK – will relocate activities to New York, which is considered the next best location for the provision of financial services with economies of scale.
- Even if there is relocation to EU countries, one may assume that more than half of the EU wholesale banking markets – comprising derivatives, loans to big EU clients and foreign exchange market activities denominated in euro – will remain in the UK even after Brexit. Estimates show that in 2016, about 90% of the EU wholesale markets were located in the UK and around one-third of these could go to the EU due to Brexit.[7]

Current EU banking and consumer protection laws will no longer apply post-Brexit unless a special chapter in the new treaties imposes minimum cooperation requirements between the UK and the EU. This includes British macroprudential institutions (the Bank of England) as well as UK prudential supervisory institutions in banking, insurance and securities markets, and the relevant institutions in the eurozone and the EU, particularly the European Central Bank, which supervises around 120 large banks in the eurozone, and the European Systemic Risk Board (ESRB), which is responsible for macroprudential supervision in the EU. The ECB as a European Institution is a full member of the ESRB.[8] Only Norway and Iceland are observers.

The cost of Brexit could become much larger than studies suggest due to the lack of cooperation in macroprudential supervision and economic policy between the soon to be post-Brexit UK and the EU27. It is also important to take into account the size of foreign direct investment impediments in OECD countries in banking and insurance and in finances in order to get a better idea about the effects of the relocation of capital flows in the context of Brexit. The UK government is likely to consider changes in the corporate tax rate and in banking regulation as a means of raising the growth rate of output above the reduced level observed in the context of Brexit.[9]

The ECB CISS indicator (see Figure 1) shows that the UK referendum has raised financial market nervousness and a new spike could occur in 2018-19 as it becomes clear whether or not Brexit – and what type of Brexit (hard or soft) – will be implemented. The Bank of England could fight a recession with an expansionary monetary policy to some degree, but then the inflation rate would rise again in the context of a strong pound depreciation.

3 Bank for International Settlements: 87th Annual Report, 2016/17, Basel 2017.

4 A. Cesa-Bianchi, F.E. Martin, G. Thwaites: Foreign booms, domestic busts: the global dimension of banking crises, Working Paper No. 644, Bank of England, London 2017.

5 Cf. https://www.bankofengland.co.uk/prudential-regulation/authorisations/passporting.

6 See, for example, Cambridge Econometrics: Preparing for Brexit, Final Report for the Greater London Authority, January 2018; and Oliver Wyman: The Impact of the UK's Exit from the EU on the UK-based Financial Services Sector, October 2016, available at http://www.oliverwyman.com/our-expertise/insights/2016/oct/The-impact-of-Brexit-on-the-UK-based-Financial-Services-sector.html.

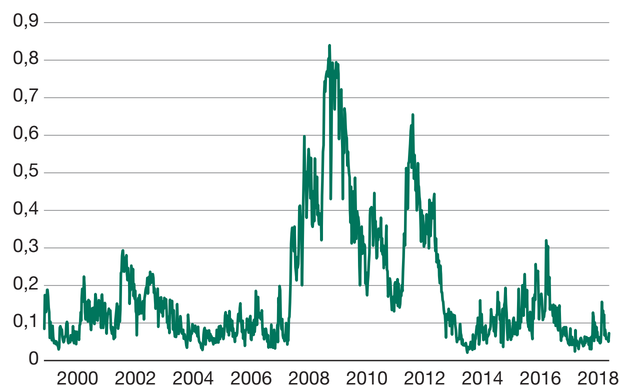
7 A. Sapir, D. Schoenmaker, N. Véron: Making the best of Brexit for the EU27 financial system, Bruegel Policy Brief, Issue 1, February 2017, available at http://bruegel.org/wp-content/uploads/2017/02/Bruegel_Policy_Brief-2017_01-060217.pdf.

8 https://www.esrb.europa.eu/about/orga/list/html/index.en.html.

9 P.J.J. Welfens, F.J. Baier: BREXIT and Foreign Direct Investment: Key Issues and New Empirical Findings, in: International Journal of Financial Studies, Vol. 6, No. 2, 46, 2018.

Figure 1

ECB Composite Indicator of Systemic Stress (CISS)



Source: ECB Statistical Data Warehouse: CISS, data 8.1.1999-31.8.2018.

Brexit poses a number of problems to contract continuity:

- Two trillion GBP in derivative contracts could become void on 29 March 2019. This applies to insurance contracts as well: 30 million EU policyholders and six million UK insurance policyholders could face serious problems unless a timely solution is negotiated.[10] Financial service providers have also pointed out the relevance of contract continuity problems.[11] The envisaged transition period – until the end of 2020 – could help to mitigate some of the problems associated with derivative contracts, but insurance policies are different because most are long term.
- If a solution is not found, the result could be heightened financial instability in both British and European markets.

It is hard to believe that these issues have not yet been resolved as of the first quarter of 2018. Failure to achieve a timely solution indicates that there is a deep political rift between the UK and the EU. All current Brexit cost estimates would be too low if the contract continuity problem continues.

Brexit, EU-UK trade agreement and financial market instability

Depending on the outcome of Brexit negotiations – whether the result is "hard," i.e. leaving the EU single market and the customs union, or "soft," i.e. remaining in the EU customs union (EU tariffs would apply to the UK and the EU would negotiate free trade agreements) – the real economy of the UK would face quite different adjustment dynamics and changes in output growth. The exchange rate depreciation of the pound may be rather strong in the case of a hard Brexit or more modest in a soft Brexit. May's government has announced that it prefers a hard Brexit, opting to negotiate a series of free trade deals with other countries including China, India, Canada, Australia and New Zealand. This approach comes under the heading of "Global Britain". The Labour Party leader Jeremy Corbyn has indicated that he favors a soft Brexit with a customs union in which the UK negotiates its own free trade agreements. Such negotiations, however, are impossible since the EU customs union is designed in such a way that the European Commission negotiates free trade agreements on behalf of the entire customs union. The soft Brexit option is the most likely outcome politically speaking. In this case, the Northern Ireland border regime issue is a critical aspect of EU-UK trade negotiations. The current soft Northern Ireland border regime would be replaced by a new hard border regime in the event of a hard Brexit. The Irish parliament will not sign an EU Treaty without a soft border regime and May's government is unlikely to pursue the hard option if it means breaking up the UK. Therefore, it appears that financial markets will initially anticipate a hard Brexit, followed by final negotiations in autumn 2018 during which it will become clear that a soft Brexit is the only politically feasible solution. This outcome, however, may create a political crisis in the UK.

The oscillating market expectations will bring considerable financial market volatility, including exchange rate fluctuation. Researchers have shown that anticipation of a hard Brexit will bring about a rather strong depreciation of the pound, while expectations of a soft Brexit will bring a smaller depreciation – and an appreciation relative to the previous hard Brexit-related exchange rate level.[12]

It follows then that a real devaluation of the British pound may occur which will stimulate foreign international mergers and acquisitions in the UK. This is supported by Froot and Stein who conclude that a real devaluation in imperfect capital markets stimulate foreign direct investment (FDI) and mergers & acquisitions.[13]

10 A. Bailey: The Future of the City, Speech at the Future of the City dinner, 5 February 2018, Financial Conduct Authority, London.

11 Association of Financial Markets in Europe: Impact of Brexit on cross-border financial services contracts, AFME/UK Finance briefing paper, September 2017.

12 A. Korus, K. Celebi: The Impact of Brexit on the British Pound/Euro Exchange rate, EIIW Discussion Paper No. 243, available at http://www.eiiw.eu/fileadmin/eiiw/Daten/Publikationen/Gelbe_Reihe/disbei243.pdf.

13 K. Froot, J. Stein: Exchange Rates and Foreign Direct Investments, in: Quarterly Journal of Economics, Vol. 106, No. 4, 1991, pp. 1191-1217.

To the extent that leading banks from London will relocate to EU27 countries, the respective host countries can be expected to improve their product innovations in banking and financial services. EU regulations may put pressure on leading investment funds from the UK, pushing them to relocate certain activities to EU27 countries. The ESMA has put some pressure on British investment funds to consider such relocation. London banks looking to relocate to Ireland and continental EU countries do not have much lead time for this relocation. Banks intending to operate in one of the 19 European countries starting in April 2019 must submit a request for a license at the ECB. Ireland, Germany, France, Luxembourg and the Netherlands have a location advantage. It appears that the Dutch government is not eager to attract additional financial sector activities from the UK because small open economies may incur additional stability risks in the future due to a strong relative increase in the banking and finance sector.

As long as the EU and the UK cannot find a compromise on a financial service free trade agreement, the banks in the UK face a difficult transition period. Future interactions would be based on "regulatory equivalence arrangements" – or the EU's limited and revocable access given to third country institutions in a particular field of financial services. The EU already has such agreements with the US and Singapore; banks in the UK will likely face similar regulatory arrangements. However, this is based on the premise that financial service regulation in the UK would be recognised as the equivalent to respective EU regulation. The British government is eager to adopt a new wave of deregulation – partly fueled by inherent pressure to follow the Trump administration's deregulation initiatives. The EU, however, is hesitant to accord broad equivalence agreements.

EU28 banks will be strongly affected by further steps toward Brexit. This should be reflected in the EU's Brexit-related stress test on the biggest EU28 banks in November 2018. The test includes new IFRS9 requirements, e.g., provisions for the anticipated future losses of asset positions.[14]

A key problem with the EBA stress test is that November 2018 is much too late. The EBA-sponsored banking stress test is scheduled to be published in November 2018 and will do very little to reinforce confidence. The IFRS9 accounting standard should not be included for the first time if it casts doubt on the stress test.

14 IFRS9 means that banks should avoid traditional problems, for example those visible in the Transatlantic Banking Crisis which meant that provisions could only be made for losses when they had been realized even though bank managers could clearly anticipate the respective losses.

The overall institutional setting for prudential supervision and macroprudential supervision presents a rather complex picture, which includes global international organisations such as the IMF and the Bank for International Settlements (BIS) as well as EU institutions (ESRB, EBA, EIOPA, ESMA) and national agencies.

Risks for EU28 banking and financial market stability

With the UK's exit from the European Union, the question of banking stability in the EU will again come to the fore. The financial activities in London are, from an EU perspective, of a much greater dimension than the activities of the British bank HSBC.[15]

The Bank of England may, according to suggestions from the British government and indications from Brexit-related legislation, take a different regulatory path than that of the EU by orienting itself toward deregulation. Similar calls were made by the British banking sector in consultation with the May government.[16] It appears, therefore, that the UK will follow the deregulation program suggested by the Trump administration in March 2018.

Three particular transitory risks related to relocation should be noted:

- If the relocation of activity X initially based in London to eurozone country E_i ($i=1, 2…19$) takes place, one might face the problem in country i that the national supervisory authority lacks the expertise required leading to new transitory policy risks.
- Relocation could raise the costs of the provision of the respective financial service, at the same time there could be opportunities for innovation due to spillover effects, i.e. EU27 host cities/regions could benefit from the diffusion of these advantages.
- The relocation of London bank activities to the EU27 could bring about political tensions between the EU and the UK.

The risk of spillovers in terms of banking deregulation being transferred unintentionally from the UK to the EU27 should be more thoroughly analysed. There are certainly

15 HSBC was included in the 2017 annual report of the European Systemic Risk Board as being the only system-relevant British bank with cross-border European activities.

16 S. Gordon, L. Noonan, P. Jenkins, G. Parker: UK to diverge from EU on financial services rules after Brexit, Financial Times, online edition, 21 September 2017, https://www.ft.com/content/582ca822-9e06-11e7-8cd4-932067fbf946 (19.9.2018).

options for EU-UK regulatory cooperation. However, if Brexit brings a strong long-run output decline, thereby putting pressure on the British government to adopt reduced corporate tax rates and lighter financial regulation in the UK, the EU27 will not have much interest in regulatory cooperation. Research needs to be conducted to analyse how big the "forced" FDI relocation towards the EU27 in the banking and insurance sector will be and to assess the current account and nominal plus real exchange rate effects on the UK and the EU27, respectively.

The updated IMF FSAP reports for the UK and the eurozone in 2018 cannot replace the necessary cooperation with the European Systemic Risk Board. If macroprudential analysis in the ESRB in 2017-18 is restricted and does not deliver a comprehensive analysis for the EU28 countries, the cost of Brexit could be much higher than expected since the analytical gaps imply a lack of risk management from the policymakers' side.

Incomplete risk management analysis

The EU28 countries should also take a critical look at financial markets and banking with regards to broader risk management perspectives. Is this happening as part of a rational international transition process in the Brexit dynamics in 2017/2018? No. The Bank of England apparently was partially blocking adequate analysis at the ESRB in which case Brexit could become a blind flight.

The type of supervision the ESRB is supposed to guarantee requires an understanding of the potential systemic risk that emerges from the interaction of individual banks in stress; shocks in foreign exchange markets, real estate markets or natural resources markets; shocks associated with fiscal or monetary policy; or political risks.[17] In 2017, the Governor of the Bank of England – who is also First Vice-Chair of the ESRB – did not actively support the ESRB task to broadly analyse the relevant Brexit dynamics that could be highly relevant for systemic stability of the EU28 within a joint analytical effort. The ESRB's risk dashboard results from March 2018 indicate some financial market links between EU27 countries and the UK. Regarding the strong UK financial market links to so many EU countries, the data for the UK is not available and, therefore, is not included on the risk map in Figure 2.

The Bank of England and other UK authorities have all the relevant data, and it seems obvious that the UK is being uncooperative in terms of risk analysis by the ESRB and thus is undermining the ability of the ESRB to fulfill its

Figure 2

Interlinkages and composite measures of systemic risk: Cross-border claims of banks

Notes: Based on consolidated banking data. The size of the bubbles corresponds to the ratio of domestic to total claims of a country's consolidated banking sector. The thickness of the arrows depends on the share of bilateral foreign claims in the total claims of the banking sector extending the loans. Arrows are not displayed in cases where the corresponding ratio is below 5%. Due to the use of consolidated data, cross-border claims also include banks' exposures to other countries in the EU through the presence of subsidiaries in those countries. Data for UK not available.

Source: ESRB Risk Dashboard, March 2018, Issue 23.

mandate. This already started happening two years before the UK departure date, at least according to the timeline of the May government. Will the European Parliament and the EU accept such non-cooperation from the UK in an EU28 institution? What are the conclusions about EU-UK cooperation to be included more or less strictly in the EU-UK treaties on Brexit? A free ride regulatory policy option for the UK would be quite inadequate both from an EU27 perspective and a global perspective.

In the context of Brexit, the ESRB will not look into the relevant macroprudential aspects of the EU28's banking system and its interactions. The historic nature of Brexit reduces the EU's economic weight by almost one-fifth.[18] The departure of EU27's wholesale banking market center – located in London – will likely temporarily strain the financial market. This clearly requires an integrated EU28 analysis rather than a separate picture of the UK and the

17 Political risk has become a broader challenge in the OECD countries as emphasised by the BIS Annual Report of 2015.

18 Based on gross domestic product data of 2016.

eurozone as painted by the Bank of England and the ECB, respectively. In 2017, the ESRB apparently was either unwilling or unable to deliver this; and the role of the Bank of England is opaque.

As we have discussed previously, financial market risks in the Brexit transition process could be reduced if macroprudential analysis is adequate at the ESRB and if all policy actors in the EU28 assume their respective responsibilities. The challenges could, however, be considerable if rising US interest rates plus political instability and policy inconsistencies overlap in Brexit. Post-Brexit, the UK may only be an observer at the ESRB if an eventual EU-UK treaty makes arrangements which allow for such a status.

Leaving the EU puts a broader responsibility on the UK than simply considering narrowly defined national interests. It should be clear that before any EU-UK Free Trade Agreement can be negotiated, the EU27 must make sure that there is an agreement in the field of joint prudential supervision and cooperation for the years 2018-2020. It can be shown that there is a trilemma in the case of flexible exchange rates, namely that it is impossible to have both flexible exchange rates, free capital flows and adequate banking regulation.[19] Considerable financial market volatility in Europe and in the US – due to EU28 spillover effects and Trump's trade war policy effects – should be expected in 2018-2020 and high volatility could undermine prospects for stable economic growth in OECD countries.

The May government will face the option of pursuing a hard Brexit – which could result in a very serious Northern Ireland border regime problem or possibly even a new Scottish referendum – or accept a customs union solution, the latter seeming most likely. There is no doubt that political stability will be at a premium in the UK.

19 P.J.J. Welfens: Foreign Financial Deregulation under Flexible and Fixed Exchange Rates: A New Trilemma, EIIW Discussion Paper No. 238, 2017, available at http://www.eiiw.eu/fileadmin/eiiw/Daten/Publikationen/Gelbe_Reihe/Jourderegulationdisbei238.pdf.