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The Impact of Brexit on Financial Markets—Taking Stock

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Abstract: The UK's withdrawal from the EU will have far-reaching consequences on the European economy. However, the ultimate consequences of Brexit, especially for financial markets, depend on the final agreement, which is still under negotiation. Currently, regulated financial services can be provided across borders under simplified conditions. Without a special agreement, these EU passports cease to apply for business activities between both jurisdictions after Brexit. The EU third-country regimes for non-EEA companies are too few and too unsecure for intensive relations in trade and services. Knowing that London is the leading global financial center, an adequate agreement needs to be found, to ensure affordable and sufficient financial services for business, investors, and consumers. Unfortunately, it appears almost impossible to find solutions for the often contrary interests and various thematic areas in the remaining negotiating period—a no deal scenario becomes more likely. As a result, market participants have started to adapt structures and processes accordingly, by relocating certain functions to the EU27. Nevertheless, it is up to the negotiators to reach an agreement, which achieves the best possible outcome for all affected parties taking into account the opportunity costs of a failure in present Brexit negotiations.

Keywords: Brexit; financial markets; transitional agreement; third country regimes; regulation; European Union; United Kingdom; derivatives; banking services; investment services; insurance services

JEL Classification: F30; F40; G15; G20

1. Brexit Negotiations Unfold—Status Quo and Latest Developments

The withdrawal of the United Kingdom (UK) from the European Union (EU) in March 2019 will have far-reaching consequences on the European economy, in particular with respect to financial services. The concrete impact on businesses, consumers and investors cannot be predicted at present. The reasons are that the ultimate consequences of Brexit, particularly on financial markets, depend on the final exit scenario, which must be negotiated at the political level.

The Brexit negotiations officially started in June 2017 and have been formally divided into two phases: "Phase One" focuses on citizens' rights, the UK's financial obligations, and the question of the Irish border. "Phase Two" deals with potential transitional agreements and the general framework for future relations. This staged negotiation strategy creates a clear structure. Yet, it implies that agreements on future relations will be reached only at a late stage or, in the worst case, not at all.

After lengthy and controversial discussions on the first three priorities, sufficient progress was achieved in December 2017 to proceed with Phase Two. Although this constituted a first major step forward, still many problems must be addressed and the pending decisions to be taken in the second phase will be even more challenging. While in March 2018 a general agreement on a transition period until December 2020 was found, discussions on the future framework continue. Especially the question is unanswered, how a hard Irish border can be avoided and if and which type of customs union would manage to do so.

However, time is running short, just leaving few months to craft appropriate and sound rules, especially with respect to future financial service relations. If the negotiators cannot agree on all topics in the withdrawal agreement, the whole document will not come into effect. Meaning a hard Brexit without any provisions end of March 2019. Thus, the negotiators originally intended to have a preliminary solution until June 2018. The new and final deadline is the European Council meeting this October, in order to allow timely ratification of the withdrawal agreement in both jurisdictions.

In this context, some British politicians have repeatedly proclaimed a "no deal is better than a bad deal" stance in the past months. Yet, such statements conflict with latest empirical figures: In 2016—the year of Brexit referendum—the UK exported about 320 billion US dollars of goods and services to EU27 Member States; the other way round, the UK imported a volume amounting to about 420 billion US dollars from the EU (Ward 2017). Regarding financial services, 30 percent of the Foreign Direct Investment (FDI) stock in the UK comprises FDI in financial services (Welfens and Baier 2018). Oliver Wyman (2017) estimated that the UK's wholesale banking industry would most probably need to raise 30–50 billion US dollars equity in the case of preserving existing relations with EU businesses after withdrawal of the UK from EU. Sapir et al. (2017) suggest that about 2 trillion US dollars (or 17 percent) of all assets in the UK banking industry might move abroad as a consequence of Brexit (see, for instance, McMahon (2017) for an extensive survey of key financial figures regarding Brexit). Between July 2016 and June 2017, around 3.6 million EU27 citizens lived in the UK—6 percent of the British population—(Office for National Statistics 2017) and around 1.2 million Britons in other parts of the EU (United Nations 2015).

The societal and economic consequences of a "cliff-edge scenario" or so-called "hard Brexit"[1], especially in the short run, could thus be tremendous. With Brexit current EU law immediately ceases to be applicable in the UK and has to be replaced by national provisions. The British government intends to achieve this with the "European Union (Withdrawal) Bill", which is currently under discussion in the British Parliament. This repeal law initially transforms all EU directives, which exist at the time of withdrawal and have not already been transposed, as well as directly applicable EU regulations including case law into British law. This means that the two regulatory frameworks will be virtually identical at the time of withdrawal. However, the assumption that business activities can therefore simply continue as before is wrong. This has been made clear by emphasizing, "Brexit means Brexit" and that not being an EU Member is different from being a Member.

Although this approach is appropriate, without a comprehensive trade agreement, the majority of product and service flows as well as citizens would incur severe negative consequences after Brexit. Due to this, companies keep on preparing for the worst-case scenario—a hard Brexit—and start adapting their structures and processes accordingly. They accept all associated efforts for restructuring as well as permanently higher cost structures. If a free-trade agreement were to be concluded at some time after Brexit, further adjustments within companies would be less likely. Companies would only have limited willingness to incur further costs to reverse the changes already made. At the same time, this reduces the possible advantages of a comprehensive political agreement, and thus weakens the willingness to agree on it.

The following paragraphs shed more light on the question, as to what extent Brexit will affect financial markets, if there will be no agreement between the EU and the UK at all.

[1] Here, the term "hard Brexit" stands for the situation where negotiators fail to reach any agreement (including transitional arrangements) on the future relationship between the EU and the UK in due time.

2. Financial Markets and Brexit—EU Passport, Third Country Regime, and a No Deal Scenario

Financial and capital markets play a central role for financing business activities and innovation and thus are of decisive importance for the creation of jobs and economic growth. A large range of EU regulations and directives regulate entities, business activities, and services offered in these markets.

2.1. EU Passporting System as Basis for Single EU Financial Market

The EU single market offers the possibility to provide regulated financial services across borders under simplified conditions ("EU passport"). Companies must apply only once for a license within the EU and then can offer their services in the entire EU without additional national permits. EU passports can be granted for market participants (e.g., banking permit), products (e.g., securities prospectus) or services (e.g., marketing a fund).

However, without a special agreement, EU passports like all EU legislations cease to apply for business activities between both jurisdictions after Brexit. Hence, the extent to which a license remains possible for offerings from the UK into the EU and vice versa, and for which companies, products, and services depends on the outcome of the negotiations. In this regard, the long-term structure of the future relationship should minimize negative consequences for the European and international financial system.

2.2. Third Country Regimes Cannot Substitute EU Passports

Third-country regimes give companies from countries that are not Members of the European Economic Area (EEA) uniformly regulated access to EU markets, so that cross-border transactions can be concluded more securely and efficiently. Third-country regimes exist in a wide range of forms and in a large number of regulatory texts. So far, there is no harmonized regime in place covering all areas of regulation. The regulatory landscape rather compares to a large patchwork of individual solutions (European Commission 2017a, see Table 1). The most common third-country solution are so-called "equivalence regimes". They provide for equal treatment of third countries and EEA Member States, where equivalence of the legislative and supervisory framework in the third country is given. In addition, cooperation between supervisory authorities is a precondition.

The third-country regimes currently provided for in European regulations do not encompass all the areas to be regulated in the framework of Brexit and, where they exist, are too narrowly framed for maintaining the present level of intensive relations in trade and services. In addition, the lengthy process of recognizing "equivalence" has to be completed. Another downside of such decisions on equivalence is that they might be revoked at short notice. This, indeed, limits their general suitability and does not offer a sufficient amount of certainty and legal continuity for affected market participants.

Considering the level of business flows between the UK and the remaining EU27 countries, the EU third-country regimes are therefore neither appropriate nor sufficient. Around 8000 financial companies from the EU27 Member States use EU passports for their activities in the UK and just under 23,500 EU passports for their financial services and products (Financial Conduct Authority 2016). In the opposite direction, 5500 British companies use EU passports for their activities in EU27 countries and around 335,000 EU passports for their financial services and products.

Table 1. EU passporting and third-country regimes in EU financial and capital markets law.

Legal Basis/Issue	EU Passport	Equivalence Regime with EU Passport	Other Third-Country Regimes
MiFID II/MiFIR	Yes, for financial and investment services and branches.	Yes, but only investment services for professional and selected clients. This comprises no private client business and only a small portion of corporate client business.	Establishments optional for EU countries.
	Yes, for trading venues. Trading venues have non-discriminatory access to CCPs, and benchmarks	Yes, but restrictions are expected through the EMIR Review.	
	Yes, for data provision services.	No.	
CRD IV/CRR	Yes, for banking services as well as branches (of banks).	No, not for banking services or branches. For investment services compare MiFID II/MiFIR.	Third-country equivalence for special aspects (e.g., risk weighting) possible, but contains no market access or EU passport.
PSDs	Yes, for payment services.	No.	
EMIR	Yes, for CCPs.	Yes, but restrictions are expected through the EMIR Review.	
	Yes, for TRs.	Yes.	
	CCPs and trading venues have non-discriminatory access to each other.	No, but compare. MiFID II/MiFIR.	
CSDR	Yes, for services and branches (but national regulator has to be informed).	Yes.	
UCITS	Yes, for management and marketing of collective forms of investment.	No.	
AIFMD	Yes, for the management and marketing of alternative investment funds to professional clients.		Non-EU providers can manage alternative funds EU-wide and market them to professional clients via ESMA recommendation and authorization by the European Commission.
Prospectus Directive/Regulation	Yes, for issuers' securities prospectuses.	Yes.	
Transparency Directive	Applies for all issuers with EU listing.		Yes. Applies independent of seat for all issuers with EU listing.
Market Abuse Regulation	Applies for all issuers with EU listing.		Yes. Applies independent of seat for all issuers with EU listing.
Benchmark Regulation	Yes, for benchmark providers.	Yes.	Temporary recognition of third-country benchmarks until equivalence decision is taken, if compliance with IOSCO principles is equivalent to those of the regulation.
Solvency II Directive	Yes, for insurers and reinsurers.	Yes, but only for reinsurers.	
CRAs	Yes, for rating agencies (CRAs).	Yes, but only for third-country companies and if no systemic relevance for EU financial stability (certification).	CRAs which cooperate closely with an EU CRA and are subject to a comparable regime can be endorsed by an EU CRA (endorsement), however, ESMA plans stricter rules

2.3. No Deal Scenario Would Cause Severe Market Disruptions

Previous paragraphs indicate the need for an adequate agreement between the EU and the UK. However, it appears almost impossible to find a shared solution for the often contrary interests and various thematic areas in the remaining negotiating period. As a result, it can be assumed that an agreement will not be reached on all relevant issues in the withdrawal agreement. Given the close economic interdependence between the EU and the UK, a failure to find a solution would leave both parties in a lurch.

EU law classifies all economies that are not Members of the EEA as third countries. The likelihood rises that the UK becomes such a third country and that corresponding rules will govern the UK-EU-relationship in many areas. It would then be necessary to verify in many individual cases whether particular EU provisions have a third-country regime and whether this can be applicable in the specific case. For most other areas, especially World Trade Organization (WTO) rules would govern trade relations between the UK and the EU.

A large portion of financial groups, which have hitherto used London as a hub to Europe, have already started to relocate partially to locations elsewhere in the European area or at least announced that they plan to do so. Bearing in mind the regulatory and business risks associated with Brexit, these companies cannot and must not await the outcome of the Brexit negotiations. Furthermore, similar questions arise for EU credit institutions and investment firms, which operate a branch in the UK. Due to the cessation of EU passports, they must either apply for a permit to open a third-country branch or establish a subsidiary in the UK.

Currently, it is not possible to foresee what the future cooperation will look like. Therefore, affected parties can deploy appropriate measures only to a limited degree or do not have enough time to finalize necessary measures due to the extent of adjustments. For this reason, transitional arrangements are important and indispensable. They buy more negotiating time, enable businesses to prepare for the new situation, and prevent, at least temporarily, a no-deal scenario. The short two-year timeframe for the Brexit negotiations makes the Brexit project even more difficult. Until March 2019, agreements must be reached on the UK's withdrawal from the EU and then the basis laid for future relations. Afterwards, regulators, society, and companies will have to react to the new rules and adapt business processes, contracts and structures accordingly. The following section explains the extent of changes and the market disruptions caused by Brexit with some examples from financial practice.

3. Financial Markets and Brexit—Key Examples in Financial Services

Brexit will affect a wide array of financial services of the future UK-EU-relationship. The corresponding banking and capital market services comprise among others deposit-taking, lending, payment services, services relating to derivatives, foreign exchange and securities, as well as insurance-related services. The rules governing financial services also refer to regulation and supervision of market infrastructure. In the following paragraphs, the effects of a hard Brexit will be explained through some key examples. An overview of further EU legislation and the consequences of Brexit on the corresponding services can be found in Table 1 at the end of the article.

Banking services in the EU are primarily regulated by the Fourth Capital Requirements Directive (CRD) and the Second Capital Requirements Regulation (CRR).[2] These rules allow lending institutions to offer banking services across the entire EU and to open branches without a separate approval in each Member State. Thus, CRD IV/CRR provide EU passports for banking business such as loans, bank accounts, or other services they offer to their clients. However, after Brexit these EU passports will cease to apply and CRD IV/CRR provide no third-country regime for banking services instead. Due to that, banks need to relocate all EU27 business to an existing or a newly established EU subsidiary. This also means shifting capital, staff, and infrastructure to this location and applying for EU licenses.

On the basis of the Revised Markets in Financial Instruments Directive (MiFID II) and the Markets in Financial Instruments Regulation (MiFIR)[3], companies can establish themselves freely within the

2 CRD IV: Directive 2013/36/EU of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms [. . .]; CRR: Regulation (EU) No 575/2013 of 26 June 2013 on prudential requirements for credit institutions and investment firms [. . .].

3 MIFID II: Directive 2014/65/EU of 1 May 2014 on markets for financial instruments and [. . .]; MiFIR Regulation (EU) no. 600/2014 of 15 May 2014 on markets for financial instruments and [. . .].

EU and offer capital markets services such as securities and derivatives across borders, without an additional national permit. This also encompasses all ancillary services, which are necessary to provide securities and derivatives. Moreover, MiFID II/MiFIR contain an EU-wide permit for data provision services as well as trading venues. MiFID II also provides for a third-country solution based on an equivalence regime. Under this regime, EU-wide provision of MiFID-regulated services only depends on the implementation of a notification procedure (third-country entity passport). However, it applies only to very limited areas; e.g., for the provision of investment services to professional clients. No services can be offered to retail and only very few to corporate clients. It is thus far from constituting a comprehensive EU passporting regime. Consequently, most EU27 business activities have to be relocated to the EU in the case of a "hard Brexit".

Insurance business is subject to the rules of the Solvency II Directive[4], which enables primary insurance and reinsurance companies to sell their products and services EU-wide. In addition, this legislation offers them the possibility of home-country authorization and control. With Brexit, branches of EU insurers lose this privilege and become subject to UK supervision. Solvency II also provides for an equivalence regime but only for reinsurance business. Thus, primary insurance cannot be offered across borders.

Finally, the regulation and supervision of financial market infrastructure; i.e., exchange spots and related trading activities—will also considerably affect financial services in future EU-UK-relations. At the heart of the corresponding European legislation is the European Market Infrastructure Regulation (EMIR)[5]. In particular, here, the most critical points refer to the trading and clearing of derivatives.

The derivatives market has become a highly discussed topic in context of Brexit. The reason is a frequent public rehearsal concerning a compulsory relocation of clearing activities from London towards continental Europe. The haggling mainly refers to the trading and clearing of euro-denominated interest rate swaps ("euro clearing"). Clearing of transactions has existed since the very beginning of commercial activity. Alongside bilateral clearing, clearing via central counterparties (CCPs) has developed over time. The CCP establishes the payment claims arising from the financial transaction, calls in these claims from one party and releases them to the other party. If a party is unable to meet its obligations, the CCP takes on the counterparty risk.

Due to regulatory changes, clearing of over-the-counter (OTC) derivatives[6] has gained more importance since the 2008 financial crisis. The outstanding nominal value of OTC derivatives worldwide was 532 trillion US dollars with a gross market value of 11 trillion US dollars in December 2017 (Bank for International Settlements 2018). Interest-rate derivatives constituted the biggest share with 427 trillion US dollars outstanding nominal value—around 80 percent. 29 percent of these interest rate derivatives were denominated in euro (122 trillion US dollars). With 320 trillion US dollars, 75 percent of all interest rate derivatives were cleared via CCPs, with a slightly lower volume for those denominated in euro (72 percent).

Currently, the London Clearing House established in the 19th century (nowadays LCH.clearnet) clears about 95 percent of all global OTC interest rate derivatives, of which around 29 percent are euro-denominated interest rate derivatives (LCH Limited 2018). EU27 firms account for a quarter of all globally cleared interest rate derivatives in euro, meaning that the far bigger share belongs to international corporations (Bank of England 2017). The EU27 share in the global interest rate derivatives market for all currencies is even less and only amounted to around 14 percent in 2017.

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4 Solvency II: Directive 2009/138/EC of 25 November 2009 on the taking-up and pursuit of the business of insurance and reinsurance [. . .].

5 EMIR: EU Regulation No. 648/2012 of 4 July 2012 on OTC derivatives, central counterparties, and trade repositories.

6 Over-the-counter derivatives are derivatives, which are not traded on an exchange spot but directly between market participants.

Derivative markets in the EU are primarily regulated through MiFID II/MiFIR as well as EMIR. Notably, EMIR introduced central clearing for all EU financial counterparties as well as nonfinancial counterparties whose OTC derivative volumes exceed a certain threshold, excluding risk-hedging activities. In addition, there is a notification obligation for OTC derivatives to a trade repository (TR). EMIR also provides a third country regime for non-EU CCPs providing clearing services in the EU. Under these provisions, it is possible for these CCPs to offer clearing business to EU market participants, if the European Commission recognizes the equivalence of the foreign legislative and supervisory regime.

In 2017, the European Commission published several proposals for revising EMIR[7], in which it also proposes a new framework in relation to the equivalence of CCPs from third countries. This draft regulation provides that systemically relevant non-EU CCPs should in future be subject to additional supervision by the European Securities and Markets Authority (ESMA). If ESMA and the competent central banks conclude that regulatory measures cannot be enforced, the European Commission can even deny recognizing this CCP and force EU market participants to transfer their business to the EU. This process runs in parallel to the ongoing revision of the framework for the three European Supervisory Authorities (ESAs), whereby ESMA shall be assigned direct supervision of clearing houses (European Commission 2017b).

Regarding the impact of Brexit on clearing activities, one has to distinguish between regulatory obligations related to EMIR, and changes in risk-weighted assets (RWA) and corresponding capital charges stemming from CRR. In addition, distinctions have to be made with respect to existing and new business in future EU-UK-relations. As regards new clearing activities, it may be relatively simple to minimize the negative consequences of non-recognition for new business, e.g., by transferring clearing to a recognized EU CCP. Nevertheless, different opinions about the impact of such a relocation exist. Some studies warn against more costly clearing, at least in the short term, due to reduced liquidity and restructuring activities (ISDA 2017). Others conclude that a possible increase in the initial margin could cause further additional costs. However, there are also studies that come to precisely the opposite conclusion and assume a decline in costs (Union Investment 2017). The differences arise from varying portfolio and business structures of market participants. Current netting effects, business focus, and sector particularities affect the costs and benefits of relocating or keeping clearing activities in London. Moreover, the new rules only apply to EU market participants. International competitors, which represent a far bigger share of the euro clearing market (around 75 percent), could continue to clear via UK CCPs and it is not evident that they will shift this business into the EU.

By contrast, major changes would be needed for existing contracts extending beyond Brexit, if no arrangements or grandfathering are agreed. The risk-weighted assets (RWA) to be set aside for existing contracts would increase significantly since the risk position of a qualified CCP (QCCP) will become the risk position of a non-QCCP following Brexit. It is argued that the RWA with an overall risk position of about 11 billion US dollars could increase more than 16-fold (Deutsches Aktieninstitut 2017). On the basis of the new regulatory proposals, the question also arises as to whether it continues to be possible to clear financial products through a non-QCCP from a third country at all. The question of how then to proceed with existing contracts causes even greater uncertainty, as they would need to be repapered and transferred to an EU CCP—if possible. Time will be needed to do so, as market participants need to adjust or end contracts and find new EU counterparts for all contracts/transactions in the EU. In particular, long-term transactions such as interest rate derivative contracts (in some cases, with a maturity of up to 40 years) would be considerably affected. Protection that enables market participants to let their contracts run to term or at least give sufficient time to shift these contracts to an EU CCP would offer a remedy here.

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7 EMIR Review: Proposal for a Regulation amending EU Regulation No. 648/2012 as regards the clearing obligation [. . .], 2017/0090 (COD) of 4 May 2017; Proposal for a Regulation amending EU Regulation No. 1095/2010 establishing a European Supervisory Authority [. . .], 2017/0136 (COD) of 16 June 2017.

The financial sector in particular would be affected by deliberations and changes in relation to clearing. Due to the high uncertainty about the future of clearing in Europe, Eurex Clearing together with several market players launched a partnership program at the end of 2017, which is intended to accelerate the development of an alternative service offer for the clearing of interest rate derivatives in the EU. As of May 2018, the average daily volume of interest rate swaps cleared at Eurex Clearing increased up to 71 billion euro and the notional outstanding stood at around 7 trillion US dollars (Eurex Frankfurt AG 2018). Such market-based solutions allow for mitigation of the risks associated with Brexit—at least to some extent. In contrast, nonfinancial companies would hardly feel the effects since EMIR mostly exempts them from the clearing obligation. Yet the additional costs incurred by financial counterparties could indirectly affect the market for corporate and retail financial services. Financial services could either become more expensive or will be provided to less extent. This effect could be intensified by the described changes required in all parts of financial markets. Up to now, no one can predict, whether and to what extent such risks will eventually materialize with Brexit.

4. Conclusions

The UK's departure from the EU will have a major impact on the European economy. Based on their regulation, financial activities between the UK and the EU are especially affected. After Brexit, most activities will no longer be possible or their regulatory basis too unsecure to rely on it. Knowing that London is the leading global financial center, an adequate solution needs to be found, to ensure affordable and sufficient financial services for business, investors, and consumers. It is up to the negotiators to reach an agreement, which achieves the best possible outcome for all affected parties, taking into account the opportunity costs of a failure in present Brexit negotiations.

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