


Research Paper Series



An overview of BREXIT effects
on the Banking System

OCTOBER 2018



ESSENTIAL SERVICES FOR
FINANCIAL INSTITUTIONS

Iason Consulting Ltd is the editor and the publisher of this paper. Neither editor is responsible for any consequence directly or indirectly stemming from the use of any kind of adoption of the methods, models, and ideas appearing in the contributions contained in this paper, nor they assume any responsibility related to the appropriateness and/or truth of numbers, figures, and statements expressed by authors of those contributions.

 iason

Research Paper Series

Year 2018 - Issue Number 09

First draft version in September 2018

Reviewed and published in October 2018

Last published issues are available online:

<http://www.iasonltd.com/research>Front Cover: **Silvio Lacasella**, *Riflessi*, 2010.ESSENTIAL SERVICES FOR
FINANCIAL INSTITUTIONS

Executive Summary

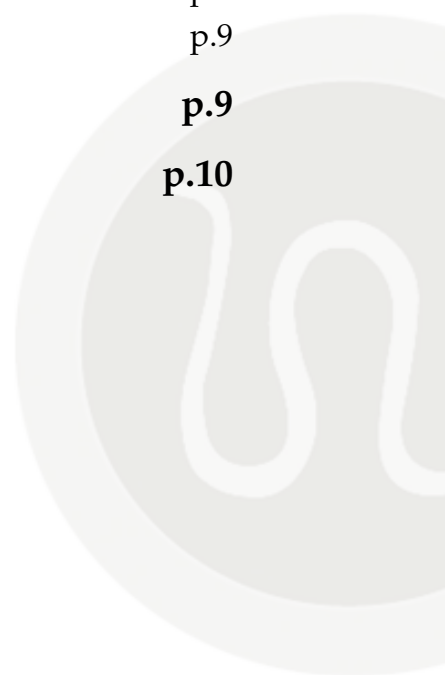
The decision by Great Britain to leave Europe is certainly an extraordinary event.

Following what has been proposed by some Regulatory Opinions and some already developed works, this article presents a brief overview of the systemic effects for the Banks active in the Community market and in the UK. The effects of the so-called BREXIT can be observed in all the operating levels of the Banks and will determine the need, by the Institutes, to develop a series of procedures to mitigate the risks inherent in this event.



Table of Content

Introduction	p.4
Who? Actors Involved	p.4
What? The BREXIT Effects	p.6
Effects on Credit Risk Area	p.6
Effects on Internal Models	p.7
Effects on Funding & Liquidity	p.7
Effects on Capital Markets	p.8
Effects on Governance & IT Structure	p.9
Conclusion	p.9
References	p.10



An overview of BREXIT effects on the Banking System

Elia Stucchi *

THE banking system, after the economic and financial crises, is under stress for a further important reason: BREXIT. British citizens, during the referendum held on 23 June 2016, expressed their willingness to leave the European Union; this decision has had, and in large part will have, political, economic and social effects. One of the main sectors affected by the exit of UK is the banking world, an important segment for the British economy and more generally for the world one. As reported in documents published by the European Banking Authority "EBA" [3] [2] and by the European Central Bank "ECB"[4], it is clear that BREXIT will have important effects on the daily banking activity of the Institutes. If as assumed by the Authority a so-called "Hard Brexit" occurs, i.e. an exit without agreements between the parties, the induced risks will require changes and internal control structures (no "empty shells") advanced and able to minimize risks and negative effects on the banking system, and therefore on the economic and industrial one. The objective of this brief paper is to propose an overview of the effects that BREXIT, whether with or without agreements, will have on banking activities, on their balance sheets and therefore on the possible effects that consumers will be able to directly observe.

The following article includes ideas and opinions that cannot be proved by any real data or fact-checking yet, since based on hypothesis and discussions currently ongoing in the financial industry. The main purpose of this article is to focus on potential outcomes of Brexit on the banks' activities but is not aimed at evaluating or criticizing in any way the political decisions in relation to those event.

1. Who? Actors Involved

To the effects of BREXIT, it is necessary to observe which actors will be more affected because of their presence on the European market. The *Figure 1* shows how different subjects, strictly interconnected and integrated, operate within the European Union and the United Kingdom.

Due to the British exit from the EU, this interconnection will be severely tested and a series of agreements will be needed in order to define a new operational framework. These agreements will be important for the continuation of the relationship between Counterparts and necessary for economic growth and stability. The financial institutions that will be impacted by BREXIT can be divided into three distinct categories:

1. European banks and their respective subsidiaries in the UK;
2. UK based banks and their respective subsidiaries in the EU;
3. Non-EU banks and their respective subsidiaries in the EU and UK markets.

In the absence of agreements among Counterparts, Governments and Regulators the current relationships will possibly deteriorate with severe consequences. The European Regulators have

*At the time of the writing of this article, the author was working for Iason Consulting.

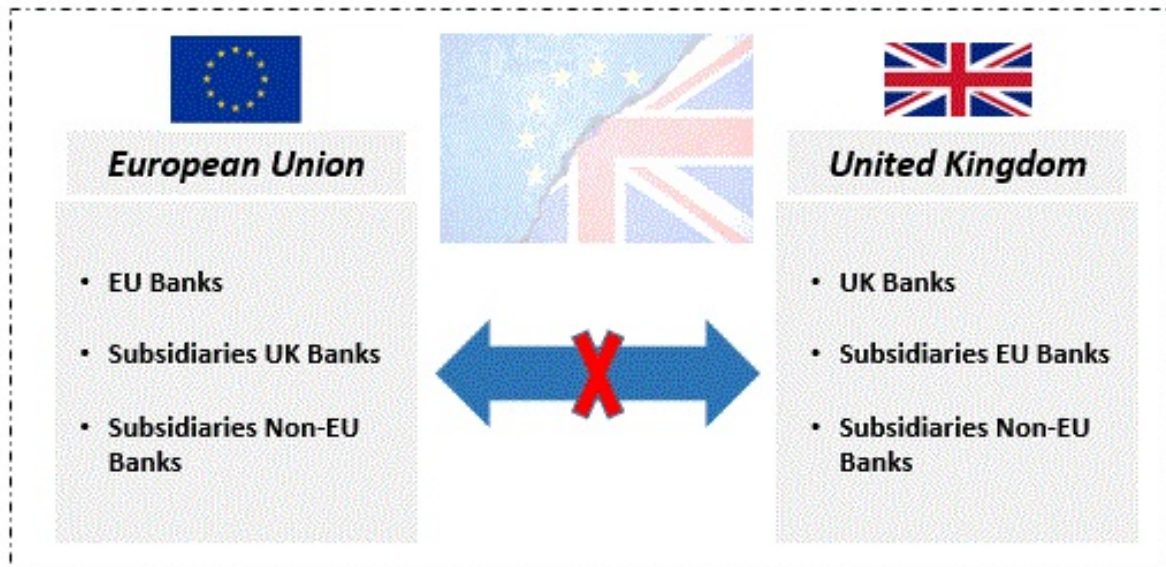


FIGURE 1: Actors Involved

already pointed out that opinion warning all the involved Subjects.

From the EBA guidelines of June 2018:

"The EBA is issuing this opinion in response to this unprecedented situation, considering the potential for disruption to financial institutions and their customers if the financial institutions are not adequately prepared poses serious risks to the objectives given to the EBA"

It is important to underline two words that remark the importance of this paper: unprecedented and potentially disruptive. Then, according to those statements, all of the previously defined actors will be potentially affected by this event. The EBA, through its guidelines, highlights how institutions must be well prepared and need different guidelines to mitigate the risks.

The EBA opinions have two fundamental objectives:

1. To prepare all the EU27 and UK financial institutions for BREXIT (with or without agreement) and then to equip them with guidelines to structure all the instruments aimed at mitigating risks and negative effects; they will strongly influence not only the activity of financial institutions but also that of Corporations, Governments and Consumers;
2. To protect bank customers exposed to this particular financial event. Customers will suffer the effects of an extraordinary event that could change the actual (and relatively well known) situation. Banks could implement robust and sound decisions to influence directly Customers views and activities.

Regarding the first purpose, banks will have to carry out a series of assessments and activities as a result of the possible increase in risk on the financial and economic markets. First of all it is important to have full knowledge of the contracts in place for the whole of the Group's subsidiaries and with external parties, or those within the EU and the UK market. All existing contracts (mortgages, credit cards, investments, etc.) must be protected and continuity in the activity must be facilitated, in the path known as "business-as-usual". The general assessment must also concern solvency and liquidity aspects of the Institutes' positions, inter-group relations, market position and business model. Moreover, in order to respond to the riskiness situation it will be necessary to check the Capital level and requirements held by the Bank. Ensuring full coverage of the risks subscribed by the Banks, increasing (for example) the levels of capital to guarantee

particular instruments that are supposed to be effectively stressed (see the following part concerning the role of the clearing houses and derivative products). Two other important aspects highlighted by the EBA are: the *governance structure* and the *funding capacity*. Banks must have a structured organization and control activities can not be outsourced creating, by quoting the note, subjects similar to "empty shells". This organizational structure will be able to analyze all the effects on the Institute's booking model. The Bank must also be able to maintain the ability to find resources and funds even in the event of a BREXIT without agreement between the parties, evaluating its rolling activities, other possible sources of financing and any effects on its business activity.

The second objective of the guidelines regards the protection of consumers, shareholders in financial institutions. All the information concerning the effects of Brexit on consumers interests and their activities must be provided to them. In addition, banks must clearly indicate which strategies and behaviors will be implemented to minimize impacts; moreover the EBA emphasizes the importance of clarifying, analyzing and explaining all the possible contractual changes that would affect the consumers, so as to make them participate in the general situation.

2. What? The BREXIT Effects

It is clear that there could be different effects the Bank may be prepared to face. We try to underline the most important by different blocks, in order to well illustrate the possible consequences on the various operational aspects:

- *Credit Area*: the impact will concern the riskiness of the credit portfolio and in general the credit process of the Institutes;
- *Internal Model*;
- *Capital Markets*: impacts on trading activity and hedging transactions may occur;
- *Funding Cost*: effects on funding activities of the Banks and related costs;
- *IT infrastructures and governance*.

The consequences might be greater for those Subjects and Counterparts that operate in countries more exposed to British economy; moreover the effects related to the portfolio exposure of the Banks would depend on country's concentration and diversification. As reported in different studies, among which it is possible to cite the work of Luigi Federico Signorini for Bank of Italy[8], there will be different impact for European and World Countries after BREXIT. In addition, Standard & Poors has defined the Brexit Sensitivity Index (BSI)[9]: an indicator that clearly provides which countries are most sensitive to a British exit from the Union. This indicator uses information regarding, for example, the import/export and investments level of the various countries within the UK, migration information and financial shared interests; it can be a good proxy-indicator of general synthesis and can be a point of reference for the different subjects into the market. From the S&Ps analysis, the countries most affected from British leave will be those who closest from a geographical point of view and those historically connected to the British economy; so it is easy to cite as example like Ireland, Malta, Cyprus and the countries of Northern Europe.

2.1 Effects on Credit Risk Area

Following the previously depicted point, the occurrence of the BREXIT may have an important impact on the *credit area* of the Institutions, thus impacting directly on the indications in the financial statements, on the current activity and therefore on the implemented business model. It is clear that the economic and financial effects caused by the exit from the Union will be very important for the credit portfolio held by banks. In particular if the exit occurred without an agreement between the parties, there could be a downgrade of the subjects operating in these markets more exposed to the British economy and those operating in the UK; the downgrade

will occur following the general increase in credit risk due to more difficult economic conditions in which some parties will find themselves more easy not to fulfill their obligations towards the Institutes. This phenomenon will have two important impacts: the *loan portfolio credit quality* and the *provisioning activities* implemented by the Bank. Within this riskier environment, any downgrade of some Counterparties might corresponds to a greater Probability of Default associated with them. This will supposedly lead to a less stable and riskier Credit Portfolio (with a deep focus on those subjects who have ties and dependence on the British economic market). A deterioration in credit quality will clearly influence the definition of assets in accordance with IFRS9, according to which the portfolio is divided into "Held to collect" and "Held to collect and sale" assets; as depicted from the directives and from the regulation, in order to correctly evaluate the quality of a specific loans, it is necessary to incorporate into the calculation the future loss evaluated for the loans (overcome the past idea of "incurred loss"). So an increase in the overall riskiness, for example shown by a worsening in credit indicators associated to some Counterparts, will determine a variation within the staging of the credit activities and therefore in the subsequent provisioning activity that the bank will have to implement. The Capital requirements necessary for adequate credit risk coverage, have been modified and more own funds will be needed with an immediate effect on the activity of the Institute. In the matter of loans, by debtors operating with the UK market, it will be more difficult to repay them and therefore the banks will be considered unable to meet the obligations undersigned by the Subjects. Besides the banks should be able to implement not only the aforementioned provisioning operations but also different business and commercial policies due to the changes into credit Portfolio; they should facilitate loans diversification and thus minimizing the associated concentration risks linked to the overall exposures.

2.2 Effects on Internal Models

The topic related to the analysis of the Credit and the riskiness ensured to it, introduces a very important theme: the one related to the use of *Internal Models*. All of the institutions involved will need to have specific approvals for the use of internal models for the evaluation of the different processes. In fact, there may be differences between UK-based and European assessments; from this point of view, collaboration between the UK and EU27 is necessary in order to share all the information and processes necessary to maintain consistency in the evaluations carried out by the internal models.

2.3 Effects on Funding & Liquidity

Another aspect closely linked to Brexit concerns *Capital* and *Liquidity* requirements and the internal control implemented by banking institutions. It is clear that in the absence of agreements between the parties there will be probably financial tensions on the markets that will directly influence the operations of the banks. An important aspect is strictly connected to the interbank market; it is not so difficult to think that an increase in economic tensions and general risk can have a strong impact on the rates with which banks lend money to the market. As happened in 2011, it is possible to have situations of difficulty in obtaining the liquidity necessary to support the daily banking activities; the Central Banks can then carry out policies aimed to maintaining liquidity within the system and improving the financing conditions of the Subjects. With this in mind, the so-called Contingency Funding Plans are inserted, aimed at mitigating the liquidity risk associated with any stressful situations, such as BREXIT. Banks, especially those operating in the British market, will have a series of buffers to deal with high stresses at least in the short term; then having a strong "Liquidity Risk Management" structure is also very important and must be more structured and integrated over the Group's branches. Banks may face a stress regarding the levels of capital held; the financial tensions and the greater riskiness of the system can lead to demand greater levels of capital held. In fact it will be presumably more onerous, to hedge the transactions on financial markets and to finance subjects operating in markets whose the intrinsic risk is greater.

2.4 Effects on Capital Markets

The effects of BREXIT can also be observed into the *Financial Activities* of the Banks. One aspect that needs to be analyzed, as highlighted also by the ECB[4], is connected to the Booking Model of the Institutes; that regards the correct internal control of associated risks of the activities of the Institutes and shared by all the Group Branches. Indeed all the Subjects involved in back-to-back operations must have a structure capable of correctly considering all the implemented activities: differentiating between the so-called *onshore* and *remote banking operations*. The onshore concern all those EU activities and products exchanged between EU customers; while the latter concern operations with third countries. This correct assessment of the activities affects the risk profiling and adequate hedging procedures, necessary for compliance with the European Directives. A further aspect to analyze is related to the derivatives market and the role played by the Clearing Houses in the market stability. As proposed into a Paper made from the *International Swaps and Derivatives Association "ISDA"*[7], with BREXIT there may be problems that have not been observed until now due to the fact that actually Banks are using Clearing House operating in UK for numerous (almost all) operations on derivative products (IRS, CDS, Swap etc). The key points are basically two: legal framework and operative aspects. It will be important to analyze the agreements that will regulate the existing and future contractual obligations; it is difficult to imagine that the contracts with an extra-EU counterpart will be declare not compliant but it will be necessary to know in depth the new regulatory framework. Moreover it will be necessary for the Banks to decide whether to keep in the UK as a clearing house or to move their activities on the derivative markets with other players. This choice will depend on various factors related to possible EU-UK agreements and the analysis of costs and benefits profile of this operation. There may be competition phenomena between the Clearing House of European countries and non-EU subjects, each of which will try to get the largest number of customers who will decide to move operations from London. The actual central role of *LCH* (based in London) could be undermined by different players from different countries like U.S, France and Germany; examples could be that Banks will move their operation to *Eurex Exchange*, a clearing house located in Frankfurt or to *CME* that operates from the United States.

Furthermore, one important aspect concerns the FX market. There may be a strong pound devaluation and this would lead to different effects on the financial statements of banks and their operations. First of all, this devaluation will lead to a revaluation of assets denominated in pounds with clear effects on the balance sheet, and there will also be important effects on the operations of the client companies of banking institutions. Infact, depending on the business and the import/export levels, there will be immediate and clear effects following a possible devaluation. The exporting companies to the English market will be strongly affected by the loss of English purchasing power. On the other hand, the companies importing from the British market will be able to benefit from a more favorable exchange rate (all this while keeping clear the fact that there will no longer be a single market, free and accessible as before the English choice).

Banks and all branches, will have to closely analyze the portfolio held and observe which companies will be most affected by this choice of monetary policy; therefore trying to minimize the portfolio impact and consequently any negative effects on the business. This will have effects on equity investments on particular securities affected by BREXIT which will have to be controlled through a careful asset allocation. A further aspect linked to the financial framework is related to all those companies, operating in the UK, that today benefit from possible European Community Funding; those funds, in the absence of bilateral agreements, won't be secure and companies could face in with a decrease (or an annulment) of these. Thus creating important effects on financing policies and planned investments. Banks will therefore have to carry out an increasingly deep and continuous view on portfolio investments and Counterparties structure.


Another important aspect will concern, following the definition proposed by the Regulator, to avoid "*Empty Shells*" phenomena; strictly related to the correct evaluation of back-to-back operations as previously depicted. That is a situation in which some branches of a banking group do not have an effective operational structure in order to work with the Bank. As proposed from the Regulator, all the structures of Internal Governance and Management must be carefully developed

for each branch. Branch's structure will be developed and able to analyze and control risks, allowing a capillary control of all the Group's activities. Moreover the Regulator outlines the impossibility of outsourcing all the management activities of the Banks; the Institutes must have an important management body capable of correctly managing all the Group's problems, in particular with a focus on managing the banking activities associated risks. This internal control must allow all the units of the Group to be able to overcome any stress and crisis events in compliance with all the regulations currently in force. The development of control and governance systems must be accompanied by an increasingly integrated and developed *Management Information System*; the internal structures must define a set of reports and in-depth documents that will allow to define and clarify all the activities implemented by the Group, such as the control and management of Risks faced by the Bank, the operating strategies and the hedging activities.

2.5 Effects on Governance & IT Structure

Related to the governance structure is the following topic, faced by the Regulator. As proposed in a paper called SNRA[5] ("Supranational Risk Assessment") it has highlighted the risk of *money laundering* and *financing to terrorist organizations*. In the event that some Banks decide to move from the UK to a State belonging to the Union, they will have to comply with EU Directive 2015/849 (so called "*IV Directive*") which provides for a careful control on banking activities in order to avoid the aforementioned phenomena and to limit the risk associated with them. Another issue is related to the *storage of Data* and the *IT-infrastructure* of the Banks; in case that the Institutes transfer some activities, the proprietary databases must be protected, avoiding loss of data and information that could damage the operational activity and the customers. The banks must therefore have very advanced data management infrastructures integrated into all the branches of the group. Due to BREXIT event, it is easy to understand how Banks, and Industries in general, could possibly decide to move their UK branches into Union's countries; this in order to overcome difficulties bringing to the separation from the single market of the recent years. This will affect in particular UK market and those banks who are UK based or who have different branches in Great Britain.

3. Conclusions

This brief analysis has underlined how the decision to leave the European Union by the UK could bring systemic effects on the banking system. The effects will affect the various areas of competence of the Banks and will oblige them to make operational and business model changes; certainly the agreements that will be carried out at the political level will be important and will not only concern purely economic and financial aspects. The controls implemented will therefore be quantitative and qualitative and must cover all the business units of the Group and the Branches thereof. It will also be extremely important to define a framework of clear and shared rules between all the involved Actors; in order to minimize the negative effects of this *unprecedented* and *potentially disruptive* choice, keeping the overall operations unchanged and guaranteeing the interests of all of the Banks stakeholders. 

References

- [1] **Deutsche Bank Research.** *Brexit Impact on investment banking in Europe.* Deutsche Bank Research. July 2018.
- [2] **European Banking Authority.** *Opinion of the European Banking Authority on issues related to the departure of the United Kingdom from the European Union.* EBA. June 2018.
- [3] **European Banking Authority.** *Opinion of the European Banking Authority on issues related to the departure of the United Kingdom from the European Union.* EBA. October 2017.
- [4] **European Central Bank.** *Supervisory expectations on booking models.* ECB. August 2018.
- [5] **European Commission.** *Report from the Commission to the European Parliament and The Council.* EC. July 2017.
- [6] **European Securities and Market Authority.** *General principles to support supervisory convergence in the context of the United Kingdom withdrawing from the European Union.* ESMA. May 2017.
- [7] **International Swap and Derivatives Association.** *Contractual Continuity in OTC Derivatives. Challenges with Transfers.* ISDA. July 2018.
- [8] **Signorini, L. F.** *Brexit: the possible economic and financial effects.* Bank of Italy. 2017.
- [9] **S&P Global Ratings.** *Who has the most to lose from Brexit? Introducing the Brexit Sensitivity Index.* S&P Global Ratings. June 2016.

Iason is an international firm that consults Financial Institutions on Risk Management.

Iason is a leader in quantitative analysis and advanced risk methodology, offering a unique mix of know-how and expertise on the pricing of complex financial products and the management of financial, credit and liquidity risks. In addition Iason provides a suite of essential solutions to meet the fundamental needs of Financial Institutions.



**ESSENTIAL SERVICES FOR
FINANCIAL INSTITUTIONS**