The Unexpected Virtue Of Brexit In The Investment Banking Industry

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Thesis

"THE UNEXPECTED VIRTUE OF BREXIT IN THE INVESTMENT BANKING INDUSTRY"

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Abstract

The focus of this research project is to observe the effects that Brexit has brought upon the United Kingdom financial industry, with a more specific scope in the Investment Banking Industry. How Brexit will and continue to effect London's financial hub. This paper is observing each possible scenario and determining how and what impact each of them will have in the UK. Ultimately, through research our end goal is to determine which the ideal scenario is.

Introduction

It all started with the "Big Bang", and I am not referring to the theory of how the universe came to be by George Lemaitre. No, I am referring to a financial "Big Bang", which was the name given to the biggest de-regulation of the London financial market that went into effect on October 27th, 1986.

"That revolution was called "Big Bang because new ways of trading shares came into effect on one day" [11]. The De-Regulation of London financial market was a movement lobbied by Conservative party leader Margaret Thatcher (UK Primer Minister at the time) the de-regulation of the market consisted of changes in several parts of the finance industry. One of the changes that had the most effect in the industry were changes of the trading floor. The trade floor used to run on the old stock outcry system (yelling out orders), a system that was becoming obsolete by the minute with the development of computer systems. The old stock outcry system was now being replaced by an electronic trading system which made trading efficient, cheaper and more accessible.

"The Big Bang reforms proved foresighted and reinforced London's role as a financial centre" [8]. One of the most important changes that is attributed to this era was that of opening the financial industry to foreign investors and giving free market access to foreign entities. The deregulations allowed for foreign firms to invest and open their own firms as well as, takeover UK brokers and consolidate into bigger companies. This resulted in a big influx of investments from foreign players that wanted to gain access to the European Market, or simply expand their operations. This was followed by an increase in takeover and acquisition of small players as new regulations allowed for big players to consolidate power. In turn big companies became bigger whilst simultaneously setting their European headquarters in the city of London.

With these deregulation banks had lower barriers of entry to access the UK. Since the government no longer protected local brokers or businesses, it was easier for them to expand. By 1993 firms that had established themselves in the UK had also gained access to the now single market. The EU was established, and in 1999, the introduction of the Euro gave them access to the market of the newly created currency. And so, London became the financial entry point to the European market.

Another factor that contributed to London's growth is that of the OTC (Over the Counter) derivatives market;" *Finally, London benefited remarkably from the pre-crisis growth in OTC derivatives markets as well. This was probably due to relatively early introduction of electronic marketplaces and the arrival of the euro, which stimulated the issuance of euro-denominated derivatives"* [8]. It was a recipe for success for the entire industry but it was the IB (Investment Banking) industry that stand to grow and develop. They were now offering a long range of products and had access to a vast market of capital, paired with the introduction of Euro currency denominated "The City", which had a tremendous advantage over other European cities: ''*London as a financial centre is also home to the vast majority of euro-denominated trading with access to euro-settlement and clearing systems" [21].* Thanks to innovation and by being the first to implement these systems, "The City" was able to assert their status as financial centre of the EU, London was now the main point of entry into the European market, a one stop shops to currencies, derivatives, and cross banking services and what seemed like unlimited capital. Therefore, one cannot help but wonder how much influence "The city" has on the British economy.

"The financial industry is one of the most important sectors for Britain. Including insurance and auxiliary services, it is the second largest segment of the economy, behind real estate activities. Its GBP 115 bn in gross value-added account for 6.6% of the total, a figure down

from 9% at its peak in 2009" [8]. Therefore, we can observe how big the Industry is and how much of the economy it represents. One would go as far as to infer how essential to the economy the industry is.

"Polling suggests discontent with the scale of migration to the UK has been the biggest factor pushing Britons to vote out, with the contest turning into a referendum on whether people are happy to accept free movement in return for free trade" [18].

On June 23rd, 2016, the United Kingdom results from the referendum that put to a popular vote decision of whether to remain or exit the European Union were revealed. The public had voted in favour of exiting from the European Union. Right after the referendum results were announced, David Cameron submitted his resignation and Theresa May became a prime minister. And, thus, negotiations for Brexit begun under a new PM. Throughout this negotiations Britain has managed to get a total of 3 extensions, and a brand-new prime minister (Boris Johnson). Since Johnson came to power there has been a temporary parliament suspension, (see more [1, 2, 3, 14, 15, 16, 17, 24] about Brexit and Brexit negotiations) and growing uncertainty and issues with regards to the negotiation of Brexit with conservative MP even resorting to changing parties. Although the agreement is close from being done, there seems to be an overall great deal of uncertainty, with regards to what will occur in almost any area. The specific details with regards to the deal and the negotiations have not been made public, it is a known fact that one of the biggest challenges in the negotiations are with regards to Ireland, Northern Ireland. As of right now, *"The European Union Agreed to delay Brexit until Jan. 31st, 2020"* [4]. Should they be unable to reach an agreement by then a hard Brexit for financial services would go into effect 11 months after the date? The prime minister main source of conflict with these negotiations is that he has lost majority in the parliament [12]. This led for the prime minister to trigger parliament elections that will be taking place in December 12th, 2019. With an end goal of regaining a majority in the house, Mr. Johnson faces a tough uphill battle *"If Johnson wins a majority in December and parliament passes his withdrawal agreement in January, the clock will start ticking on an 11-month negotiation to determine Britain's future relationship with its largest trading partner. The prime minister has ruled out extending the talks — so if no accord is reached by the end of 2020, the U.K. would crash out of the EU without a trade deal in place"* [25]. This shows the tough road ahead that Johnson faces for the UK to secure an agreement. With the democratic and labour party opposing the idea of Brexit. The government faces a substantial opposition with elections, presenting a deal the parliament would accept and to follow through on the exit. So, people, journalists, companies, economists and more have been over the past 3 years trying to outline why and how Brexit will affect the country. Migration, tariffs, border controls; especially with regards to Northern Ireland and Ireland, food imports. A few sectors of the economy as well as diplomatic alliances are in danger when it comes to undoing what has taken years for their government to build." *Johnson's first problem is time. It took the EU five years to strike market-opening accords with Japan and Canada and 20 to get a deal with the Mercosur group of Argentina, Brazil, Paraguay and Uruguay. A deal with the U.K. would involve unpicking some 50 years of trade policy toward its closest neighbor*" [25]. The PM must achieve something similar to what took over 50 years for the country to achieve whilst trying to remain competitive and keep the economy afloat. A task that does not seem possible, but with the number of variables at play, it can go several ways for the British Kingdom.

The current work does not center on the British economy, but rather on the challenges, hurdles and opportunities that the Investment Banking Industry will face in different areas of the industry, such as access to the single market in the EU, issues with passporting, competitors, and potential new partners. We are relying on previous studies as well as researched data, such as FDI (Foreign Direct Investments), Bond issuing and other available data we may find that can help us paint a picture with each scenario. Our goal is to use this data to predict more accurately what role Brexit will be playing in the industry and, what possible outcomes these economies stand to win or lose in each of those scenarios.

Limitations to the Project

There are several limitations with regards to this project. The main one would be access to banking data. Limited access to the UK biggest bank data in terms of FDI, income of the investment banking department, separated by services offered with year over year growth or shrinkage in each country, in the EU. This data which each bank keep internally, would have allowed us to analyze fluctuations in services, offered in each country, and to properly observed how Brexit has affected their operations and capital structures.

Thesis Statement

To determine what effect Brexit has and will have on the UK Investment Banking Industry. And thus, determine what scenario would result most favourable for the UK Banking Industry.

The problem with passporting

Passporting is a term that gets thrown around quite a bit when discussing the issues that banks face when leaving the EU. A passport basically enables firms registered in the EU or EEA

(European Economic Area) to do business in any of the others EEA countries without applying for another licence. In essence, passporting allows entities to operate freely in any of the EU countries without going through a lengthy application process to be up to par with local regulations: *"The internal market is underpinned by a network of Directives and Regulations, which permit access to other EEA member states if a firm has a licence in one member state (the 'home' member state)"* [21]. This combined with UK lax regulations was what allowed several banks and other entities to enter the EU market through the UK. Now there are several types of passports a company could obtain. First, there is the MiFID (Markets in Financial Instruments). This "passport" would be required by an entity in order to offer cross banking services which is basically investment services. It is estimated that *"Around 1,000 EU-27 firms possess a MiFID passport to do business in the UK. At the same time, there are 2,250 UK entities which use a MiFID passport to enter the EU-27. To put the latter number into perspective, 50-60% of the UK's "investment firms" under the MiFID use passporting into the EU-27"* [8]. This shows how important and dependant Investment Banks settled in the UK are on the MiFID. Secondly, there is the CRD IV which is the capital requirements directive that is used for banking services. We also have the AIFMD (Alternative Investment Fund Managers directives), Prospectus Directive which is utilized for issuing securities, the Undertaking for Collective which is for collective investment in the transferable securities directive for marketing and trading investment funds and the least important with regards to this paper but equally important on big scale the Insurance and Reinsurance Directive, which overlooks insurance. We must be note that the European commission [5] has clarified that, in the face of a hard a transitioned period of 12 months, will be given to financial entities from the official exit date to allow firms to transition into the next phase.

A country that does not have this passport is at risk and will, most likely, not have access to the single market, which is what was proposed in [21]. A loss of passporting through a hard Brexit would prove dire to the industry. This can be attributed to the fact that the UK would then be qualified as a third country. This means that any UK passport licence would be deemed useless and unable to operate in the other remaining countries. The author in [21] explains that, unless the country is able to secure themselves a "Norway" deal, which in essence means being part of the EFTA (European Free Trade Agreement) without being part of the EU like Norway, Liechtenstein, Iceland and Switzerland, this agreement would allow them to access the market with the downside being that they do not get to vote in regulations and have overall little to no say with regards to policies. The idea that the paper presents is that the country has to choose between two options "*On the one hand, London can position itself as an international financial centre with light-touch regulation and supervision to try and gain extra global business" [21] or "On the other hand, the UK can choose to remain close to EU legislation and thus favour its regional business in the EU" [21]*.

Authors of [21] mentioned that with hard Brexit and no "Norway Deal". The UK would have no choice but to purse global business [21]. Consequently, their financial hub would suffer greatly as many banks such as Barclays, HSBC, JPMorgan, and UBS have already publicly stated their plans to move, migrate most or part of their businesses to a neighbouring country in the EU. Should hard Brexit occur just to give some perspective, I leave a statement by HSBC Investment Banker Spokesman *"Given the tight time frame and the complexity of the negotiations, we have put in place a robust contingency plan. It is based on a scenario whereby the UK exits the EU in March 2019, without access to the single market or customs union, and without a transitional arrangement. When negotiation positions and timelines become clearer, we will update our* *contingency plan"* [8]. One of the main criticisms that can be attributed to [21] is that it assumes that the UK has to choose between to when in reality the UK has many options even when it comes to a hard Brexit. The chart on Exhibit 3, produced by [8], is a great example of how many more options the UK may in fact have with respect to the issue at hand.

In the same ways as in [8] and [12] do, we explore all possible scenarios with regards of keeping, losing or maintaining passporting and what consequences each of these bring. The first scenario being be that of a Hard Brexit, a scenario in which the UK does not come to an agreement and is forced to exit the European party. They will automatically face a third country status, but then will be faced with three options. Remaining as a third country status without acting would mean that banks located in the country will be treated as foreign entities. Thus, they will be unable to interact with EU27 (European Union Remaining 27 Countries), and continue to offer their banking services, without relocating one of their office to one that is in one of those countries. In this scenario, the UK decides not to pursue access to and focuses on gaining global business. As stated in [21], this option is not entirely bad but would mean the UK needs to revamp themselves and cater to a different market.

Within the Hard Brexit scenario, the British government may decide to pursue a reciprocity agreement by maintaining and adhering to the EU financial standards or they may try to pursue a membership in the EFTA. This would work as a of passport replacement equivalent. With the EFTA membership being the best alternative, as this would allow the UK to continue to have unrestricted access to the single market. An EFTA membership would allow them to search for individual trading agreements worldwide as well, which may allow them to un-tap new markets. The disadvantage from this scenario is that the UK now follows EU regulations but has no saying or voice in European matters and thus, may suffer second handed consequences from laws, motions or lack of implementation with certain laws. A third exit scenario, *Exhibit 3*, would be to pursue general and bilateral agreements. *"Inspiration could be taken from the relationship that the EU has formed with other trading partners. As with Switzerland in insurance, the UK could strive to negotiate a bilateral agreement for market access with the EU on financial services, pending a more comprehensive trade deal, similar to the arrangements the EU has with many other jurisdictions"* [10]. This agreement may prove challenging, and as *Exhibit 3* shows, may result in services being left out and for the country to not be able to offer the same scope of services. Nonetheless, is an option that may or may not result in a passport equivalent given the fact that it has a different approach to negotiations?

A fourth and fifth option are rather much the same, a soft Brexit would most likely result in the UK keeping their passporting in place or having some sort of equivalency that would most likely not deter the UK passporting rights. And then the last option would if Boris Johnson resigns and the Democratic Party assumes to power or if Johnson changes his mind and calls for a second referendum on Brexit, with a result of the UK staying in the Union and keeping their passporting as they currently have. A sixth option, however, only considered by authors in [20]. It resembles the third option and the idea proposed by Lanno, is a cooperation agreement formed after Brexit with the cities that can now operate in the single market in London. This would give London the freedom to form other trade agreements and expand on their global vision whilst simultaneously operating without passporting rights per se.

European Financial Competition or Cooperation

The paper [20], dives in how it is unlikely for London to be challenged as European Financial hub whilst simultaneously observing how other cities in the European Union may, in fact, actually have something to gain from the exit of the UK from the union.

"*Whilst the City's loss of 'passporting' rights will restrict its access to the European Single Market, alternative international financial centres (IFCs) within EU member states are potentially well-positioned to benefit from Brexit''* [19]. Throughout the research a common theme that has surfaced is that of the competitors that arise from Brexit. We have encountered three common or most likely "competitors" that may emerge from Brexit and those are Frankfurt, Paris and Netherlands. Now for the sake of simplicity the research will be limited to Frankfurt and Amsterdam as these are the main cities that stand to gain and grow the most noticeable amount of business, and the data available to measure they growth most readily available. It is worth noting that France (Paris) will most likely benefit a lot from Brexit and may be one of the biggest competitors but for the scope of the paper we will be discussing Frankfurt and Amsterdam only.

The underlying common idea encountered in most of the papers is simple, Europe's biggest financial "cities" will be competing against each other for the exact same market to "take over London". This in turn results in a race to attract the most business, with each city offering their own twist on the benefits their business may receive. The idea of trying to attract large business for growth can be compared to when the online giant, Amazon was looking to find a place for their second headquarters in the North America. This resulted in each city lobbying and offering their best proposals to try to lure the company to establish themselves there, this included everything from tax breaks, to incentives, to showcasing the city. The idea behind getting their HQ in their cities being that the economy, city and people would benefit for years to come due to increase in capital, employment, taxes, etc.

The General idea is that these cities are presented with an opportunity, as companies such as HSCBS, JP Morgan, Barclays have stated contingency plans in which their offices or part of would require to move to a city within the EU to continue their operations in an extreme Brexit scenario. This in turn led to city officials starting to take action in the race to attract bankers :"*In both Frankfurt and Paris, efforts led by national and local level political actors, operating both directly and as part of joint public-private initiatives, have also centred on promoting the two cities as desirable locations for financial activity leaving the City"* [20]. This shows the cities preparedness and readiness to be able to expand and capitalize on the opportunities that Brexit presents. Something that is not touched upon during research is that this may in fact led to an unintentional surge in the banking sector in certain cities regardless of the outcome of Brexit. Companies may see the upside of relocating or expanding into these cities not only because of what they offer but may in fact provide a steady economy and political climate.

Frankfurt itself has proven to be a key growing player in the financial industry and has as one of the front race runners in this race for several reasons. First, there is the proximity location to financial regulators (European central Bank, Germany Main Regulatory bodies) and it's key positioning in Europe. The infrastructure and space are already there, and the cities politicians have been publicly praising and lobbying for the expansion of the city. With the added value of an economy who has demonstrated steady growth over the past 10 years and has had a steady political record as well. One of the disadvantages the city shows, unfortunately, is that Frankfurt lacks the attractiveness of a city centre and does not have the charm of a city like London, Paris or Amsterdam may offer to investors. And although this may sound like a silly argument in a profession like banking the ability to lure the client is key and bankers have expressed that the city lacks characters which although not a big deterrent it is something worth noting. But that is not all, Frankfurt has been also competing from within their own country, with Berlin running a similar campaign the city may lose to competition or may in fact end up with a financially divided hub.

The biggest deterrent with Frankfurt however being that the national government has not shown signs of backing or encouraging the proposal of city officials.

Amsterdam on the other hand has the attractiveness of a beautiful historical city, and a similar course of action taken by city officials in lobbying for business to come to the city. This city brings the added value that it already has in place, great electronic trading infrastructures, a great supply of qualified workers and it is located at the heart of Europe with the added benefit of its proximity to Brussels. However, Amsterdam suffers in a key area and that is it lacks infrastructure and has rather small population and space in their nation's capital. To add to all this a theme that has propped up throughout the research is that almost any of these cities may lack the liquidity and service offerings needed for the industry to mimic something as big as London's Financial hub.

An idea proposed by authors in [20] is that in the face of adversity and for the sake of keeping the machine running these countries may choose an alternative to replacing London but rather cooperate. This takes into account and acknowledges how rooted London is as Europe's financial hub and realizes that no city will be able to replace in short or even medium notice. With the added realization that through cooperation these European cities may be able to get the "*low hanging fruit"* [20] and thus capitalize on it, many have turned from competing to lobbying for potential structures that allow for the cities to cooperate. This would allow for London to work with either or simultaneously with them which would result in a win case scenario for both. These cities would still gain from this and would see their financial centres growth. And although companies currently already have in place in Europe a Head and subsidiary branch system which we will not delve into, almost any Brexit scenario would change that. This cooperation system may even result in cities dividing their areas of expertise and have a place for each specialty.

One of the first arguments that can be used in favour of the cooperation approach rather than the competition one is with regards to London and their structure. Authors of [8] allude to the fact that London economy would be deeply affected by Brexit and in terms or revenue for the Investment Banking sector there would take a hit and most likely decade over year in the sector. This as mentioned before may not take into account how rooted or essential London is to the European market and the potential that the city has to come out ahead. And although banks have already contingency plans on how to move these hubs, I think they underestimate how much business London has.

Exhibit 1 shows how bond issuing's (which is one sector of the IB industry) has been steadily increasing and in fact over performing their European competitors. This may prove that cooperation is the route to go, if London truly was being questions and banks were uncertain and wanted to move their HQ or operations we would have seen a steady decline after the referendum vote in 2016 and an increase in the competitors. It can be noticed that past 2016 London has still been thriving and even though we see a decline in 2019 (up to date) it is still on par with decline in other countries, which we can interpret how the industry has still not slow down as it should if it was planning to move somewhere else. *Exhibit 8* shows as well how banking fees and commissions have continue to increase at a steady rate from 16' onwards. In Exhibit 2 we can observe how many more offering LSE (London Stock Exchange) has as opposed to other financial hubs. What is most important as it mentions in [19], that cities are also dependant on London for "liquidity, clearing, investment funds and wholesale banking services", which makes a great case for a cooperation scenario to be developed between the competing cities and London. It may, in fact, be of best interest for the European economy as a whole, as well as both sides of the party, to come to a cooperation agreement. It would be extremely hard to replace London; the cooperation route allows for it to stay competitive whilst sister cities can now thrive and continue to expand and develop their own financial hubs.

Statistical Analysis

The main goal of the current paper is to observe a historical issuing of bonds in key financial cities around the world and determine what we could expect in terms of bonds issuings for years to come. The reason we are utilizing bond issues is that we believe it to be a key indicator of the health of the Investment banking industry.

Our forecast is build by analysing historical bond data through linear regression analysis. This is a reliable method of identifying which variables have impact on a topic of interest. It determines which factors matter the most, which can be ignored, and how these factors influence each other.

We are predicting the bonds issuing in UK, Germany and Netherlands through impact of U.S. bond market, which is a good example to follow, as it is a great tracker of the health of the market and the health of the biggest financial hub.

The calculations in *Exhibit 10, 11, 12* show that all regression estimates are valid, as there is a correlation between US bond market performance and each individual cities. We utilized the forecast analysis, which allowed us to see how each market would perform in ideal situations, current situation and a worst case scenario.

<u>United Kingdom (London):</u>

By comparison UK bond market influenced by U.S bond market, we have been able to make the following forecasts (*Exhibit 4*):

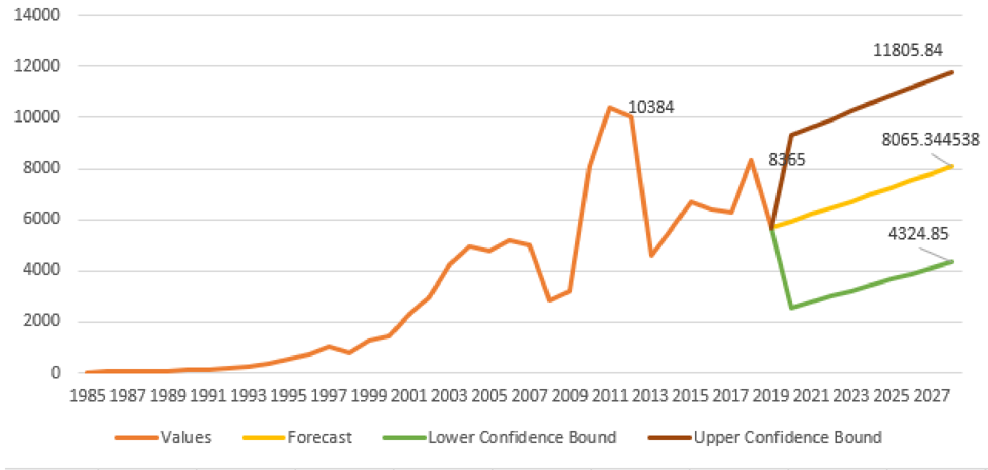

Exhibit 4. UK Bond Issuing and Forecast (Data obtained from FactSet)

An ideal situation would result in the upper level confidence of the graph. This would mean an over performance, or above average growth, in the amount of bonds issued over the next 8 years with the massive growth occurring in 2020. This would be the result of a Soft Brexit with passporting rights, or a Hard Brexit with EFTA membership. Either of these options would allow to continue to operate at a normal pace within the EU, whilst simultaneously pursue business agreements with other countries, which by negotiating directly would allow them to un-tap new markets.

The current situation, would be that of a forecast at current pace of growth. This would be the result of any of the scenarios in which the UK is allowed to continue their current operations without expand and, thus, maintaining that healthy growth level they have had for the past ten years. This forecast would occur in a Soft Brexit with equivalency, Hard Brexit with a bilateral agreement, or reciprocity agreement, or in a No Brexit scenario. As this would mean operations are interrupted and business can continue as usual.

The worst case possibility, would result in a debacle or shrinkage of the financial industry in London. This would be the result of a complete blockage access to the Single Market, when Brexit occurs. In this situation the country would be qualified as a third-party entity and remain that way.

We accompanied regression analysis by a boxplot -- a standardized way of displaying the distribution of data. It determines the regular lower and upper limits for the bond issuing in UK and U.S. By comparison of *Exhibit 4* and *Exhibit 5*, it can be determined that the forecasted data for all the case scenarios is within the regular range (i.e. no outliers in data, thus no irregular occurrences).

US	UK	
50	34	**Min**
492	299	**Q1**
3176	2859	**Median**
11969	5417	**Q3**
14589	10384	**Max**
6085.857	3281.486	**Avg**
14539	10350	**Range**
11477	5118	**IQR**
17215.5	7677	**IQR*1.5**
-16723.5	-7378	**Low Lim**
29184.5	13094	**Upper Lim**

Exhibit 9. Box-Plot Five number summary

<u>Germany (Frankfurt) and Netherlands (Amsterdam)</u>

Forecasts for bond performance in Germany and Netherlands (*Exhibits 5, 6)* shows that their gain from a massive drop in the UK banking sector would be outperformed by the UK in the less favourable case scenario.

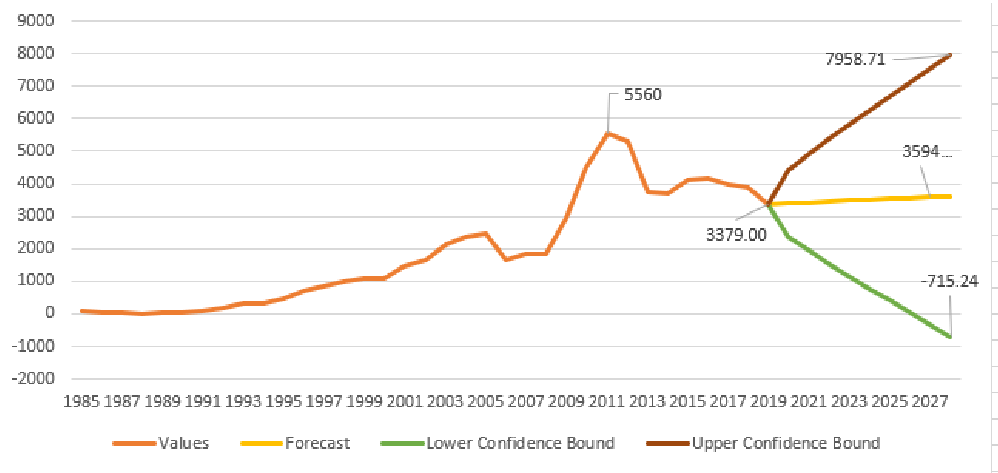

Exhibit 5. German Bond Issuing and Forecast (Data obtained from FactSet)

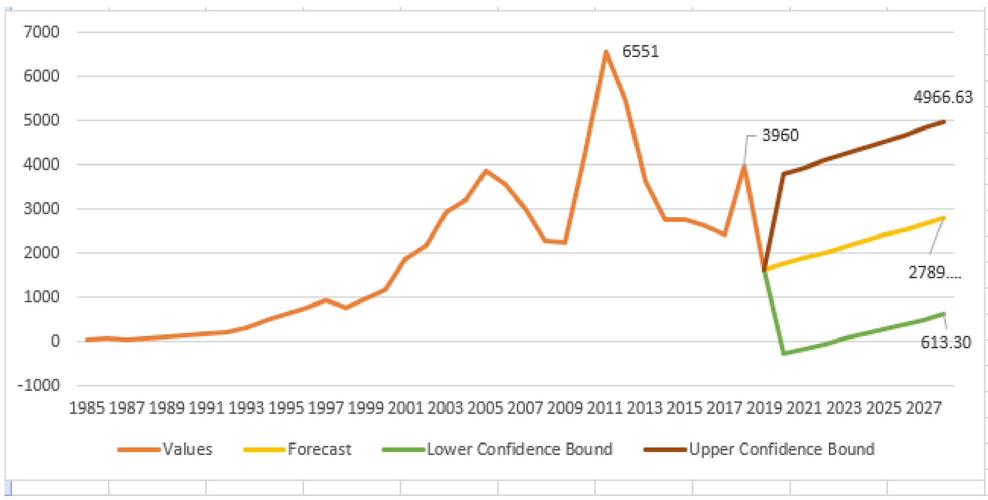

Exhibit 6. Dutch Bonds Issuing and Forecast (Data obtained from FactSet)

UK constant growth would continue in three possible case scenarios: no Brexit at all, reciprocity agreement and equivalency route. This would be due to growth in the financial sector, which would not be outperform, as no new opportunities would arise. A growth, however, in their services would occur if they exit and pursue an EFTA membership, or if they do the Soft Brexit with permission to keep partial passporting rights. Major growth would result of the ability to keep their current market access whilst, simultaneously being able to pursue and negotiate more trade agreements with other markets, which would result in an increase in their revenue growth.

London: Current Climate, Opportunities and Threats

Many believed that after the Brexit vote that the IB (Investment Banking) industry in London would immediately, deteriorate, or would start declining. *Exhibit 6,* shows that the bond growth remained constant. With a predicted steady growth that outshines any of the European counterparts in the Upper or lower level of confident prediction. In fact, the forecast analysis given in *Exhibit 4, 5, 6* can determine a few things. First, we can see that the growth in a worst case scenario for London is still above the other cities highest growth probability. If the UK follows through with Brexit, with no passporting equivalent is obtained. *Exhibit 4* shows us that the Industry would still be operating at a higher capacity than their competitors. Thus, it is safe to assume that London industry at least in the Bond Department would continue to prosper. *Exhibit 7* shows that, beyond the initial impact and reduced in FDI investment in 2016 the FDI investments has since return and surpass the normal levels. Thus, it can be concluded that the industry has since grown rather than contract. In [9], has determined that although Brexit resulted in a slowdown of the Banking sector stocks, it was not as impactful as that of a 2009 event, in this case. Here is a quote on their findings "*Brexit announcement show that Brexit was not another Lehman moments for banks, especially for EU Banks* [9]. The paper talks mainly about CDS (Credit Default Swap) spreads. It makes a point of mentioning how it affected the banks stocks and shares on the short term and tries to compare it to Brexit. The conclusion in this case is that, there is not a climate of panic in which companies are rapidly exiting the UK. However, there is climate of uncertainty that is not ideal for growth in the sector right now. Work [13] perfectly outlines the issues that business is presented with when dealing with, a potential Brexit scenario. A quote from the paper goes *"However, the fact that the future is far from certain means that forging ahead assuming the most likely outcome is a similarly dangerous approach. Firms should consider an approach to design that builds in flexibility and allows systems to operate in a range of different configurations that can be switched with minimal effort as requirements become clearer"* [13]. Moreover, the paper addresses the technological and operational issues in the Investment Banking industry. It captures the uncertainty companies face when it comes to Brexit and although they would rather not relocate, move or change their operations one has to prepare for the worse. Chances are that the uncertainty will most likely result in increasing operating costs due to the planning and may hurt their bottom line in the short term.

Most works are quick to highlight the potential threats that come with Brexit alternatively, other scenarios, some fail to see what opportunities may arise from each of them. With a Hard or Soft Brexit, the UK would have the chance to expand on relationships with other countries. Should the UK manage to make trade deal with the US, Asia or South America they could potential have an exponential grow in the financial hub and become an even bigger power in terms of financial services. A trade deal with the US may, in fact, prove feasible with the current state of the US-China relationships. With Trump expressing his enthusiasm and need to make a deal with the UK once they separate as they would become one entity as oppose to the European Union, which would be 28 countries. With a Soft Brexit being the obvious choice when it comes to this scenario due to the fact that the UK has the highest probability of remaining active in the single market, with added trade financial agreements with other countries, The City stands to become a one stop shop for global financial business and may in fact emerge as the main competitor to the US in terms of financial services. As mentioned in [20] & [21], the UK in a Hard Brexit scenario faces a lot of challenges to continue to access the single market and may in fact be forced a hand to become a global business centre. However based on how essential London is to European Financial system as per [20] it can be predicted that, although the UK would suffer, it would still be relevant to the European market, and now has the added value of being able to independently negotiate and expand their market share as a global financial player.

As previously discussed, the main threats are within the European Union as cities compete to become the new financial hub for Europe. However, as mentioned, these cities may actually be forced to cooperate rather than compete and form an alliance with London. Although London does not have much to lose in the short run, it is the long game that they should be worried about partner cities developing and expanding their infrastructure, and liquidity. This may eventually result in shutting London off, as they get big enough to handle the bulk of the services. London will have to do its best to secure a deal or ensure it continues to grow and make indispensable to the world and Europe.

Discussions

The Current status of Brexit and the continue development in legislations and negotiations, pose a challenge for the Investment Banking Industry. Future to be determined with clarity. The uncertainties presented by the British Government as well as the European Commission with regards to almost every area of the agreement lead to many variables in the equation that can and may go either way. Given that there are several variables to be taken into account when it comes to each possible scenario and given the fact that each Investment Bank specializes and thrives in different services is hard to determine to overall state of the Industry in London per se. The analysis provided by this work shows that, although initially Brexit may have lightly impacted the current years industry, over the past 3 years the overall industry has remained active, healthy and has grown at a steady pace and although it has not expanded, as it could have, if the referendum had not happen London remains to be Europe's Financial hub.

Most of the discussed papers in the current work, acknowledge and agree that one of the most important issues that the Investment Banking industry is presented with Brexit is that of passporting and access to the single market. This is an issue for Investment Banks. With contingency plans already drafted up for a worst case scenario by several of the banks operating out of London. It is impossible to determine when those plans would go into place or if they do what would happen. Until Brexit it is finalized, banks will most likely not take any action, as no one wants to take a decision that would incur a large cost that could be avoided by waiting by the situation to unfold. Given that being located in London is still a key element for the institution as well and we cannot predict how Brexit will unfold, banks will remain at a standstill. With the only certainty that in a Hard Brexit they have a contingency plan that can go into effect. There are many potential solutions to passporting should the UK exit the EU and become a third party, becoming part of the EFTA, bilateral agreements or partnerships have proven to be potential alternatives, the city may be presented with, when it comes to continue to have access and remain part of the single market economy.

An underlying theme of fear can be found throughout the research, as there seems to be an over- dramatization as to how much a Hard Brexit will affect the industry with the common idea being that "The City", the industry and the economy have everything at stake and may lose it all. With a Banks packing up and moving to another European city within months. Although, precaution and worrying as much as that does not sound ludicrous, as the industry may in suffer from Brexit, the main issue faced by these banks being that there seems to be a lot of alternatives and potential scenarios, but none of them are certain. Thus, the idea is not extreme, but seems to be overly used and radicalized to show how much the UK may stand to lose and how they should never leave the European union without taking into consideration the size and how rooted the city of London is. When it comes to financial industry in Europe at times there seems to be a lack of acknowledgement for how essential London is for Europe as well with regards to bringing foreign capital and giving the world access to and stimulating the European economy. The way I see it is that taking the UK out of the equation may result in a loss for both sides of the equation, or may result in Investment Banks winning, as they is a number of opportunities that may arise to them from this.

The paper [20], written by *Schmid, Lavery and McDaniel* proposes a more realistic, yet visionary, idea with regards to the future of the Industry. By looking at rather more specific data to the industry and consulting with companies with regards to what will be happening next, and what is a realistic scenario in case of Brexit, the authors were able to craft an idea that is not only logical, but takes into account a lot more variables when it comes to replacing London as a city and outsourcing their services. The idea at hand being that of cities forming partnerships with countries that remain in the EU seems elegant and logical, given the limitation that each of these countries' possess. The paper does a great job at highlighting works and consulting with plans by companies and city officials with regards to Brexit, whilst proposing a realistic potential scenario. And we must not also forget potential alternatives for the UK to expand even more with the development of trade agreements with other countries, leaving the European Union would allow for easier negotiations to take place in the world stage simply due to the fact that now countries have no negotiate to one country as opposed to 27 .This, in turn, may better deals being struct throughout the world with Asia , South America and even the US, which would marginally increase the UK Investment Banking Industry reach and overall market share. Given the fact that many of these Investments Banks in the UK operate at a global scale, these new deals may result in consolidation of financial operations in London which can be envisioned as the UK becoming a one stop shop for the world financial needs and become the US biggest competitors. At the end of the day Brexit may result in one of the biggest opportunities for the Investment Banking Industry in London to expand and become a world leading financial hub.

Conclusion

There are six possibilities for London current financial Industry, all of them confide within 3 outcomes: Hard Brexit, Soft Brexit and No Brexit. In a Hard Brexit Scenario we can find four of those six possibilities, the UK could: become a third-party country, pursue bilateral agreements, pursue a reciprocity agreement or apply for an EFTA membership or pursue equivalency. The first two scenarios result in the financial industry taking a hit, whilst allowing for negotiations to further their global stance. The latter two scenario manages to maintain the status quo, whilst simultaneously allowing them to pursue further business with other countries, but will diminish their voice in the EU. In a Soft Brexit situation we can find the remaining two possibilities. They could pursue equivalency or through negotiations manage to retain certain aspects of their passporting rights and thus allowing them to push business globally and continue to operate in the single market. Also, there can always be another referendum in which the vote concludes that there will be No Brexit, which would mean everything remains the same.

Cities have decided to act and start mobilizing to make the best out of this situation. There are two ways this could go. Either they compete with London and each other to get the pie crumbs that these negotiations drop along the way; or they start formulating a plan to form a cooperation agreement between the cities and thus expand their respective operations, thus, avoiding competition from “The City”.

It is through our findings that we were able to determine that, regardless of the outcome, the UK faces a minor threat when it comes to losing their financial hub, as a worst case scenario would still mean that they outperform their European countries. And it is in the EU and the UK best interest, that the UK financial market keeps operating efficiently, as a change in business would not only mean de-centralization, but would generate liquidity issues in the banking industry. This could in turn affect the markets as well as the currencies from both countries. And thus, we can conclude that, a best-case scenario for everyone would be a Soft Brexit with partial passporting in the UK. This will allow the UK to continue their operations and expand by negotiating trades with other countries. European cities would be able to develop their own cooperation agreements with the City and, thus, allow themselves to expand their own financial hubs and increase in size. All this would also mean no crisis of confidence in the EU, no liquidity and no currency issues.

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APPENDIX

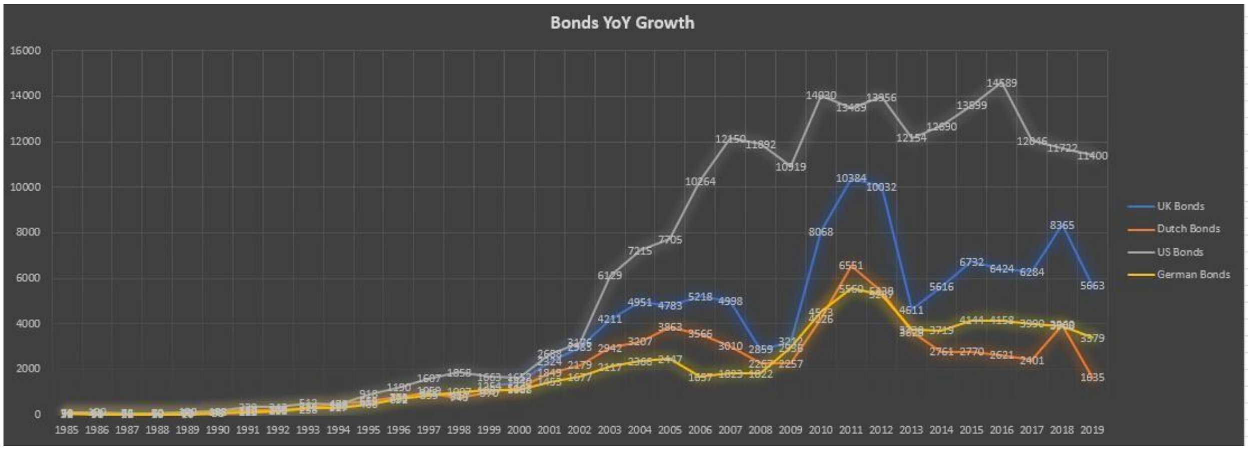

Exhibit 1. Bonds YOY Growth

Exhibit 2. Number of companies listed through an IPO (Retrieved from Kaya, O., Schildbach, J., & Lakhani, K. (2018)

Alternatives for UK financial industry 29

	Description of approach	Scope of approach i.e. which financial services it covers	Advantages of approach	Drawbacks of approach
EEA (European Economic Area) membership	UK seeks membership of EEA by acceding to EFTA Convention (agreement with its members Iceland, Liechtenstein, Norway and Switzerland) and the EEA (agreement with EU and its member states and EFTA countries, ex-Switzerland)	EU single market legislation for financial services applies across EEA	a) Applies for almost all financial services b) Passports continue to operate across single market	UK would need to implement new EU regulations albeit with no direct influence over EU law-making. Moreover, process of applying new regulation in EEA-EFTA states likely to be slow, at best.
ATA (Alternative Trade Agreements)	a) Become member of WTO GATS (General Agreement on Trade in Services) b) Enter into bilateral agreement like EU-Switzerland c) Enter into EU PTAs (Preferential Trade Agreements) like with Korea and Singapore	Depends on the individual agreement	In theory, can allow for cross-border access for financial services.	In practice, confers limited rights significantly short of an EU passport. Licensing requirements are likely to come with restrictions, whether regulatory or 'trapping' capital and liquidity.
'Third country' regimes	Based on regulatory equivalence and reciprocity	There regimes have narrow scope and do not cover all services e.g. access to market infra-structure, lending, deposit-taking, FX, payments, retail investment services	Provides access to EU market for investment services	The more limited scope is likely to fall short of the range of CIB services being provided by global banks. Like the EEA approach, UK would need to implement new EU regulations to maintain regulatory 'equivalence'. Ultimately, the EU would have the right to amend/withdraw this regime.

Exhibit 3. Alternatives for UK financial industry (Retrieved from Kaya, O., Schildbach, J., & Lakhani, K. (2018)

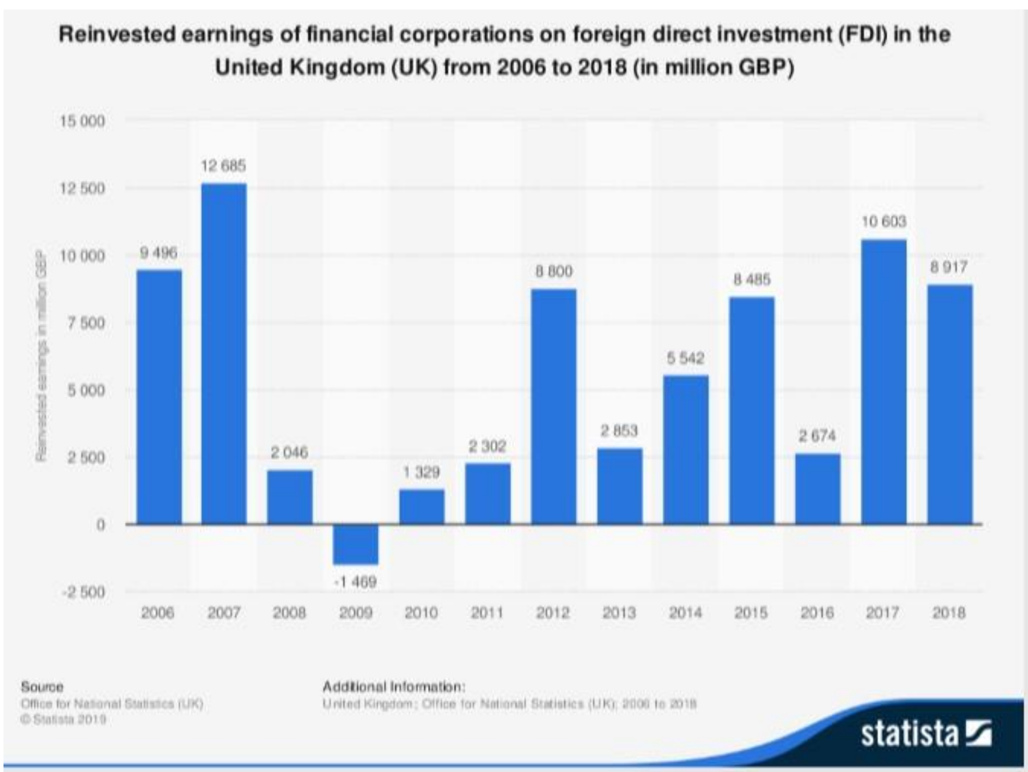

Exhibit 7. Reinvested earnings of financial corporations (Retrieved from Statista)

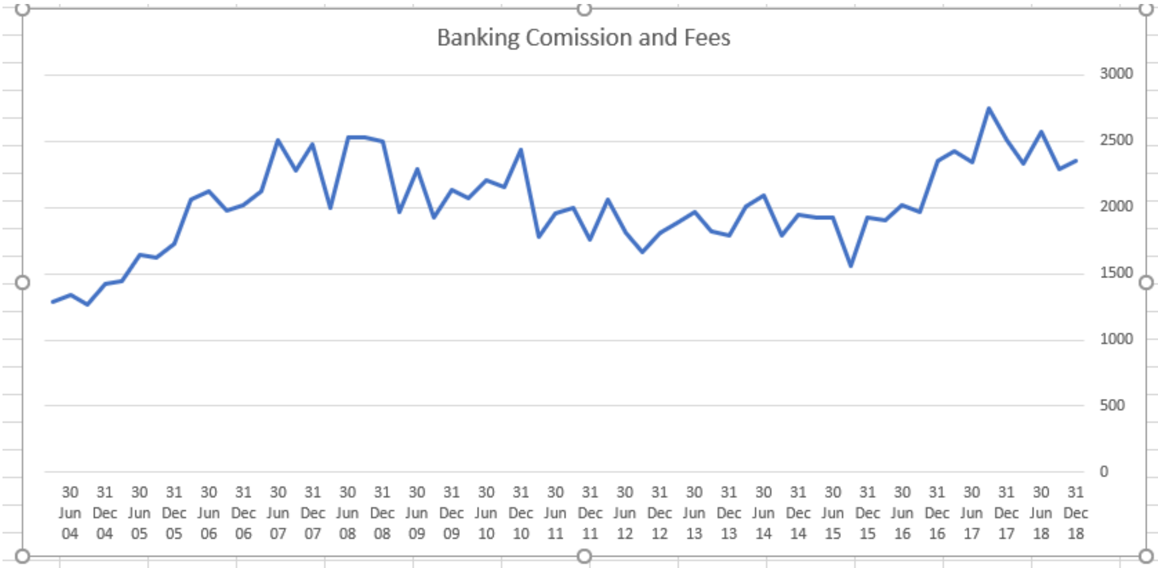

Exhibit 8 Quarterly total of Monetary financial institutions sterling and all foreign currency fees and commissions receivable related to investment banking, advisory,brokerage & underwriting from residents and non-residents (in sterling millions) not seasonally adjusted Retrieved from the Bank of England

SUMMARY OUTPUT								
Regression Statistics								
Multiple R	0.914435							
R Square	0.836192							
Adjusted R Squar	0.831228							
Standard Error	2326.871							
Observations	35							
ANOVA								
	df	*SS*	*MS*	*F*	*gnificance F*			
Regression	1	9.12E+08	9.12E+08	168.4548	1.63E-14			
Residual	33	1.79E+08	5414327					
Total	34	1.09E+09						
	Coefficients	*andard Err*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*ower 95.0%*	*pper 95.0%*
Intercept	665.2556	573.6909	1.159606	0.254531	-501.927	1832.438	-501.927	1832.438
X Variable 1	1.651874	0.127273	12.97901	1.63E-14	1.392936	1.910812	1.392936	1.910812

Exhibit 10 US-UK Regression Analysis (Data Retrieved from Factset)

SUMMARY OUTPUT								
Regression Statistics								
Multiple F	0.926694							
R Square	0.858762	VALID						
Adjusted I	0.854483							
Standard E	2160.624							
Observati	35							
ANOVA								
	df	*SS*	*MS*	*F*	*gnificance F*			
Regressio	1	9.37E+08	9.37E+08	200.649	1.4E-15			
Residual	33	1.54E+08	4668294					
Total	34	1.09E+09						
	Coefficient	*andard Err*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*ower 95.0%*	*pper 95.0%*
Intercept	218.7631	552.2111	0.396159	0.694538	-904.719	1342.245	-904.719	1342.245
X Variable	3.063345	0.216261	14.16506	1.4E-15	2.62336	3.503331	2.62336	3.503331

Exhibit 11. US-GE Regression Analysis (Data Retrieved from Factset)

SUMMARY OUTPUT								
Regression Statistics								
Multiple	0.845285							
R Square	0.714506	VALID						
Adjusted	0.705855							
Standard	3071.867							
Observati	35							
ANOVA								
	df	*SS*	*MS*	*F*	*gnificance F*			
Regressic	1	7.79E+08	7.79E+08	82.58918	1.68E-10			
Residual	33	3.11E+08	9436369					
Total	34	1.09E+09						
	Coefficients	*andard Err*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*ower 95.0%*	*pper 95.0%*
Intercept	567.2393	798.9776	0.709956	0.482718	-1058.29	2192.771	-1058.29	2192.771
X Variabl	2.838503	0.31234	9.087859	1.68E-10	2.203042	3.473964	2.203042	3.473964

Exhibit 12. US-NE Regression Analysis (Data Retrieved from Factset)