Bachelor Thesis

Banks on the Move

Why did financial institutes transfer to Frankfurt or Paris, as a result of the Brexit agreement?

Niklas Grotschulte

Public Governance across Borders

30th June 2021

University of Twente, Netherlands

Word Count: 10761

UNIVERSITY OF TWENTE.

Abstract

In this thesis, Germain´s principal financial centre theory, lobbying theories and herd behaviour theories are used to examine the movement of banks. To answer the question of why banks transferred to Frankfurt or Paris as a result of the Brexit agreement, three hypotheses are presented: First, I assume that the principal financial centre with the densest private sector network will attract the most banks. Second, I hypothesize that the city with the most convincing pull factors, provided by the public administration, will lobby most efficiently, and attract the most banks. Finally, these hypotheses are combined into the assumption that both, the attraction of private networks and the pull factors of public actors lead to a herd behaviour towards a certain city. This framework will close a gap in the literature and provide a more thorough explanation of the complexity of Brexit than just one theory could. Secondary data helped to uncover the key findings: Both, private networks and pull factors provided by public actors contributed to the movement of banks towards both cities. Frankfurt attracted more banks by offering the denser network and providing more convincing pull factors. Time will show whether herd behaviour is apparent or not.

Table of Contents

Background

Brexit got done. The transition phase that began with the triggering of article 50 of the Lisbon Treaty in 2017 has come to an end. On January 1st, 2021, the UK has left the European Union and the Brexit is complete. A hard Brexit could be avoided at the last minute through the trade and cooperation agreement. The negotiations were tough and delayed by topics such as fishing rights, which was heavily debated. But while the British fishing industry makes up 0.4% of the GDP and provides around 12.000 jobs (Wright, 2021), a much larger industry was excluded from the negotiations from the beginning. The financial sector with around 1.1 million jobs, a GDP of 7% and a total of 11% tax receipts was always going to end up with a "no deal" Brexit (Wright, 2021). The UK government decided to exclude the financial sector from the trade deal negotiations with the EU as the complexity of a financial agreement would delay the withdrawal of the United Kingdom from the Union and jeopardize Boris Johnson´s promise of "getting Brexit done" (Wright, 2021). Additionally, the UK government thought that the financial sector would weaken their bargaining power, as it is the largest industry in the United Kingdom with no serious competition on the EU side. The May administration feared that the financial sector would be used by the European Union as a bargaining chip to enforce freedom of movement (Wright, 2021). These arguments were accompanied by British exceptionalism, as statement like "the EU needs the city more than the City needs the EU" and "they wouldn't dream of cutting off EU companies from the City" led to false confidence and ultimately a no deal scenario (Wright, 2021). The only agreement which includes the financial sector is a small set of arrangements to apply international standards, like the non-discrimination on the basis of the nationality of a business and visa-free business travel. The loss of passporting rights means banks and financial actors based in the UK have no access to the EU market (Elvinger Hoss, 2021). Therefore, the UK has less access to the EU financial markets than for example Australia. This led to an ongoing migration away from the City at which more than 400 financial services already relocated their operations to the European Union. In addition to that, banks already moved more than £900bn in assets to financial centres in the European Union. According to the British thinktank New Financial this movement is only the beginning of Brexit for the financial services (Wright, 2021).

The question arises which financial centre the banks choose to operate in and how they choose. There are several options, in this research I will focus on Frankfurt and Paris, as they are the second-tier financial centres in Europe after London. To answer this question, I will structure my research along the explanatory question of "why did financial institutes transfer to Frankfurt or Paris, as a result of the Brexit agreement?". This research question addresses a gap in the literature, as Brexit is an ongoing and unprecedented process, and the existing literature of decision making in the financial sector mostly covers the decision making of individuals as brokers. To explain the choices of banks which city to move to, one has to take a closer look at how banks decide and how they are influenced in their behaviour by their environment. Germain's 1997 theory on principal financial centres can help to explain what defines a financial hot spot and what makes them attractive to banks. Furthermore, lobbying is bound to play a role when decision-making on this scale is examined, for example the influence of pull factors. These two assumptions can be connected to show that herd mentality (Bikhchandani and Sharma, 2000) plays a role in the decision-making process of banks. While the theory on these topics is rich, there is not much information on how they play together to form a bigger picture. The choices large financial institutes make are often complex and multi-faceted. By combining the theories mentioned above, a more realistic explanation for why banks choose the way they do can be established. The aim of this research is to combine these theories into one framework and to apply them to the case of banks choosing where in Europe to move, Frankfurt or Paris. This gives new insights into the decision-making processes apparent in this case. On the basis of these theories, I will pose the following sub questions. (1) What are pull factors that attract banks to a certain city? (2) How are the banks influenced by public and private actors in their decision? (3) Does herd mentality occur in the decision-making process?

Examining these questions is relevant from a theoretical and scientific standpoint. Firstly, there is little literature on this topic due to the recency and the singularity of the Brexit. Further, the combination of the PFC theory with lobbying theories and the herd mentality theory has not been done before in the literature. Combining these theories into one theoretical framework will help to gain better insights into the decision-making process of banks. Applying this framework to the case of banks leaving choosing between Frankfurt and Paris in consequence of the Brexit will help researchers to understand the movement of banks in this case and for other cases in the future.

In addition to the scientific relevance, the research has also a societal relevance. Banks have a crucial social significance, as they contribute to the whole economy by financing companies, creating jobs, and generating taxes. By understanding the movement and motivations for the movements of banks, regulators can take actions to attract them. Furthermore, the Brexit itself has a high societal relevance as it affects people, whole industries and virtually all European nations. Up until now, the financial centre of London was the most important trading hub for the European Union. After Brexit, the EU has to realign itself and readjust its financial sector. The insights of this research might further be useful for making assumptions in other cases where financial centres shift, or for other countries that consider leaving the European Union.

Theory

In the following chapter, I will employ three main theories, which can be combined to create a framework that will be applied to the case to explain the movement of banks from London to Frankfurt and Paris. The movement of banks after the Brexit can be seen in different theoretical perspectives. The complex topic of relocation of banks must be seen from several perspectives to gain a complete picture with all its facets.

Principal Financial Centre Theory

As this thesis focusses on the interaction of banks and financial centres, Germain's "Principal Financial Centre" theory can be taken into consideration. This theory offers a well-established explanation for the interaction between financial actors of different locations. According to Randall Germain's theory, these cities can be called "principal financial centres" and are home to large networks of financial players. Germain defines them as places where all aspect of credit, for example social and substantive aspects, are connected and provide an entry point for private actors and regulators. (Germain, 1997). There are multiple "principal financial centres" worldwide, which are specialized on different services and financial areas. The centres are connected with each other through relationships that are hierarchical in nature. The density of links between the PFCs show the strength and weaknesses of the relationship between two PFCs as well as ensuring the effective movement of funds in the system. Dense connections also facilitate the collection and movement of information among networks and financial centres. This information and the networks through which it moves are key in strengthening or eroding specific PFCs in the system (Germain, 1997). Further, the dependence and reliance of PFCs on each other can be seen in the direction of capital flow between the PFCs. This hierarchical relationship between PFCs reveals the distribution of power between the states the centres operate in as well as the networks of monetary agents. These monetary agents benefit from operating out of a financial centre as they have access to large networks as well as deep pools of money that allow connections to other actors and the world economy. Financial actors are profiting from operating in a PFC and it determines their success on the market (Germain, 1997). Changes in the accessibility of resources leads to a shift in power between the PFCs. Rival PFCs will try to benefit from this shift. The competition of financial centres is not limited to private actors. Regulators and governments also compete, by helping national financial actors to remedy unequal access to resources (Germain, 1997). Germain additionally stresses the importance of capital recycling mechanisms in the financial system. He defines this as "the means by which capital is recycled from areas of surplus to areas of demand or need" (Germain, 1997, p. 22). An important consideration is the susceptibility to political influence over this mechanism, as the monetary system works closely in connection to regulatory guidelines that have been established by the public authorities. The capital recycling mechanisms and the question how PFCs are connected can be seen as being structured around actions and priorities of private monetary agents. Nevertheless, these are working within the bounds of regulations created by public authorities. Shifts in the availability of resources, for example due to political action like the involvement of governments, can change the equilibrium of social powers and the abilities of certain networks to act. Political involvement as well as a shift in resources can lead to a transformation of capital recycling mechanisms and changes in the hierarchy and dependencies of PFCs.

Germain's theory of principal financial centres focusses on a structural and international approach and puts institutions at the forefront of his research. Germain's book "The International Organization of Credit" is a reference book for financial research and therefore a key work to consider when researching the movement of banks. In this research, the perspective will be set similarly as the Brexit is a phenomenon of international scope where structural changes created a shift in power. Furthermore, as Germain focusses on the institutional public and private monetary authorities, this study shares this focus on institutions. Germain describes that changes in the accessibility of resources can lead to a shift in power between PFCs. This can be related to the loss of passporting rights caused by the Brexit and therefore, this theory can be employed to research the shift of banks from London to one of the financial centres of Frankfurt or Paris. I expect that banks choose the PFC that has the densest network and therefore ranks the higher in the hierarchy of PFCs.

H1: It can be assumed that the principal financial centre with the densest private sector network will attract the most banks.

Lobbying Theories and Pull Factors

To illustrate the role of lobbying regarding the movement of banks, I will first present an overview of lobbying theories in the literature. Lowery´s (2007) work "Why do Organized Interests Lobby" provides insight into neoliberal lobbying theories. According to Lowery, the general assumption that lobbyists are actors whose only objective is to persuade public authorities is incorrect. Rather, lobby organizations are motivated by their own survival. This means that organizations have to lobby if they are not content with the status quo or if public actors do not fully represent the interests of the lobbying organization by themselves (Lowery, 2007). Further, if vital interests are threatened, even small chances of success may call for lobbying. Lowery created a multi-goal, multi-context framework with the focus on organizational behaviour. The main question which arises from researching lobbying is "what are lobbyists trying to accomplish?" (Lowery, 2007, p.46). While some contextual system can be manipulated or designed to favour lobbying, the venue in which lobbying takes place is bound by jurisdictional rules. In addition, the institutional design has a strong influence on the type of lobbying and its approach. Another aspect relevant to lobbying theory are the institutions in which lobbying takes place. Salancik and Pfeffer give more insights in their book "The External Control of Organizations: A Resource Dependence Perspective". The authors state that, no organization is completely self-contained or in complete control of their conditions. This can also be related to the resource dependence theory (Pfeffer, Salancik, 1978). Resource dependence theory works with the assumption that organizations depend on resources which stem from their environment and that organizations have to survive before they can accomplish any other tasks. Organizations which control essential external resources have the potential to form the behaviour of others by threatening to withhold access to the resources (Lowery, 2007). It is important to keep in mind that classic lobbying theories mostly focus on the lobbying towards the legislator and not lobbying among private actors or lobbying of public actors. As they do not fit perfectly for our case, one must consider additional frameworks that tie together lobbying and governmental interest representation. Therefore, I will also take pull factors into consideration. Lobbying is deeply anchored with pull factors that lead to specific business and policy decisions. The bank of England created a definition of pull factors in the financial context. Pull factors are "domestic conditions and institutions that affect the relative attractiveness of investing in an individual country" (Carney, 2019, p.4). The framework will be used to explain lobbying attempts towards private actors, in this case, banks which are relocating towards the European Union. Examples of pull factors are tax regulation, favouring financial actors and services, and advantageous labour market regulations. These actions are taken to strengthen the infrastructure and the network of the financial centre. I expect that the city that offers the most convincing pull factors will attract the most banks that are moving to the European Union.

H2: It can be assumed that the city with the most convincing pull factors, provided by the public administration, will lobby most efficiently, and attract the most banks.

Herd behaviour Theory

Examining this decision-making process more closely, in individual as well as in collective decision making, scholars from the behavioural finance research have found that psychological factor play a role in financial decision making. While classical and neoclassical theories of finance perceive the human as a homo oeconomicus whose decision making is based on the rational choice theory, the behavioural finance field is built on the assumption that the rationality of people is bounded and limited by their imperfections (De Bondt et al., 2008). Fromlet sees the herd behaviour as an important part of financial market research in a psychological context. A theory that deals with these assumptions is the herd behaviour theory by Bikhchandani and Sharma. This theory is based on three pillars: Imperfect information, concern for reputation and compensation structures. According to the authors, imperfect information is a major contributor to herd behaviour. Every individual has information which is private, but the actions of other individuals can be observed. Herd behaviour arises when individuals follow the actions of others rather than trusting in their own private information. This can be also triggered by random events combined with the choices of few individuals. As a second cause for herd behaviour, the authors describe the concern for reputation. When individuals are uncertain about their own skillset and abilities, they tend to imitate decision of preceding individuals. Fromlet explains the concern for reputation by distinguishing between two types of herd behaviour. According to Fromlet, there is voluntary and enforced herd behaviour. Enforced herd behaviour differs by the characteristic that the actor follows the herd despite favouring a different decision. This is driven by the fear of “being trampled” by the herd (Fromlet, 2001, p. 67). Further, the damage to the reputation which is done by false decisions can be mitigated by following the majority (Fromlet, 2001). The authors states that herding tends to be idiosyncratic and fragile, which means that herding occurs randomly by the choices of the first movers in connection with random events. The last trigger for herd behaviour is the compensation structure of an individual. When an individual is compensated by their performance, measured by the performance of similar individuals, they tend to orient themselves on the actions of others. This can lead to herd behaviour. This can also be seen at a larger scale; banks try to minimize absolute losses in comparison to other banks. Therefore, they tend to orient themselves on their competitors. This means that herd behaviour can also occur on the level of banks. Bikhchandani and Sharma originally developed this theory using investment bankers as the unit of analysis. Nevertheless, the theory can be applied to the larger scale of banking sector.

While previous research has developed these theories independently from each other, I will use their combination to create a framework that consists of PFC theory, lobbying theories and the herd mentality theory. The theories can be interconnected in various ways. The PFC theory shares the assumption with the lobbying theories that the environment and the accessibility of resources is vital for financial centres as well as organizations. Competition for resources and power struggles are common events in both theories. The involvement of regulators and governments, by helping national financial actors to remedy unequal access to resources in Germain´s PFC theory, can be connected with the pull factor framework, that is relevant in the lobbying theories, where domestic conditions and institutions are shaped to facilitate access of financial actors to the market. A further connection between the PFC theory and the used lobbying theories is the regulatory framework. Both, PFC, which is bound by regulations created by the public authorities of the certain PFC, as well as lobbying, which venue is restricted by jurisdictional rules, are structured by legal parameters. Combining the herd mentality theory with my previous assumptions, that both, the attraction of private networks and the pull factors of public actors lead to a herd behaviour towards a certain city. In that case, a herd effect in the movement of banks towards a certain PFC will be apparent. In this research, the aim is to determine whether this hypothesis can be confirmed.

H3: It can be assumed, that both, the attraction of private networks and the pull factors of public actors lead to a herd behaviour towards a certain city.

Data and Documents

In the next section, I will discuss the relevant literature, the empirical data, and the used documents. For this research, I will conduct a systematic comparison between the two financial places of Frankfurt and Paris. Relevant factors are the three theoretical components of principal financial centre theory, lobbying theory, and herd behaviour theory which will be combined and applied to the case at hand. The focus of my research will be a comparison of lobbying actors in detail, including private and public actors of both cities, as well as the different approaches of lobbying. I will put emphasis on the mayor lobbying groups of both cities, named EUROPLACE in Paris and Frankfurt Main Finance in Frankfurt. Also important will be the analysis of the structure and background of the two financial networks which operate in both cities. Another point of research will be the number of banks that already moved to Frankfurt or Paris.

This approach is best for answering the research question. First, by focussing on secondary information, I have access to a large pool of information, peer reviewed academic articles as well as contemporary newspaper articles. Secondly, the Brexit and the resulting movement of banks is an ongoing topic in which the actors are still conducting negotiations, which makes it difficult to gain primary information from interviews. In addition, interviews are time-consuming and therefore the number of interviewees would have to be limited. The same applies to primary data about lobbying, as it often takes place behind closed doors without information becoming public. Such a small-scale interview process would not be fitting in this research design, as the case depends on a diverse set of views from different actors to carry out a thorough comparison. Therefore, systematic comparison is an ideal research design, as it is not dependent on respondents, allows for flexible research and fits well into the timeframe.

Further, this research design ensures reliability as it is transparent about the sources that are used.

Naturally, besides these advantages, this research design has potential weaknesses. As mentioned above, lobbying is hard to analyse due to its confidential nature. Nevertheless, while lobbying is mostly non-public, its results are publicly apparent. Furthermore, even governmental information regarding the case might be biased, as governmental actors from both financial centres are heavily involved in lobbying for their cause and are in competition with each other. To face this threat, I will use data and information from both sides, Frankfurt and Paris, as well as neutral sources, to ensure a non-biased research design. Lastly, the issue that the Brexit transition is an ongoing process was already mentioned above. This could also pose a threat to my research design, as the data received from literature could be outdated during the research process. I will counter this by considering the publication dates of the sources in the data selection. I will also consider ongoing developments regarding the case in the process of research.

To answer the question where banks will move after the Brexit and its consequences, I have selected two cases out of the population of possible PFCs in the European Union. I decided to focus on Frankfurt and Paris as possible destinations for banks to move to. This was done using a selective sampling approach. The criteria for selection were the strength and size of the PFC and the probability of the city becoming the destination of banks, based on existing literature. In the ranking of financial centres in the European Union, Frankfurt and Paris take the second and third place behind London, they are described in the literature as second tier financial centres (Waite, 2017). It can be concluded that these two financial centres have the largest networks among the financial centres in the European Union. Therefore, Frankfurt and Paris are the most fitting choice to test the theory whether the largest network lobbies the best and consequently attracts the banks that intend to leave London.

In the following section, I will describe the operationalization of the main concepts and data collection. In this research, I will employ mainly secondary data with a qualitative approach. This is a fitting approach, as the secondary data collection is a time saving way to gather the most reliable data. It also expands the scope of the research by enabling me to use data from a variety of sources and not only a small number of interviews. By using a qualitative approach, my research is flexible. This means I can adapt to changes from within and without my research during the ongoing case selected. This also allows for adjustment of my approach if new developments come to light during the research process.

The data collection of my research will be conducted in the following manner. Firstly, I will solely rely on online resources to gather data, as a wide variety of data is made available through the relevant actors. To narrow it down, I used a set of criteria to find fitting data. The main criterium is the use of post-Brexit content, as the sources written before 2016 mostly rely on assumptions. To refine my search for data, I will use the key terms “Brexit”, “Frankfurt”, “Paris” and “Banks”. Besides these key terms, the principal financial centre theory by Germain also provides indicators which can be used to gather data regarding what makes a principal financial centre or the network which is attached to it. Using these search terms, I will focus on secondary data published in both countries, Germany and France, to gain a good understanding over the topic and the different view of actors. For my research I will use reliable sources, which are peer reviewed if possible. A large part of my information will be gathered from official reports from state banks and governments. Sources like newspapers, for example the “Handelsblatt” or “The Economist”, are also used, due to their expertise in the banking sector as well as their inside knowledge of the sector. Further data will be provided through industry association documents, individual statements of banks, research of thinktanks, listed annual statements of companies and official documents of regulators, like governmental publications. This data will deliver the necessary information to answer my research question along the lines of my hypotheses:

H1: It can be assumed that the principal financial centre with the densest private sector network will attract the most banks.

H2: It can be assumed that the city with the most convincing pull factors, provided by the public administration, will lobby most efficiently, and attract the most banks.

H3: It can be assumed, that both, the attraction of private networks and the pull factors of public actors lead to a herd behaviour towards a certain city.

In the following section, I will define some key concepts from these hypotheses. First, I will define the concept of networks. According to Jackson and Pernoud (2020), financial networks are intricate systems where different actors are connected in several manners and bound by financial contracts. Within this system, values are often similar due to actors local and entrepreneurial proximity to each other. This means, networks are actors who are connected by regular activities with each other on a common topic or theme (Jackson & Pernoud, 2020). In my analysis I will measure networks using this definition with the indicators of connection, regular activities and shared topics. Beginning with the number of actors who are operating in a certain network, in combination with the annual turnover of the specific financial centre. As my research focusses on banks, I will also measure the number of banks connected in the network.

Second, the concept of lobbying will be defined. Milbarth, one of the founders of lobbying research defined it as a communication process in which perceptions are influenced and changed. Koeppl extends this definition by stating that it is "the attempted or successful influence of legislative-administrative decisions by public authorities through interested representatives. The influence is intended, implies the use of communication and is targeted on legislative and executive bodies" (Koeppl, 2000, p. 71). Koeppl focussed on the intention, communication, and targets of lobbying. While Koeppl and most other classical lobbying theory focus on legislative and executive bodies as targets of lobbying, I will extend the target of lobbying to include private actors, being lobbied by public actors, as it still meets Koeppl requirements of intention, communication and a specific target. To measure the concept of lobbying I will use various measurements, beginning with the adapted definition of lobbying from Koeppl. I will also determine the actors involved. Another measurement will be the success of lobbying up until now, which I will define using the banks that already moved to this city. In addition to that, I will measure the efficiency by combining the success of lobbying with the ranking in the GFCI Index, explained below.

The last concept is the Principal Financial Centre derived from Germain´s PFC theory. As my research focusses on the analysis whether Paris and Frankfurt can be considered as Principal Financial Centres, a definition of the concept is vital. Germain defines PFC´s as places where the social and physical features of credit are connected and concentrated as an access point for individuals, organisations, and governments (Germain, 1997). PFC´s can be measured by using the size of the network, which I defined above, and the GFCI (Global Financial Centres Index) ranking. The GFCI is a biannual index which evaluates the competitiveness of over 100 financial centres worldwide, based on rating from over 28.000 international financial actors (Wardle & Mainelli, 2021). It is conducted by the Z/Yen Group, a commercial think tank based in London. The index was first conducted in 2007. For this research, I will take the GFCI 29 into consideration, which was carried out in March 2021. The ranking is based on five pillars of criteria. First, the business environment is rated by looking at the political stability and the rule of law, as well as the tax and cost competitiveness and the institutional and regulatory environment. Second, the human capital is rated along the criteria of availability of skilled personnel and flexible labour market. Third, the infrastructure of the financial centre is rated in several ways, which are secondary for this research. Fourth, the financial sector development is measured in depth and breadth of industry clusters and the availability of capital. Last, the reputation of the financial centres is evaluated.

Analysis

In the following paragraph I will answer the research question by analysing the data collected hypothesis-by-hypothesis. First, I will determine whether Frankfurt and Paris can be characterized as principal financial centres according to Germain´s theory. In the same step, I will analyse the density of the networks in the certain cities, compare them with each other and ascertain which network could attract the most banks. Following that, public influences on the decision making of banks will be analysed, by looking at pull factors provided by the public authorities. Similar to hypothesis one, the success of luring the banks to their city will be measured by the banks that moved so far. In hypothesis three I will analyse whether the factors of hypothesis one and two lead to a herd behaviour in the banking sector towards a certain city or movements towards both cities without any herding mentality. These hypotheses will help me to determine why financial institutes transferred to Frankfurt or Paris, as a result of the Brexit agreement.

Hypothesis 1

Hypothesis one states that the principal financial centre with the densest private sector network will attract the most banks. Starting with a look at Frankfurt, it is home to more than 200 registered banks (Hessisches Ministerium für Finanzen, 2021) and roughly 75.000 jobs are connected to the financial industry (Lavery, Barber 2017). According to Lavery and Barber the employment structure in Frankfurt is heavily based on jobs in the banking sector.

Frankfurt can be considered as a principal financial centre, as all of the characteristic of Germain´s PFC definition are met. Frankfurt has a high concentration of financial actors, as mentioned above, and a large and globally operating network, which will be analysed later on. Another factor to determine if a city is a principal financial centre is the Global Financial Centres Index (GFCI), which compares the competitiveness of the biggest financial centres worldwide. Frankfurt ranks on the 9th place globally, which makes it the most important financial centre of the European Union, according to the GFCI 29, which was conducted in March 2021. According to the Z/Yen Group, it heavily benefitted from the exit of the UK from the European Union and therefore gained seven rank places. For these reasons, Frankfurt can be considered a principal financial centre according to Germain (Wardle & Mainelli, 2021).

To determine the network, I will use the characteristics of networks according to Jackson and Pernoud (2020). The authors state that a network consists of different actor who are connected in several manners, for example in a regular activity and a shared topic (Jackson & Pernoud, 2020). They also have similar values due to their local and business closeness. I will use this definition to analyse the banking network in Frankfurt, more specifically the Frankfurt Main Finance group (FMF).

The FMF is an interest group of actors located in the financial centre of Frankfurt and the biggest network of the Frankfurt financial centre. It was founded in 2008 and consists of 61 members from different financial sectors as banking, consulting companies as well as universities and rating agencies. As 19 of the members are banks, which therefore make up

31% of the network, it can be said that Frankfurt Main Finance has a strong concentration of banks and a focus on banking related topics (Chen, 2021). The shared topic of the network is to strengthen the financial centre of Frankfurt as it strengthens their own position. According to Frankfurt Main Finance the aim of the members is to "express their close ties to the financial centre as well as their will to position Frankfurt as a first-class national and international financial centre" (Frankfurt Main Finance e.V., 2021). In addition to the connection between actors inside of the network, the network has also several connections with other financial actors, organizations, and regulators. Through the Germany Finance association, the FMF has a national connection with the other financial centres in Germany, for example Stuttgart, Hamburg, and Berlin. This connection also offers access to the Federal Ministry of Finance as it is involved with the Germany Finance association. Within Germany, the network is also connected with the Green and Sustainable Finance Cluster as well as the FinTech Network SDG FinTech initiative. On a global scale the FMF is a member of the World Association of International Financial Centres (WAIFC) (Chen, 2021). Besides the connections to other networks, the FMF is also associated with public authorities and local regulators. Board members of the Frankfurt Main Finance group are in key positions of regional and local governments. For example, Tarek Al-Wazir, who is the minister of economics of the federal state of Hesse, Uwe Becker, who is the mayor and city treasurer of Frankfurt and Thomas Groß, who is the chairman of the Landesbank Hessen-Thüringen. These connections enable FMF direct access to the Hessian State government as well as the City of Frankfurt (Frankfurt Main Finance e.V., 2021).

Regular activities are given through opportunities for its members to initiate business with other financial centres by providing contacts. The network also provides a platform for contacts between financial actors and political actors. It is apparent that the definition of Jackson and Pernoud of a network is given, as all its characteristics like connection, regular activities and shared topics are given in the example of FMF. It can be therefore defined as a network (Jackson & Pernoud, 2020).

Continuing with Paris, the French capital is home to four of the ten largest banks in the EU. Its financial centre employs over 330.000 people in the Ile de France region and claims to be the largest financial centre in the Eurozone (Lavery, Barber 2017). In the GFCI 29 the financial centre of Paris ranked on the 25th place and lost seven ranks compared to the GFCI 28, which was conducted in 2020 (Wardle & Mainelli, 2021). Germain´s PFC definition of a high concentration of financial actors and a large network, which will be discussed further, are met. Therefore, Paris can be considered a PFC.

Paris network called EUROPLACE, will be discussed along Jackson´s and Pernoud´s definition of a network, which was presented above. The EUROPLACE networks consists of 350 financial actors, a large number of them being small and medium-sized enterprises,

insurance companies, issuers, and investors. 27 members of EUROPLACE are banks making up seven percent of actors in the network. Despite the wide range of actors within the network, a shared topic is the promotion of the financial centre of Paris, as EUROPLACE often advertises Paris as the biggest financial centre in the EU. The EUROPLACE network is a merger of four networks, the Finance innovation network, the Emergence Incubation network, the Institute Louis Bachelier and the European Institute of Financial Regulation (EUROPLACE, 2021). The collective aim of the network is to improve the financial centres attractiveness and promoting the reforms that took place to attract financial actors to Paris, like the labour law and taxation reforms as well as the financial law. According to EUROPLACE, the promotion of business environment and infrastructure is at the centre of their mission to consolidate the position of the Paris financial centre (EUROPLACE, 2021). It can be said that the overall aim of EUROPLACE is to strengthen the contribution of the Paris financial centre at the European and international level. To achieve this, EUROPLACE has several connections inside and outside of the network. It connects the 330 actors within the network with each other. Additionally, EUROPLACE is linked with several public authorities like the regional council of the Ile de France region, the city of Paris, the Caisse des Dépôts, a state-owned bank. Another important actor connected with EUROPLACE is the French president Emmanuel Macron, who has spoken out in support of the network (EUROPLACE, 2021).
Describing the regular activities of the EUROPLACE network, it can be said that the activities are quite similar to the FMF actions. The EUROPLACE network hosts forums and discussion for its members and financial actors to get in touch with each other and to provide insights and knowledge about financial topics. It also hosts platforms for its members to network and to do business with other financial centres. Additionally, the EUROPLACE network provides financial reports through its research network enabling its members to benefit from their empirical findings. Nevertheless, the main mission of EUROPLACE is the promotion of the Paris financial centre to become the biggest and most important financial centre in the European Union after the Brexit (EUROPLACE, 2021). To summarize, EUROPLACE can be defined as a network according to Jackson and Pernoud, as all criteria are met.

In accordance with hypothesis one, I have found that both financial centres can be defined as a principal financial centre based on Germain´s definition. Further, both Frankfurt Main Finance and EUROPLACE meet the definition of a network according to Jackson and Pernoud. To determine which one is the denser network, one must compare the two networks. Paris' EUROPLACE network is by far the bigger network. It is around six times the size of Frankfurt Main Finance. Nevertheless, the concentration of banks is significantly lower, as only seven percent of the members of EUROPLACE are banks, compared to the 31 percent of member in FMF. The Paris network consist of many different groups of members, from small enterprises to globally operating banks and with a large number of issuers also a group of businesses that do not have a financial background. The number of actors without financial background in the network is larger than the number of banks (EUROPLACE, 2021). In the case of Frankfurt, the FMF network is more centred towards banking, as 31 percent of its members consists of banks. Frankfurt´s network is smaller by far, but it more concentrated as all of its members are directly connected with the Frankfurt financial centre and have a financial background. This concentration of the FMF network could be due to the specialisation of the Frankfurt financial sector towards banking in particular (Osman, Volkery 2021). This can be also seen in Paris, where the financial centre does not have a clear specialization towards a certain financial service (Osman, Volkery 2021). Therefore, the EUROPLACE network does not have a specialization either.

The question of which financial centre attracted the most banks so far has a clear outcome. So far, 25 banks including JP Morgan, Goldman Sachs and the Citigroup have chosen Frankfurt as their new hub in the European Union. On the other side, Paris could only attract 13 banks including the Bank of America, HSBC and Wells Fargo. In addition to their headquarters in Frankfurt, seven banks created branches in Paris, and one with the headquarters in Paris created a branch in Frankfurt (Hamre & Wright, 2021). The decision to choose Frankfurt or Paris depends on the network, but also on the business the banks do and what they expect from the network. Investment banks tend to choose Frankfurt as six out of ten of the largest investment banks worldwide chose Frankfurt over Paris, while only two of the largest investment banks chose Paris. Reasons for that can be discovered in the friendlier environment of Frankfurt, as there is no financial transaction tax as opposed to Paris. Also, the Frankfurt financial centre handles securities better, a key feature in the business environment of investment banks. Vital for investment banks is the trading with derivatives and their depositories. Access to this is provided through the stock market. Both networks include large exchanges, the Euronext in Paris and the Deutsche Börse in Frankfurt. The Paris stock market merged with several stock markets in Europe, for example Amsterdam, Brussels, Dublin, and Lisbon, to form Euronext, the largest stock market in Europe. Frankfurt´s stock market Deutsche Börse is smaller compared with the French network, with only half the turnover per year (Relbanks, 2017). While banks may prefer Euronext for its larger size, most important for investment banks is often the trading and depository of derivates. For this need, Deutsche Börse founded its subsidiary Eurex in 1998. It is one of the world's largest derivatives markets with over 700 access points worldwide with a sole focus on derivatives (Dhir, 2019). In general, the Frankfurt stock markets is an established exchange for derivatives trading, while Euronext is still trying to establish itself as a centre for derivatives trading. Taking everything into consideration, Frankfurt can be seen as the financial centre with the bigger network.

The first hypothesis that the principal financial centre with the densest private sector network will attract the most banks can be confirmed. Frankfurt has a smaller but significantly denser network towards banks and could attract almost twice as many banks as Paris. Volkery states that the banking sector shifts to Frankfurt, Fintech to Amsterdam, asset management to Dublin and Paris gets a bit of everything (Volkery, 2021). This statement is in line with my findings regarding the structure of the networks, that is determined by the specialization of the financial centre. As both financial centres and therefore both networks are in in competition with each other, they have different views on the outcome. Hubertus Väth, CEO of the FMF network, stated that the movement towards Frankfurt is important, as the top managers of the banks settled in Frankfurt. EUROPLACE on the other hand asserted that is does not matter for the business itself where the managers are located, but it is more important where the business takes place (Osman & Volkery, 2021). While hypothesis one can be confirmed, there might be other reasons in the decision making of banks to move from London towards Frankfurt or Paris. While the private sector seems to have an influence, the public sector will be discussed in the next hypothesis.

Hypothesis 2

The second hypothesis states that the city with the most convincing pull factors, provided by the public administration, will lobby most efficiently, and attract the most banks. This will shed more light on the role of the public sector in the process of banks moving from London to Frankfurt or Paris. It is important to analyse the impact of the public administration, as regulations play a major role in influencing the landscape of the financial sector. According to Wardle and Mainelli, the rule of law forces the sector to adapt quicker than any other environmental influences (Wardle & Mainelli, 2021). They further state that the regulatory environment is a key factor in the decision-making process of choosing a financial centre. Desirable characteristics of this environment are approachable and cooperative regulators that should provide a strong and predictable but also adaptable framework for the financial sector (Wardle & Mainelli, 2021). But does this public action meet the definitions of lobbying posed above? Koeppl defines lobbying along three dimensions: intention, communication, and targets. In the case at hand, the intention of lobbying is to convince the banks that move away from London to settle in a certain city. The second dimension of Koeppl´s definition, communication, is provided through the interaction between public authorities and targets of lobbying, the banks. It is also given through pull factors, for example policy changes that would favour the banks (Koeppl, 2000).

Starting with Frankfurt, the financial centre has several public actors from different levels of government involved in the process of increasing the attractiveness of the city for banks. Joachim Würmeling, chairman of the Bundesbank, stated that Frankfurt could become the anchor financial centre in the European Union and gain more importance on an international level if there will be further concession of the political actors regarding taxes and infrastructure (Kröner & Osman, 2021). The state government of Hesse has put a focus on the strengthening of the financial centre Frankfurt for a long time, even since before the Brexit. The state government and the city government of Frankfurt in particular are key actors in the promotion of the financial centre in Frankfurt (Lavery, McDaniel, Schmidt 2018). In addition to that, regional marketing agencies, local Landesbanken, and the Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin), the federal banking authority, have often viewed the Brexit as a chance to improve Frankfurt's financial centre growth which would increase tax income in the region (Lavery, McDaniel, Schmidt 2018). The ministry of finance for the Hesse federal state has been quoted in 2017 as saying that the financial centre must not be "thrown any stones in the form of unnecessary over-regulations", like a proposed financial transaction tax or the re-introduction of a wealth tax (Lavery, McDaniel, Schmidt 2018, p. 78; Helaba, 2019). Besides these involved actors, the Hesse Landesbank has stated that they wished for more support from the national government. This support was not given, as the national actors referred to the federal structure of Germany as a reason not to interfere in state politics (Helaba, 2019).

These actors are motivated by the mission to attract more banks to Frankfurt. To do that, they can set up and improve several pull factors. Frankfurt already has a favourable "ecosystem" for banks (Lavery, McDaniel, Schmid 2018), as the whole financial centre is directed towards the banking sector. Specific factors that are attractive to banks in Frankfurt are a very stable political environment in connection to a banking-friendly rule of law. These stable conditions come at the price of a comparatively high corporate income tax of 29,9%, the second highest in the European Union (Cléaud et. all, 2019). Germany does not have a financial transaction tax, a tax that is also relevant for the banking sector. Regarding the institutional and regulatory environment, the actors mentioned above have spoken out in favour of making the financial centre Frankfurt attractive to banks, which makes for a rather friendly environment for banks. Further, Frankfurt is home to the European Central Bank ECB. The proximity of such an important regulatory agency could be a convincing pull factor for banks, as the ECB is the sole supervisor of large banks in the European Union. Besides the ECB, the BaFin is also present in Frankfurt. The BaFin attracts banks with its good reputation among financial actors in London. Interviews with CEOs of renowned banks revealed that banks facing the Brexit have a positive view on the BaFin as a regulator and value its professional and constructive handling of the Brexit and its causes, for example the well organised process of licensing (Helaba, 2019). The BaFin lobbied on a technical and regulatory level by organizing workshops and seminars with bank officials and providing information to explain the process of establishing EU headquarters in Frankfurt (Lavery et. al, 2018). Continuing with human capital, Germany has a rather flexible labour market with a high working-time flexibility, which is desirable for banks. This high degree of flexibility allows for good crisis mechanisms regarding the labour market (Cléaud et. all, 2019). These factors lead towards Frankfurt's biggest pull factor: its good reputation as a financial centre specialized on banking. Frankfurt´s officials' strategy to attract banks relies on its advantageous pull factors that were already in place before Brexit. Therefore, the need for new pull factors was not apparent. Nevertheless, officials were active to promote the existing advantages of the Frankfurt financial centre.

While the German federal government remained silent, president Macron heavily supports Paris´ ambitions to become the biggest financial centre in the European Union. Due to France´s centralized state, the whole central government gets involved in improving Paris infrastructure to attract the banks leaving London (Helaba, 2019). The city of Paris and its administration as well as the Banque de France are also outspoken to new financial actors moving to Paris. These actors lobbied very forthright and held pitches in London to address the moving banks directly (Martin 2017). However, reports from the Sunday Telegraph indicate that these pitches were not successful, as the banks located in London were concerned about France´s high taxes and tough employment regulations (Martin 2017). Further, the Paris financial centre is infamous for excessive tax rates and overregulation (Lavery, Barber 2017). The French delegation commented that they were eager to change these disadvantages as they working to improve the strict labour rules and the flexibility of the employment market. To approach this problem, President Macron passed a set of laws that were meant to ensure reforms that favour the financial sector (Martin 2017). The first law was the public finance programming law that aimed to stabilize the tax strategy of the French government by reducing the corporate taxes towards an average in the European Union. After this, a second finance law was passed in 2018, which abolished the planned increase of the existing financial transaction tax. It also abolished the marginal band of the payroll tax, to make working in France more attractive. Lastly, the PACTE bill was adopted. It was designed to facilitate the access of foreign employees to the French labour market by abolishing the mandatory retirement pension insurance for foreign employees. It also brought advantages directly for the financial sector, as it allowed the exclusion of bonus payments from severance packages for employees in the financial sector (Office of the Premier Ministre, 2018). The corporate income tax banks have to pay when they settle in Paris is 28.4% and the financial transaction tax is at 0.3% of stock purchases. Another pull factor of Paris is the European Banking Authority (EBA) which is located in the financial centre of Paris. A pull factor that was in the focus of French authorities was the general city brand and appeal of Paris as the only global city in the European Union (EUROPLACE, 2019). This was often set in opposition to Frankfurt, which the French discredited as provincial and unsuitable for financial actors. Overall, Paris' strategy towards the financial sector in Paris has been described by Osman and Volkery (2021) as stick and carrot. There is an overwhelming support from the governmental side on every level, from the local authorities up to president Macron, who want to improve the financial centre in Paris. Nevertheless, France is described as a relatively instable political environment, with high labour costs and a rather bad English-speaking workforce (Osman & Volkery, 2021).

In both cases, Frankfurt and Paris, lobbying from public actors is apparent, as it meets the adapted definition of Koeppl. Comparing the pull factors of Frankfurt and Paris, many differences emerge. A report from the European Commission regarding the similarities and differences of the French and German Economies, which already included French labour law reforms, found that Germany has a higher labour flexibility with a higher working-time flexibility. Therefore, it also has the better crisis response mechanisms due to its higher degree of adaptability. In addition to that, the employment protection legislation is still more lenient in Germany than in France (Cléaud et. all, 2019). This shows that France´s comprehensive labour law reforms failed to compete with existing German regulation. Further the effectiveness of the provided pull factors can be measured by the scores of both cities in the biannual GFCI Index, as it contains criteria like political stability and rule of law, tax and cost competitiveness and the provided infrastructure. Above, I have shown that Frankfurt provides the better labour market features for banks. This is supported by the GFCI 29 Index that placed Frankfurt in the category of "Business Environment", which includes political stability and rule of law as well as tax and cost competitiveness, on the 10th rank worldwide, whereas Paris failed to reach the top 15 ranks. Similar findings were shown in the category of "infrastructure", where Frankfurt ranked 11th worldwide and Paris again did not rank among the top 15 (Wardle & Mainelli, 2021). In turn, Paris could convince with their overall reputation. In the category of "Reputation", which includes the city brand and appeal compared with other financial centres, they ranked 15th whereas Frankfurt is not mentioned (Wardle & Mainelli, 2021).
Interviews with senior executives from US banks, that already moved and decided in favour of Frankfurt, also showed the different approaches of public actors lobbying and different sets of pull factors. They stressed that Frankfurt´s plan of consistency in connection to reliability and stability was more convincing than Paris´ "crazy promises" regarding tax structures (Lavery & Schmid 2018, p.6). Another respondent stated that they were looking for stability and clarity in times of political instability, caused by Brexit. They were not on the search for a new "cool deal" (Lavery & Schmid 2018, p.3). The different lobbying approaches of public officials were summed up by one respondent who stated that Frankfurt "didn't want to be loud and aggressive…and I think it was a good strategy. Paris had another strategy. They were very pushy and populistic in their attempts to attract firms. Frankfurt was a little bit less loud, less aggressive" (Lavery & Schmid 2018, p.6).

The second hypothesis, that the city with the most convincing pull factors, provided by the public administration, will lobby most efficiently and attract the most banks, can be confirmed. Public authorities of both financial centres did lobby according to Koeppl´s dimensions of lobbying. Both cities provided pull factors to attract banks, Frankfurt stressed their existing advantages while Paris improved their position with new legislation and their reputation as a city. Paris courted the banks by offering many changes in legislations and promises towards the banks, whereas Frankfurt relied on their existing qualities. This could be due to Paris´ need to catch up with Frankfurt, as the GFCI scores showed that they were lagging behind. This was supported in interviews with US bank executives, which showed that Paris officials could not persuade the banks to settle in Paris. In conclusion, Frankfurt provided the more convincing pull factors and lobbied more efficiently. This confirms the hypothesis, as Frankfurt attracted 25 banks so far, while Paris could only attract 13.

Hypothesis 3

The third hypothesis states that both, the attraction of private networks and the pull factors of public actors lead to a herd behaviour towards a certain city. In the analysis so far, I have shown that there is an influence of private networks and pull factors of public actors on the movement of banks. Hypothesis one, that the densest networks attracted the most banks, was confirmed. So was hypothesis two, that the city with the more convincing pull factors and the more efficient lobbying attracted more banks. It is apparent that both factors play a role in bank's decision-making. The last hypothesis combines these two factors and asserts that this results in herd behaviour towards a certain city.

Bikhchandani and Sharma (2000) state in their herd behaviour theory that three pillars contribute to herd mentalities: Imperfect information, concern for reputation and compensation structures. There is an underlying sequence to herd behaviour. Actors hesitate to make a decision and only act once they observe other actors' behaviour. Bikhchandani and Sharma´s three pillars characterize this process. Starting with imperfect information, the authors see this as a major contributor to herd behaviour. The Brexit can be seen as an event that is characterized by imperfect information. The situation for the financial sector around a trade agreement was unclear for years. The whole campaign around leaving the European Union can be described as intransparent and marked by misinformation (Renwick et al., 2018). Osman and Volkery (2021) describe the current state of Brexit related movements in finance as unstable, adding to the existing situation of imperfect information (Osman & Volkery, 2021). Every bank possesses their own information but can also observe how other banks act. Herd behaviour happens when banks stop trusting their own information and act according to the action of other banks. Bikhchandani and Sharma state that this can be triggered by random events combined with the choices of individual banks. This means that the imperfect information around the Brexit in combination with random events can lead a bank to make the choice to move to a specific city, starting a herd effect that attracts more banks to that city. The second pillar relates to concern for reputation. When individuals are not certain about their own skillset and abilities, they tend to imitate decisions of preceding individuals. Fromlet (2001) states that they act this way to avoid making false decisions, which can lead to damaging one's reputation (Fromlet, 2001). By following the herd, the damage can be mitigated. This can also be applied to the fear of losing contact to other network participants like thinktanks regulators and information services. In the case at hand, the Frankfurt financial centre is already home to a number of renowned banks, like the Citi group, Goldman Sachs, JP Morgan and Nomura (Volkery, 2021). This could influence banks that are leaning towards choosing Paris, but are concerned about damaging their reputation through false decision, to choose Frankfurt instead. Lastly, compensation structures can affect herd behaviour in the movement of banks. In order to try to minimize their absolute losses, banks tend to orientate themselves on others. Summing up, it can be confirmed that both, the attraction of private networks and the pull factors of public actors, affected bank's movement towards a certain city. The beginning of herd behaviour towards Frankfurt can be observed in the case at hand. A specialization between the European financial centres is apparent. According to Volkery (2021), Fintech goes to Amsterdam, asset management to Dublin, the banking sector shifts to Frankfurt and Paris gets a bit of everything (Volkery, 2021) and does not have a specific specialization (Osman, Volkery 2021). Further, the more banks shift towards Frankfurt, the more synergies and agglomeration effects occur (Helaba, 2019).

Despite that, it is important to keep in mind that the information around the movement of banks is imperfect. Banks do not admit if they simply copy the action of others without their own decision-making. In addition to that, the aftermath of the Brexit and the movement of banks is still ongoing. Recent statements of the ECB suggests that banks in London should move jobs to the EU after it is unclear whether banks are allowed to proceed their derivatives businesses in London after 2022 (Osman, Volkery 2021). It seems that the largest share of banks has not been distributed between the European PFC's yet. The final distribution will only become clear in the next years (Osman, Volkery 2021). Hypothesis three can therefore not be confirmed or denied, as the process of moving banks is still ongoing and characterized by imperfect information and uncertain decisions that still await to be taken.

Conclusion

This thesis aimed at answering three main questions regarding the influence of private networks, public pull factors in combination with lobbying and a resulting herd behaviour on the movement of banks. In the last section, I was able to confirm the first hypothesis, that the principal financial centre with the densest private sector network attracts the most banks. The networks examined were contrary to each other and resembled the structure of the PFCs. As Paris' PFC is fragmented and home to various types of financial services, its network consists of many different types of actors. In comparison to that, Frankfurt's PFC and its network is smaller, but specialized towards banks and denser. Therefore, Frankfurt was favoured by banks that had to leave London. The second hypothesis, that the city with the most convincing pull factors, provided by the public administration, will lobby most efficiently and attract the most banks, could also be confirmed. It was apparent that both cities had vastly different approaches. Paris took greater action to catch up with Frankfurt's existing environment, but ultimately fell short. Their strategy of aggressive tax reductions and their city's reputation did not meet bank's expectations. Meanwhile, Frankfurt followed a much more objective strategy of stressing their existing advantages. Frankfurt's approach was ultimately more effective, attracting more banks. This was confirmed by the GFCI 29 ranking and interviews with Brexit banks officials. Hypothesis three stated that both, the attraction of private networks and the pull factors of public actors lead to a herd behaviour towards a certain city. As both conditions of hypothesis three, the attraction of private networks and pull factors of public actors, can be confirmed in the first two hypothesis, the resulting herd behaviour, which is formulated in hypothesis three, cannot be confirmed or rejected. There are first hints that a herd behaviour towards Frankfurt is apparent, as most banks so far chose Frankfurt over Paris. Nevertheless, it is too early to draw conclusions regarding herd behaviour.

Why, then, did financial institutes transfer to Frankfurt or Paris, as a result of the Brexit agreement? Networks as well as pull factors and public authority lobbying played a role. Overall, the PFC that could combine both made the race. Frankfurt did not only provide the better pull factors, it also offers the denser network compared to Paris. Therefore, a clear movement towards Frankfurt among the banks is apparent. Initial herd behaviour towards Frankfurt could be detected, but it is important to keep in mind that the movement of banks as a result of the Brexit agreement is still and ongoing event.

From a theoretical standpoint, the aim was to create a framework that combined theories of Germain, lobbying and herd behaviour into one model. This was successful here. The framework helped to gain more insights into the movement and decision making of banks in the case at hand. This closes a gap in the literature related to the recency of the Brexit. The insights found here as well as the framework can be used to consolidate further research.

To gather these insights, I relied on secondary information, in the form of peer reviewed academic articles, newspaper articles as well as reports and government publications. Secondary information was ideal for this research question, as Brexit is an ongoing topic which makes it difficult to obtain primary information, due to the non-disclosure of the negotiations. This also relates to interviews, which would have been beyond the scope of this research. Therefore, a systematic comparison between Frankfurt and Paris proved an ideal research design, as it was not dependent on respondents, allowed for flexible research and fit well into the timeframe. It also ensured reliability and transparency about the sources that were used. Despite the strengths of this research design, weaknesses are unavoidable. In this case, lobbying is difficult to analyse due to its confidential nature. To face this, I used data published by the two biggest lobbying networks of Frankfurt and Paris, as well as regulatory publications which were the result of lobbying. Another threat to the research was posed by one sided data. I faced this, by using data of both sides, Frankfurt and Paris, as well as neutral data from third parties. As already addressed above, the movement of banks from London to Paris or Frankfurt is an ongoing event. This also affected the research design as data could be outdated during the research. I countered this by considering the publication dates of the sources and only using recent sources. By addressing these weaknesses, the strength of my research design was ensured.

This research is a first step in the analysis of the movement of banks caused by the Brexit. Further research needs to be conducted to focus on the herd behaviour aspect of bank movement, which was discussed in hypothesis three, as the recency of this topic allowed neither confirmation nor rejection of this hypothesis. The theoretical framework created could be helpful for further research and could also be used to compare different PFCs with each other. Lastly, recommendations for practices can be made on the basis of this research. It showed what environment and characteristic banks desire in a principal financial centre. Thereby, it also showed what factors regulators should focus on to provide fitting pull factors for banks. Being aware of research like this could prepare regulators for events like Brexit that come with imperfect information, instability, and insecurity. These findings can help public and private actors in a PFC to make beneficial decisions to strengthen their position on the global market.

References

Asen, E. (2021). *Corporate Income Tax Rates in Europe*. Tax Foundation. Retrieved 23 June 2021, from https://taxfoundation.org/2021-corporate-tax-rates-in-europe/.

Bikhchandani, S., & Sharma, S. (2000). Herd Behavior in Financial Markets: A Review. SSRN Electronic Journal, 47(3).

Carney, M. (2019). Pull, Push, Pipes: Sustainable Capital Flows for a New World Order. Bank of England.

Chen, Y. (2021). *Bundesregierung stärkt den Fondsstandort Deutschland*. Frankfurt Main Finance e.V. Retrieved 23 June 2021, from https://frankfurt-main-finance.com/bundesregierung-staerkt-den-fondsstandort-deutschland/.

Chen, Y. (2021). *Finanzplätze gründen Arbeitsgemeinschaft „GERMANY FINANCE"*. Frankfurt Main Finance e.V. Retrieved 23 June 2021, from https://frankfurt-main-finance.com/germany-finance/.

Chen, Y. (2021). *FMF hat drei neue Mitglieder – Morgan Stanley bleibt an Bord*. Frankfurt Main Finance e.V. Retrieved 23 June 2021, from https://frankfurt-main-finance.com/neue-mitglieder/.

Cléaud, G., de Castro Fernández, F., Durán, J., & Granelli, L. (2019). *Cruising at different Speeds: Similarities and Divergences between the German and the French Economies*. Luxembourg: Publications Office of the European Union.

De Bondt, W., Shefrin, H., Muradoglu, Y., & Staikouras, S. (2008). Behavioural Finance: Quo Vadis?. Journal Of Applied Finance, 19, 7-21.

Dhir, R. (2019). Eurex. Investopedia. Retrieved 28 June 2021, from https://www.investopedia.com/terms/e/eurex.asp.

Elvinger Hoss. (2021). Hard Brexit For Financial Services - Finance and Banking - Luxembourg. Retrieved 31 March 2021, from https://www.mondaq.com/financial-services/1026448/hard-brexit-for-financial-services

EUROPLACE. (2021). *Our Mission*. Paris-europlace.com. Retrieved 23 June 2021, from https://www.paris-europlace.com/en/content/about-us. EUROPLACE. (2021). Our Mission. Paris-europlace.com. Retrieved 23 June 2021, from https://www.paris-europlace.com/en/content/about-us.

Frankfurt Main Finance e.V. (2021). *Über FMF*. Frankfurt Main Finance e.V. Retrieved 23 June 2021, from https://frankfurt-main-finance.com/ueber-uns/.

Fromlet, H. (2001). Behavioral Finance - Theory and Practical Application. Business Economics, 36, 63-69.

Germain, R. (1997). The international organization of credit. Cambridge Univ. Press.

Hamre, E., & Wright, W. (2021). *Brexit & The City: The Impact So Far*. London: New Financial.

Handelsblatt. (2021). *Insidern zufolge: JP Morgan fasst drei Europa-Töchter in Frankfurter Zentrale zusammen*. Handelsblatt.com. Retrieved 23 June 2021, from https://www.handelsblatt.com/finanzen/banken-versicherungen/banken/insidern-zufolge-jp-morgan-fasst-drei-europa-toechter-in-frankfurter-zentrale-zusammen/26658694.html.

Helaba. (2019). *Mehr als Brexit*. Frankfurt: Helaba.

Hessisches Ministerium der Finanzen. (2021). *Servicestelle Finanzplatz Frankfurt*. Finanzen.hessen.de. Retrieved 23 June 2021, from https://finanzen.hessen.de/finanzen/servicestelle-finanzplatz-frankfurt.

Jackson, M., & Pernoud, A. (2020). Systemic Risk in Financial Networks: A Survey. SSRN Electronic Journal. doi: 10.2139/ssrn.3651864

Koeppl, P. (2000). The acceptance, relevance and dominance of lobbying the EU Commission-A first-time survey of the EU Commission's civil servants. Journal of Public Affairs, 1(1), 69-80.

Kröner, A., & Osman, Y. (2021). *Joachim Wuermeling im Interview: Bundesbank-Vorstand: Brexit führt zu bedeutsamen Veränderungen des deutschen Bankenmarkts*. Handelsblatt.com. Retrieved 23 June 2021, from https://www.handelsblatt.com/finanzen/banken-versicherungen/banken/joachim-wuermeling-im-interview-bundesbank-vorstand-brexit-fuehrt-zu-bedeutsamen-veraenderungen-des-deutschen-bankenmarkts/26856730.html.

Latt, K. (2021). *GFCI 29: Frankfurt ist wichtigster Finanzplatz Kontinentaleuropas*. Frankfurt Main Finance e.V. Retrieved 23 June 2021, from https://frankfurt-main-finance.com/gfci-29-frankfurt-ist-wichtigster-finanzplatz-kontinentaleuropas/.

Lavery, S., & Barber, A. (2017). Frankfurt, Paris and Dublin: Post-Brexit Rivals to the City of London? *SPERI Global Political Economy Brief*, *6*. Retrieved 23 June 2021, from.

Lavery, S., & Schmid, D. (2017). *Frankfurt as a financial centre after Brexit*. Sheffield: Sheffield Political Economy Research Institute.

Lavery, S., McDaniel, S., & Schmid, D. (2018). Finance fragmented? Frankfurt and Paris as European financial centres after Brexit. *Journal Of European Public Policy*, *26*(10), 1502-1520. https://doi.org/10.1080/13501763.2018.1534876

Lavery, S., McDaniel, S., & Schmid, D. (2018). New geographies of European financial competition? Frankfurt, Paris and the political economy of Brexit. *Geoforum*, *94*, 72-81. https://doi.org/10.1016/j.geoforum.2018.03.021

Lowery, D. (2007). Why Do Organized Interests Lobby? A Multi-Goal, Multi-Context Theory of Lobbying. Polity, 39(1), 29-54. Retrieved February 16, 2021, from http://www.jstor.org/stable/4500263

Martin, W. (2017). *'When was the last time you took your partner off for a weekend in Frankfurt?': Paris' pitch to be the new heart of European finance*. Business Insider. Retrieved 23 June 2021, from https://www.businessinsider.com/paris-brexit-european-finance-banking-jobs-romance-2017-2?r=DE&IR=T.

Office of the Premier Ministre. (2018). *Our Ambition for the Paris Financial Centre: delivering on our commitments and undertaking new initiatives*. Paris.

Osman, Y. (2021). *Abzug aus London: Brexit lockt mehr Finanzinstitute nach Deutschland als erwartet*. Handelsblatt.com. Retrieved 23 June 2021, from https://www.handelsblatt.com/finanzen/banken-versicherungen/banken/abzug-aus-london-brexit-lockt-mehr-finanzinstitute-nach-deutschland-als-erwartet/26823184.html.

Osman, Y., & Volkery, C. (2021). *Wettlauf um mehr Einfluss: Kein großer, aber viele kleine Sieger: Diese Finanzplätze sind Gewinner des Brexits*. Handelsblatt.com. Retrieved 23 June 2021, from https://www.handelsblatt.com/finanzen/banken-versicherungen/banken/wettlauf-um-mehr-einfluss-kein-grosser-aber-viele-kleine-sieger-diese-finanzplaetze-sind-gewinner-des-brexits/27005080.html.

Pfeffer, J., & Salancik, G. (1978). *The external control of organizations*. Stanford Univ. Press.

Über FMF - Frankfurt Main Finance e.V.. Frankfurt Main Finance e.V. (2021). Retrieved 14 June 2021, from https://frankfurt-main-finance.com/ueber-uns/#Mitgliedschaften.

Relbanks. (2017). The 25 Largest Stock Exchanges. Relbanks.com. Retrieved 28 June 2021, from https://www.relbanks.com/stock-exchanges/largest-stock-exchanges.

Renwick, A., Palese, M., & Sargeant, J. (2018). Discussing Brexit-Could We Do Better?. The Political Quarterly, 89(4), 545-552. https://doi.org/10.1111/1467-923x.12595

Volkery, C. (2021). *Brexit-Bilanz: Mehr als 440 Finanzfirmen verlagern Aktivitäten aus London in die EU*. Handelsblatt.com. Retrieved 23 June 2021, from https://www.handelsblatt.com/finanzen/banken-versicherungen/banken/brexit-bilanz-mehr-als-440-finanzfirmen-verlagern-aktivitaeten-aus-london-in-die-eu/27100818.html?ticket=ST-5594847-3UbbzHRCac1d4ovV5xwc-ap4.

Waite, D. (2017). Asset servicing at a second-tier financial centre: Framing embeddedness through mechanisms of the firm-territory nexus. Geoforum, 80, 1-12. doi: 10.1016/j.geoforum.2016.12.014Weik, E. (2005). Moderne Organisationstheorien 1 (12th ed.). Springer.

Wardle, M., & Mainelli, M. (2021). *The Global Financial Centres Index 29*. London: Z/Yen Group Limited. Retrieved from https://www.longfinance.net/media/documents/GFCI_29_Full_Report_2021.03.17_v1.1.pdf

Wright, W. (2021). *Some initial reflections*. London: New Financial. Retrieved from https://newfinancial.org/brexit-the-city-some-initial-reflections-january-2021/