Student name: Christian Ruggiero

Student number: 123083

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Index

Introduction

Methodology

1. The UK’s financial services cluster
    1.1. Big Bang
    1.2. Cluster benefits
        1.2.1 Clusters
        1.2.2 Financial services in London and the UK: cluster benefits and strengths
    1.3. The UK’s dominant position in financial services
        1.3.1 Sector exposition

2. Brexit and the UK’s financial services sector
    2.1. Context: Brexit timeline
    2.2.
        2.2.1 The impact so far. Relocations
        2.2.2 Potential room for more relocations

    2.3. Brexit scenarios
        2.3.1 Soft Brexit
        2.3.2 Hard Brexit
        2.3.3 Tailor made arrangements
        2.3.4 Where are we headed?
            2.3.4.1. Trade-deal negotiations framework
            2.3.4.2. Negotiations stalemate

    2.4. Regulatory implications
        2.4.1 Equivalence
        2.4.2 Implications through EU regulation
        2.4.3 Implications through UK regulation

    2.5. Implications through cluster engines
        2.5.1 Brexit and immigration

Concluding remarks

References

Introduction

On 31st January 2020 Brexit finally materialised, more than three years after a country-wide referendum handed the UK government with the British people's wish to leave the EU. A transition period, set in motion right after the official departure of the UK from the Union, is set to last until 31st December 2020, provided that no extension is agreed upon by the two sides. Throughout the transition period, intended to allow both the UK and the EU a smooth changing process and the opportunity to strike a deal for a future relationship, Great Britain is still effectively a member of the EU, meaning that the UK is still subject to EU regulation. Ever since the build-up to the 2016 referendum, debate has been ripe in relation to the implications an EU exit could entail for the UK, in particular with regard to its economy. As the EU is a major export market for many British businesses, Brexit has brought with it fears of significant repercussions, as shown by the dramatic fall of the British pound against other major currencies immediately following the verdict of the referendum.
One important industry for the UK economy is certainly the financial sector. The UK's centre of finance, London, has become, over the past few decades, a leading hub over a broad range of subsectors on the international stage. However, London's status has come under threat because of Brexit. As access to the EU single market is in jeopardy for financial firms based in London, a potentially significant exodus of business out of the UK may shift the balance in Europe and result in a financial hub on the European continent overtaking London's leading position.

By drawing on existing relevant literature, the present work aims to analyse the potential impact a UK withdrawal from the EU may entail for the financial services industry in Great Britain, by shedding light on the factors that played into gaining London and the UK their prominent status as a centre of finance and whether Brexit can affect those factors negatively enough as to provoke a significant loss of business for financial firms in the UK. As the Brexit process has not seen an end yet, with the UK officially a third country as of February 1st 2020 but still effectively part of the EU by means of agreement on a transition period between the UK and the EU, the definite shape of Brexit is yet to emerge.
The impact on the financial sector in UK will be highly dependent on the future relationship between the newly independent UK and the EU, which will be defined by whether or not the two sides eventually reach a trade agreement and if they indeed do, what kind of agreement they strike. As things stands, where a lot of uncertainty still exists in relation to future developments on the Brexit political process, a prediction on the exact impact that the UK's financial services industry will bear is impossible to make.
Nonetheless, an analysis of the different factors that have played into establishing the current balance among financial centres in Europe and the implications that the Brexit process entails, particularly with respect to regulation, can bring us to a clearer picture of the potential repercussions of Brexit on the UK's financial hub.

Methodology

In order to investigate the impact of Brexit on the financial services industry in the UK, we opted for a qualitative analysis. In conducting our research, we drew on existing relevant literature, ranging from academic papers to consultancy reports, to journalistic articles.

Government- and parliament reports, laws and official statements were also a useful source for the study.
The researching process behind the analysis relied strongly on a handful of academic papers. In particular, we worked with existing literature on the impact of Brexit on the UK financial sector. Namely, a study for the European Parliament's ECON committee dating to 2017 (Policy Department A) was the most important reference, given the dependence on its contributions at different stages of the analysis as well as the additional sources that we were able to gather by accessing its bibliography. Another reference the study relied significantly upon is a consultancy report by the think tank Open Europe (Scarpetta V, Booth S) from 2016.
Importantly, quantitative data throughout the analysis is secondary data. In particular, for instance, the description of the impact of the UK's withdrawal from the EU in terms of relocations from London to other European hubs is totally reliant on the figures produced by the analysis of the think tank New Financial.
Furthermore, we have to stress that a potential element of bias may be present in our study as many of our sources include consultancy reports by firms, institutions, trade associations, think tanks based in the UK, instances of which include the law firm Allen & Overy, the Association of British Insurers, the industry advocacy group TheCity UK, The Investment Association, the think tank New Financial.

1.The UK's financial services cluster

1.1 Big Bang

In attempting an analysis of the factors that have made London and the UK the most prominent financial centre in Europe, one cannot forgo the breakthrough represented by the historical event that goes by the name of Big Bang, a term used to indicate a series of changes that the London Stock Exchange went through on 27 October 1986, aimed at deregulating the British finance industry.
One of such changes was a technological one, resulting in face-to-face dealing making room for electronic trade. The innovative move was bound to bring costs down and allow trading volumes to increase dramatically. As a result, European competitors were being outpaced, making London a magnet for international banks. (BBC, 27 October 2016)
Another move saw the lifting of fixed commissions on trades, a drastic change that enhanced competition, with stockbrokers now able to charge as little a commission as they wished.
Among the radical changes brought in by the Thatcher government was also the end of the separation between brokers, who acted as salesmen opposite investors, and jobbers, who received trade orders from brokers and did the actual trading on the exchange floor. Professionals could now operate as both advisers and dealers at the same time. Mergers and takeovers would inevitably follow, bigger players were bound to emerge. As a result, enhanced economies of scale for financial firms would result.
Big Bang also meant that British brokerage firms could now be owned by foreign companies, therefore opening the City's gates to international players. American, European and Japanese banks would come in and take advantage of the deregulating process that was happening in Britain. If up until 1986 all 300 member firms of the London stock exchange had been domestic, within a year 75 were foreign owned. (Ibid.)

The influx of foreign banks and the City's growth, however, could not have taken place if it had not been for the Thatcher government's decision to redevelop London Docklands, which was necessary to make room for the expansion of the City. The financial district of Canary Wharf, for instance, would not exist today if that decision had not been made. (NewStatesman, 22 October 2016)
The expansion of the financial services industry in London was facilitated further by the replacement of the Bank of England by the Securities and Investments Board as regulator. The Bank of England's rule that all banks had to be within 10 minutes' walking distance of the governor's office, for instance, had certainly been a considerable obstacle to the City's push for expansion. (BBC, 27 October 2016)

As John Plender (1986-1987) argues, Big Bang was a response by the Bank of England, the British Department of Trade and Industry and the Stock Exchange to a global pattern of liberalisation that was transforming international capital markets and resulting in unrestricted capital flows. In similar fashion to what was happening in other countries, in the context of an economy that was relying more and more on services, the UK's government under Margaret Thatcher had realised that by offering lower standards of regulation, more international business could be won. In the light of such forces at play, it was a competition between international financial centres towards deregulation that drove the liberalising moves on the London's Stock Exchange.
In the context of such liberalising forces for global financial markets and the London centre facing declining liquidity, the Bank of England had reached the conclusion in the early 1980s that it was essential to attract international capital into the Stock Exchange and make it more competitive by eliminating the commissions monopoly that had entangled the City (two jobbing firms split between 70% and 80% of the market at the time).
In light of the above, in July 1983, an agreement was reached between the then Trade Secretary, Cecil Parkinson, and Nicholas Goodison, chairman of the Stock Exchange at the time, whereby many of the restrictive practices that had entangled the Exchange would be dismantled. The watchdogs of the Office of Fair Trading would be abolished by the UK government, and in return fixed-minimum commissions would be abandoned by the Exchange.

The revolution unleashed by the Big Bang events allowed for a mix of competition, innovation and globalisation forces that ushered London into a process of internationalisation and growth for the financial-services industry in the UK.

1.2 Cluster benefits

The Big Bang events described above set in motion a process that led London and the UK to be one of the most prominent financial centres in the world.
London's hub, in particular, is an instance of industrial cluster where, in similar fashion to other unrelated-industry clusters such as Silicon Valley or Hollywood, the benefits entailed by the concentration and proximity of intra-sector businesses and related industries resulted in "unusual competitive success" (Porter, 1998) for the whole of the industry, in this case financial and related professional services.
In light of the above, before delving into the cluster benefits enjoyed by the financial sector in London and the UK, we draw on the work of a leading contributor to cluster theories,

Michael Porter, and first describe what clusters are and some of the advantages they result in.

1.2.1 Clusters

In Porter's words, clusters are defined as "geographic concentrations of interconnected companies and institutions in a particular field, encompassing an array of linked industries and other entities important to competition, the latter including, among others, universities, standard-setting agencies and think-tanks". (Ibid.)

One way in which companies benefit economically from being part of a cluster is through increased productivity on different aspects, from inputs to information access, from technology to access to important institutions, and to coordination with related companies. With respect to inputs, among others, clusters are advantageous from a labour pool standpoint, as the presence in clusters of an existing pool of specialised and experienced employees allows businesses to incur lower search and transaction costs when hiring. Moreover, there is a further benefit for companies as they are able to attract talented people from other locations because of the reduced risk of relocation for employees that results from being located in a cluster.
In relation to information access, clusters allow for extensive market, technical and competitive information to accumulate, with companies and people having preferred access to it as a result of being located there. The flow of information in clusters is facilitated further as a result of heightened trust from tighter personal relationships and community ties. (Ibid.)

By being part of a cluster, businesses can also benefit from investments in specialised infrastructure and educational programmes made by government or other public institutions. (Ibid.)

As members of a cluster are mutually dependent, good performance by one company can result in success for another, related firm. Consequently, coordination between businesses can be economically beneficial. Among other complementarities, businesses can coordinate their activities among one another to optimise their collective productivity. Another instance is that of different businesses aiming to meet their customers' needs by complementing their products. (Ibid.)

Another means by which clusters are competitively successful is enhanced innovation. Since sophisticated buyers are often present in a cluster, clusters allow for innovation opportunities to be more visible as businesses have better access to customers' changing needs and trends. Moreover, because of an ongoing relationship with other entities within the cluster, businesses are able to learn early about evolving technology or new service concepts, among other developments.
Also, clusters provide their members with 'the capacity and the flexibility to act rapidly' and the opportunity to experiment at lower cost, further elements that allow businesses to be more innovative. On top of it all, reinforcing factors that spur the innovation process even further are to be found in the mere competitive and peer pressure that businesses find themselves subject to. (Ibid.)

Clusters are economically beneficial to their members by way of a further means, new business formation. As Porter argues, "individuals working within a cluster can more easily perceive gaps in products or services around which they can build businesses." (Ibid.)

1.2.2. Financial services in London and the UK: cluster benefits and strengths

We now dive into the specifics of one particular industrial cluster, the financial-services sector in London and the UK.

Ever since Big Bang, the financial ecosystem in London has been able to enjoy certain cluster benefits, producing a self-reinforcing mechanism which allowed it to become a major global hub for finance. Similarly to other financial centres and similarly to industrial clusters that are not necessarily related to financial services, The City of London has seen growth through economies of scale, both internal, with firms growing bigger and bigger through takeovers and mergers (BB), and external, which start arising as the scale of an industry becomes considerable and see firms benefiting economically from the pool of resources available in the cluster, including technology, human capital, suppliers, distributors. (Kuah, 2008)

Moreover, as Davis (1990) argues, financial clusters bring about external economies such as expertise developed over time, depth and breadth of money markets, close links between different financial sectors and a vast array of ancillary services available.

We can look at economies of scale as the size factor of a cluster: as a financial hub grows bigger, a higher number of new entrants is attracted to it because of the economic benefits that the mere location would bring. Among such benefits, as the number of participants in a cluster increases, liquidity and efficiency improve, resulting in prices that are less prone to disturbances and reflect all available information better.

A cluster can grow not only in size, but also in the variety and depth of sectors that are related and interdependent, with firms benefiting from so-called economies of scope. In such regard, the spectrum of financial and supporting services provided in London is incredibly broad, resulting in such benefits as ease of access, confidence building, personal interactions with clients and customers, and resolution of misunderstandings. (Ibid.)

The geographic compactness of a cluster allows firms to benefit from factors that play both on the demand side and the supply side of service consumption. With respect to demand benefits, a tighter industrial hub may allow for customer proximity, possibly resulting in reduced consumer search costs. As to supply benefits, firms in a cluster enjoy knowledge spill-overs through social interactions and labour market turnover: a higher mobility in the workforce, from company to company, from sector to sector, increases the flow of tacit knowledge and expertise. An additional supply-side benefit for firms in a cluster is access to specialised inputs, with employers able to take advantage of a specialised supplier base and hire from a labour pool that is vast and deeply specialised. Also, a higher concentration of firms resulting from a growing cluster brings on enhanced competition, and, consequently, innovation.

Clusters may also enjoy information benefits: the more concentrated a hub is, the faster information and new ideas can circulate, resulting in improved efficiency and further potential for innovation. A technology factor is present as well, with innovation spurring technological advancement and consequently better performance.

A major engine in the London's financial cluster is its labour market. Not only is the pool of talent on which employers can draw of very great extent, it also features a depth of

expertise across different professions and different sectors in the industry that is unrivalled in Europe. Moreover, the high quality of talent that firms in the City and Canary Wharf are offered is undisputed, be it at experienced level or among graduates. In addition, 39% of the graduates the UK produced in 2016 were foreign, a high proportion and the highest among countries whose financial centres compete with London, underlying the pulling power the UK and particularly London have towards international talent (TheCityUK, July 2017, pp 23). Another aspect that plays an important role within the cluster dynamics of London is its labour market's fluidity and flexibility, with a high mobility of workers enhancing the passing of knowledge, expertise and ideas among the industry.
Furthermore, the considerable size and depth of London's labour market mean a better chance of employment, therefore attracting even more workers into the capital, adding to self-sustaining process taking place in the cluster.
A further cluster engine can be found in the studies and training that job seekers take on with a career in London in mind. A bigger labour market works as an incentive for talent to invest in highly specific skills because of a larger demand for such skills. Consequently, the sector enjoys higher quality of talent in the long run and, as a result, higher service quality and service differentiation.

Another strength of the UK as a financial centre is the kind and size of markets that its firms can tap into, with access to a large domestic market as well as international markets both on the American continent and in Asia, helped by the United Kingdom's time zone, which allows business to be conducted with American and Asian customers and clients during normal hours. Another advantage to London is certainly the English language and the use by many jurisdictions in the world of English law, 'which has been identified as the first choice of governing law for cross-border contracts, a position that helped the UK foster its global influence'. (TheCityUk, 2017, pp 21)

There is also a lifestyle aspect that plays into the attractiveness of London as a financial centre: the cultural vibe and the opportunities, in general, afforded by a particular location, be it music-related or sports-related, are certainly factors that plays into workers' mobility from one financial centre to another, and London is certainly attractive in this regard. Moreover, the British capital is very cosmopolitan and that has strong pulling power with international talent: indeed, "when compared to other leading financial centres, the UK has the highest proportion of international students and the largest number of foreign nationals." (Ibid., pp 23)

'Another strength of London as a financial hub is the presence in the UK of deep pools of capital and liquidity, which enable institutions to maintain a low and stable cost of capital and allow firms quick and easy access to financing.' (Ibid., pp 22)
Also, whereas other financial centres in Europe excel in certain sectors, i.e. Amsterdam could be considered a trading niche hub whereas Paris is strong in banking, London enjoys a leading position across a broad range of sectors, from banking to fund management, from insurance to derivatives and foreign exchange etc.
Moreover, in contrast with other major hubs such as the US, where government is based in Washington, the technology cluster is in San Francisco and the most important financial centre is in New York, in the UK they are all located in London, making the British capital a

full ecosystem. This way, the cluster effect London enjoys is even more pronounced relatively to other major financial centres.

Closely linked and an additional dynamic for clusters in general and specifically the London financial hub are innovation and competition. The geographic proximity of the cluster allows firms, skilled labour, customers, clients and suppliers to be co-located, therefore facilitating cooperation and complementary activities that result in innovative solutions to service provision, produce differentiation etc.
Innovation is also spurred by competition, which increases as the cluster grows bigger and drives firms to develop new markets, differentiate their services, improve service quality and bring costs down.

A further cluster dynamic for London's financial hub is the personal relationships that geographic proximity allows. A high cluster density allows for high occurrence of face-to-face contact, which in turn increases trust and ease of communication. Being able to conduct meetings in person allows for more information to be gathered, in particular non-verbal signals like body language, which can be important.
'Meeting people before doing business with them is stressed to be crucial in order to establish relationships and trust, to provide a tailored service and to conduct negotiations.' Proximity allows for physical meetings to be held with greater frequency since they can be arranged on shorter notice. Despite the incredible strides the industry has made from a technological standpoint and the emergence of remote work, workers insist that the need for physical interactions will never be entirely replaced. (City of London Corporation, February 2003, pp 39)
The City of London's physical propinquity allows for information and knowledge to flow more easily. People in the industry get to stay up to date with the key developments in the market through formal and informal social interactions such as lunches, dinner parties, gym meetups. A lot of activity, a lot of business is conducted informally. Moreover, the compact geographical area of London's hub makes walking between firms, institutions, professional bodies, restaurants, bars etc easy enough, facilitating face-to-face contact and enhancing the cluster effect that London enjoys.
The compactness of the City of London is also an attractive factor to overseas customers because of the co-location in the British capital of both financial services firms and supporting services such as legal support and accounting, so that customers will be able to hold meetings with a range of different advisors and banks in one location.
All the advantages that geographic proximity entails are more pronounced in London because of how compact its financial district is and also the richness of its ecosystem, with finance and supporting industries, regulatory institutions all located in the City.

1.3 The UK's dominant position in financial services.

The financial services sector in the UK is one of the largest in the world, with revenues totalling between £190bn and £205bn and a gross value added (GVA) contribution amounting to £120-125bn as of 2016 (Oliver Wyman, 2016).
Moreover, the size of the sector is not just considerable in absolute terms as financial services in the UK represent a relatively high percentage of the total economy when compared to other countries. According to OECD statistics, the financial services sector

represented 7% of the total British economy in 2018, the seventh highest in the OECD countries. (House of Commons, July 2019)
Further evidence of the extensiveness of the sector in the UK is the scale of its labour pool, which, despite decreasing in percentage terms on the whole workforce in the UK over the past few decades, still counts over 1 million people. (Ibid., pp 9)
By virtue of its size, the sector contributes considerably to the UK's tax revenues, with financial and related professional services generating taxes totalling as much as £60-67bn annually. (OliverWyman2016)
The financial services sector is also the most important contributor to the UK's trade surplus in services, with trade data for 2014 showing exports exceeding imports by £58bn, compared with a total trade surplus of £32bn for other services. (Ibid., pp5)
By looking at the composition of the UK's trade surplus in financial services, the EU market represents the biggest contributor, accounting for a surplus of £19bn in 2014. Another large market is the US, which generated a trade surplus of £18bn in the same year. Other important export markets for financial services in the UK, although much lower in value when taken singularly, include Japan, whose trade surplus was estimated at approximately £2bn in 2014, Switzerland, at approximately £1.5bn, Australia and Canada, each of which represented a surplus of around £1bn for the year, and Saudi Arabia, at approximately £0.5bn. The total trade surplus for all markets other than the EU, the US and the BRICS countries was estimated at £20bn or 2014. (Ibid.)
The numbers provided above, showing the importance of the EU market for financial services providers based in the UK, indicate that Brexit does indeed have potential negative implications for the sector, as a potential hindered access may result in a considerable loss of business. At the same time, however, the numbers also show that the UK financial services sector is not solely dependent on the EU market, as it enjoys important export markets in the rest of the world as well. If the UK were able to continue riding the success it has in serving those markets and perhaps even boost trade by means of newly issued bilateral trade agreements, then potentially improved trade with countries outside of the EU may counteract the negative consequences from a potential EU market share loss on the other side of Brexit.

1.3.1 Sector exposition

London's pre-eminent position as a centre of finance on the global stage and, particularly, in Europe, can be partly attributed to the broadness of sectors over which the UK enjoys a leading position.

Asset management

Asset management is certainly among such sectors, as UK-based firms manage assets for a combined European market share of 37% as of 2017 (The Investment Association, 2019, pp 19), by far the largest in Europe. Not only is the size of the industry enormous, with £9.1 trillion worth of assets estimated to be managed by UK firms as of 2018, the sector also taps into a significant international client base, given that 40% of the assets that UK managers handle come from abroad (Ibid., pp 14). Moreover, out of these foreign owned assets, 60% belong to European clients, which is indicative of the importance that the EU market bears for the UK sector, but also the large extent to which European savers look to the UK for investment-management services.

Furthermore, by looking at statistics reported by The Investment Association (Ibid.), a prospective departure of the UK from the EU as a result of the 2016 referendum did not seem to have an immediate negative impact on the European market share that UK investment managers enjoy. As a matter of fact, interestingly, quite the opposite occurred, with the figure growing from 35% in 2016 to 37% in 2017 (Ibid., pp 19). In addition, there is a wide gap between the size of the UK industry and the one of the other most important European hubs, with investment managers from France, Germany and Switzerland serving a combined European market share of 34%, lower than the one enjoyed by the UK sector. (Ibid.)

Banking
Another financial industry in which the UK enjoys a strong position is banking. As of 2019, the whole of the UK banking sector was the largest in Europe, with assets amounting to £8.14tn. (The Global City, 2020)

Among the banking sectors, Sales and Trading, which includes all secondary trading in cash and derivative products undertaken between wholesale banks and their clients, generates annual revenues of approximately £30bn and employs between 55,000 and 65,000 people. (Oliver Wyman, 2016)

The largest banking sector is by far Retail and Business Banking, whose activities include deposit taking and lending for individuals and businesses, with annual revenues ranging between £58bn and £67bn and a labour pool ranging from 450,000 to 470,000 people. (Ibid.)

The banking industry also includes Investment Banking, whose scope covers such activities as, among others, Mergers & Acquisitions and Equity/Debt Capital Markets services. The sector produces annual revenues ranging from £10bn to £12bn and employs roughly 15,000 people. (Ibid.)

Another banking sector is Private Banking and Wealth Management, which, interestingly, despite generating the lowest annual revenues among the different banking sectors, with an estimated £5bn to £6bn, still employs between 21,000 and 26,000 professionals, higher than the Investment Banking sector. (ibid.)

One factor underlying the significant size of the UK banking industry can be traced in its global outreach. As of March 2020, around 250 foreign banks were active in the UK (The Global City, 2020), indicating the attractiveness of Britain to international business. In particular, international banks are attracted to London because of the cluster effect that its financial system allows, with businesses within one sector benefiting economically from the proximity and concentration of other well developed, related, sectors.
Further indication of the global outreach of the UK's banking industry is London's leading position for international bond trading, with around 78% of global secondary market turnover in 2019 (Ibid.).
Moreover, 43% of global foreign exchange trading takes place in the UK, a figure which is higher than for any other international centre, the US being the second highest at 17% (Ibid.)

Furthermore, the amount of dollars traded in the UK is more than double the amount traded in the US and almost four times as many euros are traded in the UK than the Euro-area (Ibid.), which is indicative of the global dominance enjoyed by the UK in foreign exchange.

Insurance

The UK is also home to a large and well-established insurance industry.
The whole of the sector, including both insurance and reinsurance activities, is estimated to generate annual revenues ranging between £39bn and £42bn and employ between 310,000 and 335,000 people. (Oliver Wyman, 2016)
As is the case for other financial sectors, UK insurers can tap into a very large international market. The Association of British Insurers reports insurance trade exports totalling £18.45bn in 2017 (ABI, February 2019, pp 5). Importantly, 67.3% of the amount, £12.41bn, was exported to Europe. Considering how large the European market share is for insurance firms in the UK, a potential loss of access to the EU single market following Brexit may have important negative consequences for the industry.
Because UK insurance-services imports amount to much lower numbers compared to exports, with a total of £1.76bn imported in 2017, of which approximately £1.26bn from Europe, the UK has been able to enjoy a significant trade surplus in insurance services. (Ibid.)
A further sign of the extent to which the UK's insurance industry is globally positioned, London is the only financial centre in which the 20 top insurance and reinsurance firms have a presence (The Global City, 2020).
On the other hand, though, of the estimated £39-42bn in revenues reported above, only £3bn to £5bn related to the EU for the year 2015, while the big chunk, between £27-£29bn came from UK clients. (Oliver Wyman, 2016, pp 6)

Market infrastructure and other

The UK also finds itself in a position of dominance in Europe with regard to market infrastructure, with its Central Counterparty Clearing houses (CCPs) clearing 'as many as 75% of euro-denominated interest rate derivatives'. (Policy Department A, 2017, pp 32)
Market infrastructure includes exchanges, clearing and inter-dealer broking activities, with annual revenues adding up to a total £3-4bn, and securities services ranging from custodian services to collateral management, which also annual revenues between £3-4bn. (Oliver Wyman, 2016)

A considerable further £16-20bn (Ibid.) in revenues is generated annually by a full range of technology, credit rating agency, payment and data services that do not necessarily fit within the definition of market infrastructure but can be considered to fall within its scope. These activities also employ a significant portion of the UK financial services pool, with a total of 80,000-90,000 professionals. (Ibid.) The FinTech sector would also fall within the scope of activities.
Speaking of Fintech, according to The Global City (2020), more investments came into the UK than anywhere else in Europe in 2018. $3.3bn were invested in the form of venture capital and private equity that year, much higher than the $716m invested in Germany or the $328m invested in Switzerland (theglobalcity.uk). More importantly, though, the figure for UK investments saw an increase of 15% on the previous year. Against a backdrop of a

prospective Brexit, fintech start-ups in the UK have seen a significant rise in financial backing, which might be indicate that the UK's departure from the EU may have little implications for this sector.
Aside from the fintech industry, venture-capital investments in the UK are highest than anywhere else on the European continent, with €4.3bn of venture-capital funds going to companies based in the UK over the first half of 2019 (Ibid.). The same period from a year before had seen less than half that amount, with VC investments amounting to €2.1bn (Ibid.). An increase over one single year may not be enough to draw any conclusions, nonetheless, it might be a signal that Brexit may have little impact on the private equity industry.

Supporting industries
The UK's financial ecosystem is further boosted by the depth, size and level of expertise of supporting industries such as legal services and accounting.
With respect to the former, the UK is the pre-eminent centre on the global stage for international legal services and dispute resolution (TheCityUK, December 2019). The UK's market for legal services is the largest in Europe and has a significant international presence, 'with more than 200 foreign law firms from around 40 jurisdictions' being active in the country (Ibid.).
The leading position that the UK's legal services industry enjoys on the global stage is boosted by its use of English common law, which is found in the legal systems of many of the world jurisdictions. Another factor underlying the sector's strength is the above-mentioned financial ecosystem that is present in the UK.
As financial-services firms rely on legal assistance, a more developed, bigger, and broader financial hub will inevitably result in a bigger legal-services industry, which has been the case of the UK legal services sector.

In light of the exposition above, it seems clear that the UK's financial system's pre-eminent position in Europe encompasses a broad range of sectors. An ecosystem so developed has become even more dominant because of the cluster effect it can enjoy. Legal firms, for instance, want to establish themselves in the UK, particularly London, because of the sheer amount and depth of finance-related business they would have access to, but also the quality and depth of ancillary services such as accountancy.

Moreover, as things stand, the demand for financial services coming from the EU bloc, currently largely met by the UK industry, cannot be met by any other European hub for different reasons, including, for instance, a lack of capacity and the lack of clustering benefits enjoyed to such an extent as the UK does.(Policy Department A, 2017, pp 48)
Also, no other financial centre in Europe enjoys a similarly dominant position over such a broad range of industries as the UK does. Different financial centres on European mainland enjoy positions of strength in select sectors; however, they have the characteristics of niche hubs, they do not enjoy a leading position over as broad a range of sectors as the UK does.

2. Brexit and the UK's financial services sector

2.1 Context: Brexit timeline

Before embarking upon the analysis of the implications of Brexit for the financial services industry in the UK, aware that it has been a long process, we provide the reader with a brief summary of the events that took place after the 2016 referendum and led us to where we are now.

Following the Remain camp's defeat in the 2016 referendum and the consequent resignation of the then UK prime minister David Cameron, who had called the referendum himself with the intent to once and for all put an end to rising calls for UK independence, Theresa May was appointed as new prime minister, tasked with seeing the Brexit process through and officially rendering the UK independent of the EU.

In order for a member state to leave the EU, the European Council has to be formally notified first. That, in turn, triggers Article 50 of the Treaty on European Union, by which 'the Union shall negotiate and conclude an agreement with that State, setting out the arrangements for its withdrawal, taking account of the framework for its future relationship with the Union'. (European Union, Article50)

The UK triggered Article 50 on 29 March 2017, setting in motion a two-year countdown to withdrawal (European Commission), throughout which negotiations for a Withdrawal Agreement would take place between the UK government and the European Commission, the latter appointed on behalf of the EU Member States.

Agreement on the draft Withdrawal Agreement was reached by the two sides in November 2018; however, approval in the British parliament was needed before the UK could go through with the Agreement. The draft deal was rejected on three different occasions in early 2019 by the House of Commons, one of the two chambers of the UK parliament, mainly due to unsatisfaction among members of parliament with proposals laid out in the draft Agreement in relation to the border between Northern Ireland, which is part of the UK, and Ireland, an EU Member State.

The successive refusals of the draft Withdrawal Agreement by the UK parliament were not without consequences.

Firstly, different extensions to the withdrawal period, which was initially supposed to last two years, became necessary because of the delay brought onto the exit process.

Secondly, the stalemate resulted in implications for the political landscape in the UK, as Theresa May relinquished her post following sustained pressure to resign from her own party, the Conservative party, whose general stance towards the draft Agreement agreed upon by the UK government and the European Commission was still negative, despite successive changes brought on by May at different stages. Boris Johnson, the new leader of the Conservative party, took over from May as prime minister in July 2019.

Despite the prospect of the UK crashing out of the EU without a deal seemingly becoming more and more likely over the summer of 2019 under Johnson, which resulted in nervousness among financial professionals and investors that was visible in a steep loss of value for the British Pound, agreement on a new draft Withdrawal Agreement was reached between the UK and the EU in October 2019 and finally approved by the UK parliament in January 2020, thanks in part to a revised Protocol on Ireland and Northern Ireland that would eliminate the 'backstop' (an appendix to the draft Withdrawal agreement meant to prevent a hard border between Ireland and Northern Ireland).

The Withdrawal Agreement was subsequently signed by representatives of the UK and the EU on 24th January 2020.
With an agreement finally in place, after the European Council had agreed to a third extension of the withdrawal period until 31 January 2020 back in October 2019, the UK formally became a third country on 1 February 2020. (European Commission)
A transition period, throughout which the UK is still effectively a member of the EU and subject to its rules, and meant for a smooth departure and a trade deal to be negotiated, is set to last until 31 December 2020, provided no extensions are agreed upon by the UK and the EU.

2.2.1 The impact so far. Relocations

Repercussions for the financial services sector in the UK resulting from Brexit emerged well before the UK formally left the EU, with contingency plans put in place by UK-based financial firms right after the 2016 referendum and several companies preventively relocating EU-related operations from the UK to other European hubs without waiting for the Brexit process to come to an end, in response to the uncertainty surrounding negotiations between the UK and the EU and whether a trade deal would be struck between the two sides or not, and if yes, the shape of such an arrangement.
In light of the above, we now discuss the impact that Brexit has had so far on the financial sector in the UK, by looking at the relocations of businesses from Britain to the EU that have occurred ever since the majority of the British population voted for an EU departure back in 2016.
In doing so, we draw on research conducted by Wright, Benson and Hamre for the think-tank New Financial. Namely, all of the figures provided below are from a report of theirs dating back to March 2019.
Before moving on to the exposition, though, it is important to bear in mind, as the authors themselves highlight, that there might an element of danger in considering all moves as Brexit-related when some may just be in line with the usual course of business for companies. The numbers provided should therefore be taken cautiously.

We now provide an outline of the relocations that have taken place since the 2016 referendum. Different European financial hubs have attracted firms from the UK. The main beneficiaries are discussed below.

Dublin

Dublin is the European financial hub that has benefited the most so far from the UK leaving the European Union. Indeed, the Republic of Ireland's capital has seen the highest percentage of financial-services business moving out of the UK into the EU, with New Financial reporting that 30% of all Brexit-related moves had Dublin as favoured destination.
On the other hand, while Dublin has attracted the majority of moves within Asset Management (43%), Insurance (36%) and Alternatives (59%), the same cannot be said about banking, where the Irish capital has attracted 14% of moves, lower than Frankfurt and Paris. (New Financial, March 2019)
Two Instances of big industry players that picked Dublin as their gateway to European markets on the other side of Brexit are identified by New Financial in Bank of America and Barclays. The former has spent in the region of 400 million dollars to set up its new European hub in Dublin, according to its vice-chairwoman, Anne Finucane, who, in

attendance to a finance conference in the Irish capital sometime in early 2019, also said there was no going back, regardless of future developments following Brexit, stressing how permanent such a move was (The Irish Times, 13 February 2019). As regards Barclays, contingency plans have seen 190 billion euros worth of assets, linked to about 5000 clients, moving from the UK to Ireland.

Paris

Paris was touted by many in the industry as the leading contender to take London's position as the most important financial hub in Europe on the other side of Brexit. However, up to the first quarter of 2019, the French capital had only attracted between 10 and 15% of financial-services firms moving out of Great Britain (New Financial, March2019). A big chunk of the moves regarded banking, with the sector representing around 40% of businesses relocating to Paris. That is not surprising, considering that the French capital's financial industry has traditionally been more invested in domestic banking (TheCityUK, July 2017, pp 44).

Another 30% of moves from London to Paris involved diversified financials, whereas asset management firms and insurance companies saw 11% and 15% of moves respectively. Importantly, Paris has not attracted the majority of relocations for any of the sectors, not even within the banking sector, with 20% of banks/investment banks relocating to Paris, in contrast with a 29% figure reported for Frankfurt. (New Financial, March 2019)

Furthermore, out of all the financial firms relocating operations to France, only a portion of them have done so with the aim of making Paris their post-Brexit European headquarters. Many companies have identified the city as merely a secondary hub to which relocate some business and staff but not their European headquarters. Instances of such moves include the likes of Citigroup Global Markets, Credit Suisse, JP Morgan and Morgan Stanley.

Very restrictive labour laws, a perception among the industry players that French regulators are not so keen on innovation and the presence of very high tax rates, both at the corporate and the personal level, are all factors that likely have weighted considerably on businesses' decisions to relocate in cities other than Paris.

On the other hand, French regulators are working towards becoming more responsive to markets' needs and desires, with president Emmanuel Macron, well known for his banking friendly political views and himself an investment banker before venturing into politics, pushing hard for reforms that would allow France to attract more financial-services business into the country.

In particular, one characteristic of the French labour landscape that put off many companies in the past can certainly be found in a lack of flexibility enjoyed by employers compared with more liberal countries such as the US and the UK, given the difficulty in France to put into effect multiple-worker layoffs: in that respect, Macron's recent labour-law reforms entail changes that are expected to make such dismissals smoother and easier.

Frankfurt

Frankfurt is another city that many have dubbed as a contender for London's EU leading position as a financial centre on the other side of Brexit, in light of the stability of its financial hub, the fact that the European Central Bank is based there, and Germany's economy, the biggest in the European Union.

Since the Brexit referendum, Frankfurt has attracted the majority (29%) of banks/investment banks looking to relocate their operations out of the UK, which is not surprising as the German banking system is the largest in the EU. Goldman Sachs, Morgan Stanley, JP Morgan, Credit Suisse are only few instances of several firms operating in banking and investment banking that have chosen to relocate their European headquarters to Frankfurt. (New Financial, March 2019)
On the other hand, when we consider the financial services industry as a whole, as of early 2019, only between 10% and 15% of Brexit-induced moves had seen Frankfurt as the financial centre of choice. Moreover, a quarter of such moves were merely secondary, with firms picking other cities to be their new European headquarters, an example of which being Bank of America, which has chosen Dublin and Paris as its two European headquarters, for its banking division and markets operations respectively. (Ibid., pp 7, fig.5)

The apparent unattractiveness of Frankfurt to firms operating in sectors other than banking can be traced back to different factors, including the cultural sobriety of the city in comparison with, for instance, London or Paris; a perception that, as is the case with France, German regulators are not very flexible and are not keen on innovation. In addition, restrictive worker protection laws and high taxes add up to the negative forces weighing on markets, similarly to the case of Paris. Moreover, the fact that Fintech, an important innovation engine for the financial sector as a whole, and the government are both based in Berlin rather than in Frankfurt diminishes the cluster benefits that result from the proximity of interdependent sectors (Fintech being one of them) and supporting institutions (in this case, the government).

Luxembourg
Luxembourg has emerged as one of the countries that have benefited the most from the anticipation of Brexit so far, with its financial hub attracting just under 20% of all firms moving operations out of the City of London or expanding their existing business in the Grand Duchy. Luxembourg has attracted the second-highest percentage of relocations for Asset Management (35%), Insurance (27%), and Alternatives (31%). In relation to Asset Management and Alternatives (Hedge Funds &Private Equity), the figures are not surprising as they seem to be consistent with the hub's leading position in Europe with respect to investment management. (New Financial, March 2019)

Amsterdam
Amsterdam has also seen a significant number of firms coming in from the UK as part of their plans to tackle Brexit, registering 10% of moves as of early 2019. Importantly, Amsterdam has attracted the majority of trading firms and market infrastructure providers (diversified financials), with 28% of all moves. (Ibid.)
The attractiveness of the Dutch capital has probably got a lot to do with a liberal and market-oriented outlook similar to that found in Britain and the United States, on top of its history of strength in trading and market infrastructure.
Instances of firms or divisions choosing Amsterdam as their main post-Brexit hub include the likes of Bloomberg Trading Facility, Gelber Group, Hitachi Capital, Jump Trading. For a full list of the relocations, we refer the reader to the New Financial report listed among this study's refences (March 2019, pp 5).

On the other hand, Amsterdam seems to have attracted much less business when it comes to other financial services, with the likes of BlackRock, BMO Global Asset Management and DeVere Group being the only asset managers choosing to be centred in the Netherlands; Commonwealth Bank of Australia, MUFG securities, Norinchukin and RBS the only banks relocating from the UK and zero insurance firms opting for a move to the Netherlands, as of early 2019.

In light of the exposition above, it seems clear that rather than a unidirectional shift of business from London and the UK to a single European financial hub, we are presented with a multipolar world in which different financial centres across Europe have attracted different firms from the UK on the grounds of the particular sector of activity of those firms. Moreover, rather than moving operations from the UK to one single location, many firms have chosen to relocate different divisions to different European hubs, based on those divisions' sectors of activity.
The grounds of such emerging multipolarity are to be found in the difference of ecosystem between the financial sector in the UK and hubs in the rest of Europe. No European financial centre is as complete, as developed, as dominant as London and the UK. As the European financial centres discussed above enjoy positions of strength in particular subsectors of the industry, many financial firms looking to relocate operations out of the UK have opted to split their moves based on the different strengths of different European hubs.

The figures provided above indicate that the impact of Brexit on the financial sector in the UK has certainly not been trivial. Moreover, as New Financial notes, the figures may underestimate the number of moves that have actually occurred. Also, the authors predict that further moves may take place in future, considering we are still in the midst of the Brexit transition period.
However, despite a significant dent in financial-services business in the UK as a result of Brexit, the impact still seems limited, suggesting London and the UK may retain their position of leadership as a financial centre in Europe.

Furthermore, many financial services firms based in the UK have chosen to stay put. One reason may be found in the fact that the competitive edge enjoyed by Britain's financial cluster may outweigh the potential repercussions resulting from the uncertainty and potential loss of market share that staying in the UK might entail.

2.2.2 Potential room for more relocations

Financial centres across Europe can attract more financial services firms out of the UK in the long run by increasing their competitiveness. In such regard, the Global Financial Centres Index (GFCI), a ranking of financial centres around the world issued by Z/Yen and updated twice a year, identifies five different areas of competitiveness.

One area is business environment, whose scope covers, among other factors, the political stability and rule of law of the country in which the financial hub is located, institutional and regulatory environment, and tax and cost competitiveness. With respect to regulation, financial centres could benefit from changes that would make the labour market more efficient and flexible (Policy Department A, 2017, pp 66). The French regulatory framework, for instance, as discussed in the section above, is such that it is more difficult to lay off

employees than in countries with more liberal attitudes towards their labour markets, such as the UK. The French government is indeed taking steps towards loosening its restrictive labour market regulatory system, meaning Paris may in future become more attractive to financial firms looking to relocate out of the UK or, for that matter, another European hub.

Another area of competitiveness is human capital, which includes factors like the availability of skilled workers, the education and development landscape, and the quality of life that one can expect from living in a particular location. The potential labour market regulatory changes discussed just above, for instance, would not just benefit a financial centre through its business environment, as human capital would be positively affected as well. A more liberal labour market would result in higher mobility of workers, which in turn would make a financial centre more attractive to potential employees relocating from other cities, including skilled workers, as opportunities of new employment would arise with more frequency.

Infrastructure is a further area of competitiveness for financial centres, its scope covering, among others, Information and Communication Technology (ICT), transport, and Built Infrastructure, with Z/Yen (September 2019) arguing that 'improving built, ICT and transport infrastructure is best done in a concentrated financial centre, taking full advantage of economies of scale and scope.'

A fourth area of competitiveness is financial sector development, which covers, among other factors, depth and breadth of the different industry clusters making up the sector, availability of capital, and market liquidity. Efforts towards boosting the competitiveness of EU financial centres within this area might be found, for instance, in the Capital Markets Union initiative set in motion by the EU to create a single market for capital (European Commission), which is expected to increase availability of capital across the Union (Policy Department A, 2017, pp 66).

Reputation is the fifth and final area of competitiveness for financial centres identified by the GFCI index. It includes factors like appeal and brand of cities, level of innovation, and cultural diversity. EU financial hubs can become more competitive and attract more business by means of, for instance, a more start-up-friendly regulatory environment, as innovation, an important financial cluster engine, would be boosted as a result. (Ibid.)

In light of the above, although the financial services sector in the UK would seem to have managed to avoid a large-proportion loss of business for the time being, it is possible that by increasing their competitiveness, financial centres across Europe might be able to attract more firms out of the UK. If any particular European hub were able to increase their competitiveness by a certain extent and discover the cluster benefits enjoyed by the London's financial sector, then Brexit may result in harsher repercussions in the long run than what we have witnessed so far.

2.3 Brexit scenarios

Ever since the 2016 referendum, an important element of uncertainty in the Brexit process has lain in the different possible shapes that the UK's departure from the EU could take. The

different scenarios, which differ in terms of how close the future relationship between the UK and the EU would be to an EU membership, include:

- Joining the European Economic Area (EEA) Agreement ('Soft Brexit')
- Withdrawal of the UK from the EU without any arrangements ('Hard Brexit')
- Tailor-made arrangements between the UK and the EU (Policy Department A, 2017, pp 14)

Each scenario is described below.

2.3.1 Soft Brexit

The Brexit scenario which comes the closest to EU membership would be for the UK to join the European Economic Area (EEA) as a non-EU member (Policy Department A, 2017, 2.3). The UK would have to join the European Free Trade Association (EFTA) first, though, as the EEA agreement only covers EU member states and EFTA States. Britain would join the likes of Norway, Liechtenstein and Iceland, which, despite not being part of the EU, are able to enjoy access to the Single Market. Such access to the Single Market entails that rights as well as obligations enjoyed in any of the EU countries are also enjoyed in any of the EEA signatory states.

Among the obligations the UK would have to face as a party to the EEA Agreement, having to comply to EU legislation certainly stands out considering that one of the reasons for leaving of the bloc was for Britain to have control over their own laws in the first place. Moreover, not only would the UK have to align its domestic laws to the EU's acquis, but the UK would also not be able to participate to EU-law making, strongly diminishing the influence it has been able to enjoy over the past few decades.

Joining the EEA as a non-EU country would require the UK to accept the EU four pillars for Single Market integration: free movement of goods, free movement of capital, free movement of services and free movement of people.

Immigration was one major discussing point through the political campaign that led to the 2016 Brexit referendum, with Brexiteers championing a tough line on passport-free entrances, hence a halt to free movement of persons. Consequently, having to abide by the free-movement-of-people pillar seems like a major obstacle to a UK's decision to join the EEA agreement.

Also, once out of the Union, even if the UK were to join the EEA, it would lose its rights to a formal role in EU-law making. Although some influence could still be exercised on an informal and technocratic level in light of the important role Britain plays in the Single Market, the UK could still do little against EEA-relevant EU-rule-making with potential negative impact on its interests (Armour, 2017). It looks difficult to foresee how British diplomats working on Brexit would be able to sell this point to the British people in light of the political rhetoric that brought the Leave campaign to its stunning victory in the summer of 2016.

Furthermore, compliance with EU law in light of EEA membership would be dynamic in the sense that any modifications to European legislation would have to translate into continuous updates to British law. The EEA Agreement has since 1994 seen more than 5000

new legal acts incorporated as protocols or annexes. (House of Lords, Paper 72, December 2016).
Other types of formal trade arrangements would not bind the UK to continuous changes to its legislative framework in the way the EEA agreement does. The free trade agreement between the EU and Switzerland, for instance, is not continuously revisited.
Given how adamant the UK government has been on reaching independence of its legislation from EU law on the other side of Brexit, it seems fair to say that such compliance with EU law as a result of EEA membership would not be accepted by the UK.

Moreover, the EEA agreement entails participation by both EU countries and EFTA members in annual financial contributions to a series of programmes benefiting the EU. An annual EEA budget is decided upon for 7-year periods, with the current time frame running from 2014 to 2020. The modalities of each country's contributions are laid out in Article 82 of the EEA Agreement, with payments varying according to the actual programmes a country takes part in and the proportion of that country's GDP on the total GDP of the European Economic Area. Forecasts conducted at the beginning of the current programming period estimated a total commitment by the EEA EFTA signatories of approximately EUR 3.22 billion, almost double the estimate for the period 2007-2013 (EFTA). These are certainly not trivial figures and given the size of the economy of the UK compared to that of the EFTA countries, its contributions as an EEA member would likely be much higher than its EFTA counterparties. Considering the political sentiment surrounding the 2016 Brexit referendum, with a break away from financial support of the EU being one the championed advantages of leaving the Union, the argument above certainly looks like further reason for the UK not to accept an EEA membership.

On the other hand, being an EEA member through EFTA would allow the UK to make its own free trade agreements with third countries, in contrast with EU membership (by which trade deals with third countries have the EU itself as counterparty). This results in much more freedom on the trade relationships the UK may want to forge with countries whose emerging economies have promising potential for the financial services industry in Britain like China or India, for instance.
However, newly negotiated FTAs with third countries would have to fit within the framework of EU legislation that the UK would have to abide by as an EEA member, therefore limiting the scope within which the British would be able to act when negotiating any trade deals.

As to the implications an EEA membership would have on financial services in the UK, firms operating out of the UK would keep their European passports and therefore maintain access to the single market. In the same way, businesses operating out of EU state members and seeking to serve UK clients would keep access to the UK market by virtue of their passporting rights (Policy Department A, 2017, 4.7).
If access to the single market is preserved, the main reason for UK-based firms to relocate elsewhere in Europe as a result of Brexit would vanish. Although some businesses may have moved their European headquarters to some other hub as part of their contingency plans, it seems likely that only a small percentage of them might stick to their new locations if the UK remains in the single market. Cluster benefits including economies of scale and scope would remain almost intact, making the economic impact of Brexit on financial services in the UK

fairly low (Ibid.). The short-term disruption to the industry caused by uncertainty would be likely to wane in the long run.

In spite of the fact that an EEA membership would be the best possible option for the financial service sector in the UK, though, it is not surprising, in light of the considerations put forth above, that the UK has already ruled out such option.

2.3.2 Hard Brexit

The harshest terms for a future relationship between the UK and the EU would be found in a scenario with no arrangements made between the two sides. Under this setting, by virtue of their memberships of the World Trade Organisation (WTO) and the UK's newly established third-country status, trade relations between the UK and the EU would be governed by WTO commitments.

Importantly, access to the EU Single Market for UK-based financial firms would be at the mercy of third-country equivalence decisions made by the EU, where EU legislation provides for equivalence regimes. In case an equivalence regime is not provided by the EU legislative framework for a particular sector, 'firms must obtain authorisation under the regulatory regimes of each Member State in which they wish to operate.' (Policy Department A, 2017, 2.2.2.)

Within the framework of a hard-Brexit scenario, with the UK enjoying limitless discretion with regard to its own legislation, its tax regime and its regulations, a possibility would be for the UK to make London an Offshore Financial Centre (OFC).

The defining characteristic of an OFC is that financial services are provided to customers and clients abroad on a disproportionate scale compared to the size of the domestic economy of the country in which the hub is based. (Ibid., 4.6)

Examples of OFCs include such leading hubs as Hong Kong and Singapore.

As to the former, the semi-autonomous Chinese city has established itself as the leading offshore hub for financial activities denominated in Chinese currency. Its stock market is one of the largest in the world and its fund management sector is one of established leadership. Hong Kong's predominance as a financial hub is attributable to different strengths, among which its tax system, which is simple and favourable, with a corporate tax rate at 16.5% and personal income taxed at a flat 15%, no sales taxes, no VAT, no capital gains tax and no withholding tax on dividends and interest. (Scarpetta, Booth, 2016)

Moreover, through a system of Comprehensive Double Taxation Agreements, Hong Kong has been able to avoid double taxes for foreign investors looking to do business there. Also, the use of English common law and a favourable time zone are additional advantages that have made HK attractive to foreign businesses and investors.

The leading status of Hong Kong's financial centre, though, has come under threat in light of a political crisis that started in 2019 and deepened in 2020 as a result of a security law put in place by the Chinese government.

With respect to Singapore, the city state's financial hub features a large banking sector, with assets totalling nearly USD 2 trillion at the end of 2013 (Scarpetta, Booth, 2016). Also, similarly to Hong Kong, Singapore enjoys a strong position in the fund management sector, with 591 fund managers registered and licensed with the Monetary Authority of Singapore

and more than 80% of total assets under management sourced from outside Singapore at the end of 2014, a clear sign of the offshore nature of the hub. Singapore is also a leader when it comes to over-the-counter trading and is one of the largest foreign-exchange centres in the world.
Among the strengths that lie behind Singapore's success as a global financial centre, Scarpetta and Booth (Ibid.) cite its location, which is strategically beneficial for the Asia-Pacific markets; the strength and growth potential of its economy, the robustness of its regulatory and supervisory framework; the high quality of its infrastructure; the use of English common law and; similarly to Hong Kong, a favourable tax regime.

Geographically closer instances of hubs that function within a third-country regime are found in Switzerland, the most predominant of which are surely Zurich and Geneva. Although a member of EFTA, the country is neither a member of the EU or the EEA, therefore its access to Europe's single market is not warranted. However, its financial-services industry can enjoy access thanks to the concession of full equivalence under Solvency II by the European Commission. However, Switzerland is one of only two instances, alongside Bermuda, of third countries being granted full equivalence, showing how it is everything but straightforward that the EU will do the same with the UK, especially considering Brexit was triggered by the latter and given London's strategic importance as a financial market for the EU.
The Swiss financial centres enjoy success thanks to different strengths, among which Scarpetta and Booth (Ibid.) list the stability and broad predictability of the country's politics, a healthy economy, a flexible labour market and a tax regime that sees moderate taxation, double taxation agreements put in place and a high level of tax autonomy for the country's cantons which allows tax competition among them.

Turning our focus back to the UK, , macroeconomic indicators (including, for instance, the ratio between financial-services exports and GDP) seem to indicate that the UK already resembles an OFC (Zoromè, 2007); hence, a post-Brexit scenario in which the UK effectively becomes one cannot be ruled out. However, it remains to be seen whether the benefits for businesses and clients from operating in London as an offshore centre would offset the costs from the UK leaving the EU and becoming a third country.
As Zoromè(Ibid.) argues, an OFC is attractive to do business in when its fiscal and regulatory costs are low. By fully disentangling itself from the EU, the UK could make deliberate moves with respect to both regulation and taxes and make them more favourable in order to attract business. However, in doing so, the UK government would have to incur compromises as well.
Lowering fiscal costs of financial services for individuals and corporations would result in less tax earnings for the UK government. Given the high contribution that the industry provides to state revenues, with £71.4 million paid in the year to March 2016, 11.5% of the state's total earnings that year (Policy Department A, 2017, 4.6), the impact of any small change fiscal rates on state revenues would be considerable.
With respect to regulatory costs, the UK government could theoretically lower them as much as it sees fit, as national legislation would not have to be aligned to EU law anymore. However, as Policy Department A (Ibid.) points outs, political considerations would come into play and practically limit the room for drastic changes to British law, considering the trend experienced by regulation globally ever since the financial crisis, with standards set by

international fora such as the G20 and the general, shared desire of nations to have stricter supervision and regulation.
It seems clear, then, that economic, political and stability considerations would come in the way of the UK exploiting limitlessly tax and regulatory races to the bottom, therefore limiting prospective potential benefits resulting from London possibly becoming an Offshore Financial Centre.

2.3.3. Tailor made arrangements
In between an EEA-membership and a cliff-edge hard Brexit, we are presented with a third scenario, whereby the UK and the EU reach a bilateral agreement on a future trade relationship.
Instances of bilateral arrangements include the Comprehensive Economic Trade Agreement (CETA) between Canada and the EU and the trade agreements between Switzerland and the bloc.

As to CETA, despite the arrangement granting liberalising conditions on trade in goods such as the elimination of tariffs on all industrial products, over two thirds of tariffs on fishing and over 90% of tariffs on agricultural goods (House of Lords, 2016, Paper 72, pp 40), when it comes to services, although the agreement includes favourable terms such as greater access for the EU to certain Canadian services markets such as postal, telecommunications and maritime transport, article 13 of the agreement states that the access to the EU single market enjoyed by financial firms based in Canada does not extend anywhere near the passporting rights enjoyed by firms based in the EU (Armour, 2016). It must be noted, however, that CETA does not commit Canada to free movement of persons, which is one of the pillars on which the EU has been adamant if any full access to the single market is to be granted to third-country firms.

As to the bilateral arrangements between Switzerland and the EU, over 100 individual agreements have been struck over the past few decades by the two sides (House of Lords, 2016, Paper 72, pp 40). Importantly, in contrast with CETA, one of such agreements provides for free movement of persons. However, as regards services, Switzerland enjoys less comprehensive preferential access to the EU markets than is the case for trade in goods. In particular, financial firms based in Switzerland are granted no general access to the single market. Hence, no passporting rights are entailed, meaning that subsidiaries must be established in an EU/EEA country if swiss firms' operations in the EU are to be maintained.

By looking at the precedents outlined above, history tells us that it is difficult for a third country to obtain passport-like access to the Single Market in financial services within the framework of a bilateral agreement.
As Raoul Ruparel, special adviser on Europe to Prime Minister Theresa May between July 2018 and July 2019, put it, "services will clearly be the most difficult sector, particularly financial services, as there is no precedent for third-country access to the Single Market in financial services and other services." (House of Lords, 2016, Paper 72, pp 43)
On the other hand, however, as Armour (2016) argues, the UK enjoys a better bargaining position than that of Canada and Switzerland at the negotiating table, because of, among other reasons, the importance of its financial-services sector for the EU, which serves the

Single Market on a scale that is not provided in any other European country. Therefore, we should take Canada and Switzerland's instances with caution, knowing that a better deal with respect to services and, particularly, financial services, with potentially greater general access to the Single Market, is certainly possible.
Although an eventual trade agreement between the UK and the EU may not entail the same passporting rights that UK-based financial firms have enjoyed by virtue of Britain being a Member State, a deal may well provide "a more enduring foundation for Single Market access by UK firms than a unilateral equivalence determination by the European Commission" (Ibid.), as equivalence decisions may well be merely political and could be withdrawn at any time, leaving UK firms at the mercy of the political and legislative UK climate, which could lead to repercussions from the EU, since the legislative frameworks in the UK and the EU may be aligned at the beginning but diverge in time.

With the UK ruling out an EEA membership and seemingly set on avoiding a cliff-edge, no-arrangement departure from the EU, a Free Trade Agreement (FTA) has been at the centre of negotiations between the two sides, a 'comprehensive' FTA agreement being cited as the aim of the UK in the government's White Paper on Brexit dating back to 2 February 2017). In the Article 50 Letter (29 March 2017), the then prime minister Theresa May put forth "a bold and ambitious FTA between the UK and the EU which should be of greater scope and ambition than any such agreement before it so that it covers sectors crucial to our linked economies such as financial services and network industries".

A substantial exposition of the UK's government aspirations for the future trade relationships between Britain and the EU, a starting point necessary for negotiations to get under way, was however only provided in a White Paper published on 12 July 2018.
In the White Paper the UK government put forth free trade in goods, with a 'common rulebook' that would be in place for the UK and the EU to abide by. The UK would therefore agree to align its legislation to EU rules, committing to a continued harmonisation of its rules and the EU's in relation to trade in goods.
Furthermore, in the Paper the UK brought forth a new Facilitated Customs Arrangement to remove the need for customs checks and controls between the UK and the EU while at the same time maintaining Britain's control over tariffs for its own trade with third countries.

If the proposed relationship for goods seems one aimed at liberalising trade and maintaining pre-Brexit conditions as far as possible, when it comes to services, the UK government's proposals do not seem to entail as liberal and collaborative a relationship.
In particular, as regards financial services, there is acknowledgment by the UK government that once Brexit materialises, a passporting regime will no longer be applicable. However, in light of the shortcomings perceived by the UK with respect to the existing EU third-country equivalence regimes, which are discussed in the Paper and include, among others, 'the lack of provision for institutional dialogue and supervisory cooperation and the large gaps in the scope of services and activities covered by the regimes' (Allen & Overy, 2018), the UK government puts forth a form of 'enhanced equivalence'.
Within the proposed arrangement, a broader range of cross-border activities would be covered by the equivalence regimes for the UK, presumably including services for which an equivalence regime is currently not provided, such as banking. (Ibid.)

Moreover, the ‘enhanced equivalence’ regime envisioned by the UK would see reciprocal recognition of equivalence under all existing third-country regimes, in light of the ‘identical rules and entwined supervisory frameworks’ that the UK and the EU currently share. Furthermore, the White Paper envisions limitations on the autonomy either side would enjoy in future equivalence decisions. Namely, the UK would want for both sides to commit to avoiding future introductions of divergent regulations with respect to cross-border financial activities. Also, The UK government proposes extensive supervisory cooperation in relation to systemically important financial-services providers as well as continued dialogue when it comes to regulation, with particular respect to the early stages of new proposals. Moreover, the Paper envisions transparency with respect to the equivalence assessment methodology; a structured process leading up to any withdrawal of equivalence, with an initial period of consultation on possible solutions followed by the introduction of clear timelines and notice periods whenever an equivalence withdrawal decision is made; and predictability and long-term stabilisation, with the UK and the EU committed to avoiding future changes that may impact equivalence.

It is difficult, at this stage, to envisage the proposals outlined above successfully going through, considering the EU’s adamant stance on maintaining their full decision-making autonomy in relation to equivalence determinations. Michel Barnier, chief EU negotiator, has already rejected, for instance, the notion that the EU’s equivalence-decision autonomy might in any way be restricted by a new arrangement with the UK.

2.3.4 Where are we headed?

As mentioned earlier, a post-Brexit EEA membership has already been ruled out by the UK government. With the UK formally a third country as of February 1st,2020 and a transition coming to an end on December 31st, we are left with either a ‘hard Brexit’ or a trade-agreement scenario. Both the UK and the EU would certainly prefer the latter option in light of their economic interests. However, although negotiations for a trade agreement are ongoing between diplomats on the two sides, important differences may eventually prove insurmountable and result in the UK leaving the EU without a deal.

As the eventual shape of Brexit is still uncertain and dependent on whether the UK and the EU will be able to strike an arrangement for their future trade relationship, we move on to discuss the ongoing trade-deal negotiating process, its major issues and its state of progress.

2.3.4.1 Trade-deal negotiations framework

As discussed earlier, the UK’s desired outcome for its financial-services industry would entail a form of enhanced equivalence. However, any bilateral arrangements providing the UK with an improved equivalence-regime framework would be just one among a series of arrangements covering other sectors and issues. Concessions made by the EU on certain issues might require for the UK to make concessions on others.
Below is provided a description of the major issues under discussion.

One of the issues concerning the future relationship between the UK and the EU is fishing. Once Brexit becomes effective, the UK will claim back sovereignty over the waters surrounding Britain and will be able to decide which fisheries can access them and how much fish they can actually catch. Absent a deal between the EU and the UK, European

vessels could therefore be denied access to British waters. Considering the high dependence of fishing communities in the EU on British waters, it is easy to see the negotiating leverage on the UK's side within the context of the trade agreement as a whole. However, leverage is on the EU's side as well, since British fishers could be prevented from selling their produce into the European market. In terms of outcome aspirations, the EU is aiming to maintain the status quo, so that fishing vessels from EU Member States will be granted the catches in British waters that they have historically enjoyed. The UK, however, has made it clear it does not intend on allowing continued, general access to its waters, stating it would consider access for any EU vessels in annual negotiations, similarly to what arrangements between the EU and Norway provide for (The Guardian, 27 February 2020). The issue has proven to be a sticking point for the negotiating process, with the UK also insisting on decoupling the fish catch in UK waters from fish sales in EU markets (The Guardian, 01 March 2020).

Negotiations have also concerned security. The UK is open to working with the EU police agency Europol and the EU law enforcement agency Eurojust but has made it clear it does not want to join either. Also, on the other side of Brexit, the UK does not want to take part in the European arrest warrant (which allows for criminals crossing the borders of EU members to be pursued), seeking to replace it with an extradition agreement. Moreover, it remains to be seen what the UK intends to do with respect to the European convention on human rights. (Ibid.)

A further aspect under consideration for negotiators is the role that the European court of justice (ECJ) would have in settling disputes. The UK government has insisted that the ECJ should not have any jurisdiction in the UK on the other side of Brexit, thereby deeming unacceptable the role that the court has in interpreting EU law when faced with a dispute.

Potentially the most problematic issue to come to agreement on is the concept of level playing field, whereby the UK would make a legally binding pledge not to undercut European companies, meaning that the UK government could not provide British companies with large subsides in order to give them a competitive edge over EU companies. In doing so, the UK would follow EU rules on state aids. However, the UK government has been adamant regarding its position towards EU legislation, claiming it will not agree ''to obligations for British laws to be aligned with the EU's." (Ibid.)

There is also the matter of foreign policy and defence, with Brussels aiming for the two sides to be able to share intelligence and participate in joint-defence research and innovation; the UK, on the other hand, which is the biggest spender in Europe when it comes to intelligence and defence, has seemed less interested in a cooperation agreement with the EU, having made it clear early in the talks that it intended to table the subject for later negotiating stages.

Within the broad range of issues under discussion is also transport. The UK is aiming for an absence of restrictions on British hauliers looking to transport goods between EU member states. The EU's position, though, is one whereby UK and EU hauliers cannot enjoy the same rights. Future access will depend partly on how close UK workers' standards will be maintained relatively to EU standards. With respect to aviation, a similar rhetoric has

characterised both sides' positions, with the UK aiming for no barriers on flights between the UK and EU countries and Brussels' negotiators stressing that Britain cannot enjoy the same rights and benefits as an EU member state. (Ibid.)

Another aspect of the future UK-EU relationship concerns workers' rights and mobility. Despite free movement of workers being one of the EU's pillar conditions for access to the single market, the UK government has made it clear that once the transition period is over, free movement rights would come to an end. The UK has put forth a "new framework for mobility", with the 2018 White Paper proposing reciprocal arrangements enabling citizens to continue moving between the UK and the EU for certain purposes. (Allen & Overy, August 2018, pp 4)
We discuss on UK immigration, changes to its system as a result of the UK withdrawing from the EU, and potential implications for the UK financial-services industry in a separate section.

A further topic under discussion is data protection. In light of its aspiration for cooperation on the other side of Brexit, the UK has proposed a two-stage approach.
An adequacy determination would first be provided by the European Commission, whereby the level of protection of personal data in the UK would be deemed adequate for data to flow from the EU to the UK without the need to establish additional safeguards. As it would allow personal data to continue to flow, a positive adequacy decision by the European Commission is, for instance, important for trade and tourism. (The Guardian, 27 February 2020)
A second stage would entail setting up a framework to enhance dialogue and minimise data flow disruption; it would also envisage enforcement coaction and continued cooperation between the UK information Commissioner and the EU data protection authorities. (Allen & Overy, August 2018, pp 4)
The UK's proposal, however, has not generated a favourable response from the EU.

A further issue concerns civil justice. Given the UK's intent to participate in the Lugano Convention 2007, a convention on civil jurisdiction and judgement which applies to the 27 EU members plus Norway, Switzerland and Iceland, Britain's position seems to be one of openness to cooperation with the EU. The 2018 White Paper further adds that the UK would be keen on an enhanced version of the Lugano Convention through a newly forged bilateral agreement with the EU. Whether or not cooperation on civil jurisdiction and judgement between the UK and the EU will materialise on the other side of Brexit might have important implications for both sides from an economic standpoint. As Allen & Overy (August 2018) points out, a mutual regime on civil jurisdiction and judgement, implied by either participation by the UK in the Lugano Convention or a bilateral agreement between the UK and the EU, would result in legal certainty and continuity, therefore facilitating cross-border trade and consequently benefiting businesses in Britain and Europe.

Discussions about the future relationship between the UK and the EU have also concerned science and research. The UK's scientific hubs play a major role when it comes to research programmes in the EU. However, future British participation in important research programmes like Horizon Europe is bound to be dependent on negotiations concerning the

payments the UK is to contribute into the programmes and the level of leadership British actors would enjoy. (The Guardian, 01 March 2020)

We proceed, in the following section, to discuss on the progress that negotiations have seen in the lead-up to the transition-period end.

2.3.4.2 Negotiations stalemate

Several formal rounds of talks have already taken place so far. However, it would seem like limited progress has been made towards reaching a deal that would prevent the UK from a 'cliff-edge' departure from the EU.

A sign of how far apart the two sides have been in reaching an agreement can be found in the reciprocal blame game that has emerged at the end of negotiating sessions.
For instance, the chief Brexit negotiator for the EU, Michel Barnier, speaking at the end of the seventh round of talks held in August (2020), accused the UK of time wasting, saying:
"Those who were hoping for negotiation to move swiftly forward this week will have been disappointed. And, unfortunately, I too am, frankly, disappointed and concerned and surprised, as well, I must say, because the British Prime Minister, Boris Johnson told us in June, that he wished to speed up a negotiating process during the summer."
At the same time, David Frost, the UK's chief negotiator, blamed the late stalemate on the EU, stating:
"The EU is still insisting not only that we must accept continuity with EU state aid and fisheries policy, but also that this must be agreed before any further substantive work can be done in any other area of the negotiation, including on legal texts."
Another UK negotiating official was reported by The Guardian as saying:
"The process block now is the EU's insistence that we must accept their position on state aid and fisheries before we can talk about anything else. I mean, obviously we're not going to do that. So, it is frozen." (The Guardian, 21 August 2020)

As the UK's negotiators' claims suggest, the two major sticking points for the Brexit negotiations have been state aid and fisheries. As for the former, as discussed in the previous section, the EU has been adamant on the UK granting a level-playing field between the UK and the EU. However, as the requirement would bind the UK to EU rules, UK negotiators have deemed it unacceptable. On the issue, after the fifth round of negotiations, David Frost was quoted as saying:
"We have always been clear that our principles in these areas are not simple negotiating positions but expressions of the reality that we will be a fully independent country at the end of the transition period."
As to the second sticking point, fisheries, the two sides are far apart, with Barnier quoted as saying after the fifth round of talks came to a close:
"On fisheries, the UK is effectively asking for a nearly total exclusion of EU fishing vessels from UK waters. That is simply unacceptable".
UK negotiators, on the other hand, have claimed the UK does not intend to deny access, just have control over its terms. (Politico, 23 July 2020)
As things stand, compromises on the two issues seem to be difficult to reach.

Further proof of how stalemated the talks are, a deadline for an outline deal, meaning an 'early understanding on the principles underlying any agreement' was in place for July 2020. However, as of September 2020, no such early understanding seems to be the case yet. With the Brexit transition period coming to a conclusion at the end of 2020, a trade deal looks increasingly difficult to reach.
The UK and the EU could theoretically agree on a period extension so that negotiations could continue further into 2021. However, the UK has already formally rejected such option. (Politico, 12 June 2020)

An additional sign that the EU and the UK may not eventually strike a deal is provided by preparations set in motion by the UK to end the Brexit transition period without an agreement. On the other hand, though, it could just be a negotiating strategy on the UK's side: by letting the EU know that the UK is prepared for a no-deal scenario, negotiators on the UK's side might discover new leverage at the negotiating table.

Adding further difficulty to the trade-deal process, negotiations hit another setback with the disclosure of a UK internal market bill in September 2020, whose provisions explicitly override the Withdrawal Agreement struck with the EU in January 2020. Section 45 of the bill, for instance, provides for "international and domestic law", including "any provision of the Northern Ireland Protocol [and] any other provision of the EU withdrawal agreement …" to be disregarded when incompatible or inconsistent with a provision mentioned elsewhere in the bill. (UK Internal Market Bill, Section 45: (2) (d), (4) (a) (b))
As the provisions threaten the rule of law of the Withdrawal Agreement and other international treaties, the bill was met with a backlash from the EU. In a statement released by the European Commission on September 10, legal action was threatened against the UK unless changes to the bill were made. An extract from the Commission's statement reads:
"Vice-President Maroš Šefčovič called on the UK government to withdraw these measures from the draft bill in the shortest time possible and in any case by the end of the month. He stated that by putting forward this bill, the UK has seriously damaged trust between the EU and the UK. It is now up to the UK government to re-establish that trust.

He reminded the UK government that the Withdrawal Agreement contains a number of mechanisms and legal remedies to address violations of the legal obligations contained in the text – which the European Union will not be shy in using."

Moreover, the Commission did not shy away from implicitly warning the UK that if it does not proceed to drop the offending clauses in the bill, then the EU could terminate the UK-EU trade talks. A further abstract from the statement reads:

"The vice-president stated, in no uncertain terms, that the timely and full implementation of the withdrawal agreement, including the protocol on Ireland/Northern Ireland – which Prime Minister Boris Johnson and his government agreed to, and which the UK Houses of Parliament ratified, less than a year ago – is a legal obligation. The European Union expects the letter and spirit of this agreement to be fully respected. Violating the terms of the withdrawal agreement would break international law, undermine trust and put at risk the ongoing future relationship negotiations." (European Commission-Statement, 10 September 2020)

It seems clear, in light of the discussion above, that the UK's goodwill in the EU, which had been hit a first time by the UK's prospective departure of the Union and then even further by the Brexit process with its delays and negotiations complications, may have reached a new low. As things stand, with the Brexit transition period coming to an end soon and the UK government adamant that no extension would be put in place, and with negotiations still stalemated, a trade deal between the UK and the EU faces jeopardy.

2.4 Regulatory implications

2.4.1 Equivalence

Financial institutions based in the UK have been able, by virtue of the UK's membership of the EU, to operate in each and every one of its member states through the European passport, a EU legislation product which, as Policy Department A (2017, 3.1.4) words it, 'is attached to the license to operate as a financial institution granted by the home regulator'. Hence, once the regulation authorities of the country in which a financial firm is based license the institution, the firm will be able to tap into any market in the bloc it looks to serve. Rather than having to ask the competent authorities for authorisation in each and every one of the foreign countries that a firm wishes to operate in, all that is necessary with the European passport is a notification procedure, through which the home country's authority, notified by the firm, notifies the host country's authority.

Although financial firms based in the UK have been able to keep their EU passports over the Brexit transition period, the departure of the UK from the EU is bound to have consequences on the passporting rights of such businesses unless an EEA membership is opted for by the UK government. However, such scenario has already been written out by the UK government, which instead is aiming for 'comprehensive equivalence' of its regulatory and supervisory framework to that of the EU, so that firms based in the UK wishing to do business in the EU will still be able to do so without being subject to EU regulation and EU supervision. It must be noted, however, that there are different equivalence regimes and that they vary in what they imply: as Policy Department A (2017, 3.2.2) argues, "they can range from granting access to the single market in similar fashion to what passporting rights imply, to allowing EU institutions to treat exposures to certain third-country firms as exposures to similar EU financial institutions, etc." Moreover, equivalence is granted for those services which are explicitly covered by relevant EU legislation, potentially leaving certain services with no chance to serve EU markets without the necessary authorisation of the Host Member in which a firm wishes to do business.

In relying on the equivalence framework for its financial-services industry, the UK government would be totally dependent on unilateral decisions made by the EU, as it is the European Commission that ultimately decides whether 'a third-country regulatory regime is equivalent to the EU regime for purposes of financial regulation'. Moreover, the European Commission can, even after granting equivalence, at any time unilaterally withdraw it, further showing the precariousness of any potential positive equivalence decision made by the EU.

Furthermore, aside from the fact that, even when all equivalence conditions are met, the UK can only express its interest in an equivalence decision and not force the EU commission on making one, the European commission is likely to consider the UK's case with relative more

scrutiny, in light of the fact that it is considered a third country which potentially poses significant risks to the EU financial markets (Ibid.).
On the other hand, the fact that the UK government plans on incorporating all EU acquis into British law on the other side of Brexit, is a sign that a positive equivalence determination on the EU's side should be relatively straight forward. However, the political discourse in Britain leading to the 2016 referendum, seemingly more pronounced at the present with Boris Johnson as prime minister, has been insistent on giving back to the UK control over its own legislation, increasing the likelihood of future divergence between the regulatory frameworks of the UK and the EU as a result of changes to national law. At that point, the more divergent the regulatory supervisory frameworks of the UK and the EU, the higher the likelihood of equivalence-decision withdrawals by the EU would be.

Also, it must be noted that there is a 'reciprocity' concept that often applies within the equivalence decision process, whereby a positive equivalence decision would only be taken by the European commission if the legal framework of the third country in question provided for an equivalence regime for third countries as well (Ibid., 3.2.3). Therefore, if the financial firms are to be allowed access to the EU single market by virtue of equivalence decisions, the UK should reciprocally allow EU businesses access to its market. As pointed out by Scarpetta and Booth (2016), though, as the UK has a tradition of economic openness, especially with regard to financial services, openings by the UK to EU firms similar to those that UK firms would receive in the EU should not be a problem.
Furthermore, it seems safe to predict that, even if an equivalence regime does not exist within the UK regulatory framework for certain EU law, the UK would be quick in establishing such regime and the criteria for taking equivalence decisions because it would be in their best interests.

Now, financial services are regulated by the EU through different regulations for different sectors. The main EU law providing a regulatory framework for insurance, for instance, is Solvency II; Asset management, instead, is mainly regulated by AIFMD and UCITS V; as regards banking, the main EU law for investment banking is MiFIR, whereas CRD IV and CRR regulate wholesale and retail commercial banking.
Therefore, as a third country, the UK would not face merely a single equivalence decision, but rather many different decisions for all the EU law that regulates the different financial-services sectors. Moreover, as Scarpetta and Booth (2016, 2.) point out, the EU grants equivalence on specific aspects of individual regulations rather than regulations as a whole, hence increasing the potential range of equivalence decisions that would need to be made, with nearly 40 equivalence requirements as of 2016. Under Solvency II, for example, there are three separate areas for evaluation. (Ibid.)

Let us now consider in more detail different industries, the relevant regulatory frameworks and the repercussions they may have as a result of any potential equivalence decisions.

Investment banking
As far as investment banking is concerned, the Markets in Financial Instrument Regulation (MiFIR) and the Markets in Financial Instruments Directive II (MiFID II) are the pieces of EU legislation regulating the provision by third-country firms to EU markets of certain types of

investment services, among which investment advice and portfolio management, and investment activities such as market making.
With regard to MiFIR, an equivalence regime that provides third-country firms with passporting rights is included for investment services and activities directed at professional clients and eligible counterparts. If equivalence is granted, UK-based firms will be able to provide the aforementioned services and activities to any of the EU Member States, in similar fashion to what the European passport entails.
As to MiFID II, the directive covers investment services and activities provided to retail clients and elective professional clients. In contrast with MIFIR, the directive does not provide for passporting rights as it grants EU Member States discretion in continuing to apply their national regulatory regimes. Therefore, if a UK-based firm operates in an EU country whose national law requires the establishment of a branch, that firm will have to comply with the requirement if it wishes to continue serving that particular market. Moreover, it should be noted that opening a branch in an EU country does not result in passporting rights within the framework of MiFID II, therefore a branch would have to be established in any other EU Member State (that requires so) in which a firm wishes to operate. Hence, UK-based firms whose activities fall within MIFID II deciding on whether to relocate operations relative to a particular EU market will have to weigh up the costs of setting up a branch against the loss of revenue that would result from the loss of access to that particular market.

Wholesale banking
With respect to wholesale banking, which includes activities such as deposit-taking and lending, the relevant EU law is given by the Capital Requirements Directive (CRD IV) and the Capital Requirements Regulation (CRR).
Importantly, the former contains no provisions for third-country access to the single market. Moreover, similarly to MiFID II, CRD IV states that EU branches established by third-country firms do not result in free access to all other EU Member States. However, it would be possible, in contrast with MiFID II, for a UK based firm to set up a subsidiary in a Member State and, as a result, enjoy passporting rights across the EU. (Allen & Overy, 2016)
Again, UK firms providing services regulated by CRD IV will have to evaluate whether the potential loss of EU business outweighs the costs of setting up a subsidiary. Establishing a subsidiary implies higher costs compared to opening a branch, as a separate legal entity would have to be set up, with its own capitalisation, and taxes on profits computed within the local tax regime (Although, as argued by Policy Department A (4.5.2), UK banks have room for bringing down such costs by simply converting one of their existing branches into a subsidiary).
Reorganisation costs, though, are not the only downside to relocating existing operations. As Sapir, Schoenmaker and Véron (2017, 4.4) point out, the market fragmentation resulting from relocating operations would also lead to rising costs of capital.
Furthermore, a loss of access to the Single Market for UK banks would also result in higher borrowing costs, as direct access to UK lending from the EU would vanish. Although alternatives to direct lending (e.g. cross currency swaps) could be used, it would be less straightforward, leading to an increase in search costs and, as a result, making borrowing more expensive. (Policy Department A, 4.5.2)

CRR, on the other hand, does provide for third-country equivalence regimes. However, they only relate to prudential rules regarding particular exposures to entities located in non-EU countries. As a result, any positive equivalence decision by the EU commission in this regard would have no relevance in terms of third-country access to the Single Market.

In light of the above, as UK-based firms operating in the wholesale-banking sector would not be granted access to the Single Market by virtue of equivalence decisions, the impact on the sector will be shaped by the extent to which reorganisation and fragmentation costs affect their decisions to relocate parts of their operations.

Insurance
With respect to the insurance sector, regulation for EU Member States is provided within the framework of the Solvency II Directive.
Under Solvency II, three Articles contain regimes for third-country equivalence.

Article 172 states that whenever the solvency regime of a third country is deemed equivalent to that of the EU, then reinsurance contracts concluded with firms established in that third country must be treated in the same manner to contracts concluded with EU-based reinsurers, implying UK-based reinsurers would enjoy access to the Single Market on the other side of Brexit.

The second Article in question, Article 227, states that, in case of equivalence between the solvency regime of a third country and the one of the EU (with a positive determination in such regard made by the EU), the local rules of the third country may be used by EU insurance groups to carry out their EU prudential reporting for a subsidiary based in that country.

Article 260 states that whenever the prudential regime of a third country is deemed equivalent to that of the EU, then insurance groups based in that third country and operating in the Single Market are exempted from some aspects of group supervision in the EU. Exemption is therefore limited, with EU law still applying.

Regardless of whether the UK would be granted equivalence under Articles 227 and 260, it seems clear that, in contrast with reinsurance, the EU does not provide for a regulatory framework within which UK-based direct insurance providers can enjoy access to the Single Market by virtue of a positive equivalence determination: even if the UK were to be granted equivalence, on the other side of Brexit, UK-based direct insurers would either have to open a branch for each and every one of the EU Member States they wish to operate in or, alternatively, open a subsidiary in one Member State. As subsidiaries would be treated as separate legal entities and, consequently, able to apply for the EU passport, UK-based insurers would be able to tap into the Single Market through them.
It would seem, therefore, that the insurance sector in the UK might suffer from either a loss of EU business or costs for insurers related to setting up a subsidiary in a Member State. However, as Scarpetta and Booth (2016) point out, as of 2016, 87% of UK insurers providing services to the EU already did so through subsidiaries, showing that the industry sector was relying little on the use of the EU passport to access the Single Market before Brexit. As a

result, the majority of UK insurers will still be able to tap into the EU Single Market on the other side of Brexit without additional relocation costs.
It is reasonable to foresee, therefore, that Brexit will have a limited disrupting impact on the UK insurance sector, either because of favourable EU legislation (reinsurance) or because of the little impact reorganizational costs the insurance sector would face.

Asset management
With respect to asset management, UCITS (Undertakings for Collective Investment in Transferable Securities) funds are regulated in the EU by the UCITS V Directive, which, importantly, does not include any regime for third-country equivalence, leaving Single Market operations of UK funds to have to abide by the national regulations of each served country on the other side of a hard Brexit. Moreover, if a third-country UCITS fund wishes to access the Single Market, not only must it be established in the EU, it also has to be managed by a firm which is also located in the EU, meaning that UK-based asset managers would not be able to tap into the Single Market on the other side of a hard Brexit.
On the other hand, as Scarpetta and Booth (Ibid.) argue, given certain provisions, asset management companies could still operate out of the UK by means of delegation, with EU law allowing for third-country managers to be delegated portfolio management functions by UCITS funds which are located in the EU. That would mean for UK-based asset-management companies having to relocate some operations to the EU if no presence in the bloc is already established. Doing so could represent a high burden for small and medium firms, which eventually might decide to just relocate altogether into one of the EU State Members. On the other hand, the use of the EU passport by small and medium firms is quite limited already, hence downplaying the impact that a loss of Single Market access would have on such firms.
Also, many asset management companies based in the UK already have subsidiaries in the EU, bringing forth an additional downplaying factor as to the impact a loss of Single Market access might have on the sector if a hard-Brexit scenario becomes reality.

With respect to Alternative Investment Funds (AIFs) and Alternative Investment Fund Managers (AIFMs), the relevant EU regulation is provided by the Alternative Investment Fund Managers Directive (AIFMD), which, importantly, does not contain a regime for third-country equivalence decisions. However, provisions in the Directive may allow AIFMs based in a third country to still enjoy passporting rights in conducting business with AIFs based in the Single Market, through a delegation process of portfolio management functions similar to that allowed by the UCITS Directive. Requirements such as having operations in the EU to delegate to would have to be fulfilled, though.
Another way to get around the absence of an equivalence regime within the AIFMD framework could be, as Scarpetta and Booth (Ibid.) argue, maintaining passporting rights within the rules of MiFIR, which covers investment services including portfolio management and therefore may apply to AIFMs. As we discussed earlier, MiFIR grants an EU passport to third-country firms when a positive equivalence decision for the country in question has been made.

In light of the above, despite the absence of passporting rights via equivalence regimes, asset management firms based in the UK can still find alternative ways to tap into the EU single market once the UK effectively obtains third-country status. This is not to say that

access to EU business for the UK sector would be as smooth as if the UK were still part of the EU, since, for instance, administrative costs would be an inevitable consequence of conducting business by way of delegation. However, the fact that many UK asset managers already operate in the EU by means of delegation would seem to diminish the potential entity of such costs for the sector as a whole. Consequently, the burden that Brexit is bound to bring on the UK asset-management industry would seem to be limited.

Market infrastructure

With respect to market infrastructure, The European Market Infrastructure Regulation (EMIR) is the relevant EU law for central-counterparty clearing houses (CCPs) and allows for third-country CCPs to be eligible for EU clearing members or trading venues, provided they are recognised by the European Securities and Markets Authority (ESMA) and a positive equivalence decision is granted for the third country in question, which in turn is conditional on reciprocity, meaning that the third county must have itself an equivalence regime within its own regulatory framework for third-country CCPs.

Despite the substantial role UK CCPs play when it comes euro-denominated clearing, with 75% of euro-denominated interest derivatives cleared in Britain as of 2017 (Policy Department A, 2017, 3.2.9.2), the presence of an equivalence regime for third-country CCPs within the EU regulatory framework would seem to mitigate the potential negative impact of a hard Brexit on clearing activities in the UK.

However, a legislative initiative has been proposed (2017) by the European Commission to modify EMIR, bringing forth requirements for recognition of third-country CCPs, in consideration of the systemic role that CCPs in certain countries may play for the EU markets. In particular, the proposal introduces different categories of third-country CCPs in accordance to the different systemic importance CCPs play within the bloc. Of these, the highest-risk category, under which UK CCPs would be expected to fall, would not be eligible for recognition. As a result, UK CCPs would be forced to move their euro-denominated clearing activities to the EU.

In light of the above, so long as things stand, though, the equivalence regime within EMIR would allow for UK CCPs to continue conducting EU operations without having to relocate. Hence, Brexit, at least from a short-term perspective, would have little impact on UK CCPs' EU business. In the long run, however, legislative developments might prevent UK CCPs from accessing the EU Single Market and, given the size of EU business they currently enjoy, result in considerable negative implications for the sector.

Moving on to Credit Rating Agencies (CRAs), the European operations of the three firms Standard & Poor's, Moody's and Fitch Group, headquartered in London, make up for 94% of the EU credit rating market (Lannoo, 2016). Given such a figure, an EU regulatory framework which is not favourable towards third-country CRAs may have important repercussions for the future of the sector in the British capital.

Now, an EU regulatory framework for rating providers is provided by the CRA Regulation, which, importantly, restricts the use for regulatory purposes of credit ratings issued by CRAs based in a third country. In order for the ratings to be allowed use for regulatory purposes, an equivalence decision has to made by the European Commission.

In case a positive decision is made, compliance with either an 'endorsement regime' or a 'certification regime' is necessary before credit ratings are given the green light in the EU.

As to the former, Article 4 of the Regulation states that, given certain conditions, credit ratings issued by a third-country CRA may be endorsed by a CRA which is based in the EU and is part of the same group as the third-country CRA.
As to the latter, which is only available for CRAs whose activities do not play as important a role as to affect the financial stability of the bloc, Article 5 of the legislation provides that once a positive equivalence decision by the Commission has been made and the CRA is certified by ESMA, then credit ratings issued by that firm may be used for regulatory purposes.
In light of the above, equivalence regimes provided within EU regulation would seem to make it possible for UK-based CRAs to maintain their EU business. This is not to say that the EU market share of UK-based institutions is bound to stay intact on the other side of Brexit. However, it seems safe to predict a low impact for the credit rating business in the UK.

In general, If no equivalence determinations were to be made, cross-border financial services would fall within regulation set by the World Trade Organisation (WTO), of which the UK and EU are both members (Policy Department A, 2017, 2.2, 4.5). Namely, among the different agreements annexed to the WTO legal order, the one covering services and, specifically, financial services, is the General Agreement on Trade in Services (GATS).
On the surface, it would seem that WTO law would allow UK businesses continued access to the EU single market once Britain effectively becomes a third country, given the non-discrimination principles the WTO applies to all its members, an instance of which is the most-favoured-nation (MFN) treatment, which includes the obligation to apply the same tariffs and offer the same market access to all WTO members, with respect to both goods and services(House of Lords, 2016, pp51). According to the MFN clause, therefore, it would seem that the UK should enjoy the same access to the EU Single Market that every EU member state enjoys. However, exceptions apply, including cases in which favourable treatment occurs because an agreement of economic integration is in place (Article V of GATS, Article XXIV of GATT 1947), an example of which is the EU. Hence, the UK, on the other side a hard Brexit, would not be able to claim access to the Single Market through the MSN clause. As a matter of fact, no WTO law provides third countries with EU passporting rights. With no legal arrangements with the EU, the UK would therefore be left with no access to the EU internal market on the other side of Brexit.
As a result, financial services providers based in the UK would have to decide whether reorganisation costs would be worth sustaining in order to continue accessing the EU single market. In case revenue losses resulting from a market share drop did not outweigh relocation costs resulting from, for instance, setting up a subsidiary in a Member State, part or the entirety of European operations might just be dropped by UK firms. Moreover, it must be noted, relocating activities across the EU would bring along further costs for British firms in the form of diminished clustering benefits resulting from a more fragmented market, meaning that an EU exit would have negative economic implications not just for UK businesses facing relocation decisions but also for those firms that already have a presence in the EU. (Ringe, 2017)
Furthermore, economic repercussions are also bound to be felt by third-country firms conducting EU business out of the UK, which face costs from either continuing operating in the UK, since subsidiaries or branches would have to be established in the EU or moving altogether to a Member State. If both options proved to be too costly, EU operations might simply be dropped because deemed too unprofitable. (Ibid.)

2.4.2 Implications through EU regulation

As UK-based financial services firms face reliance on an equivalence framework on the other side of Brexit, with equivalence decisions totally unilateral and liable to withdrawal by the EU at any time with minimum notice, the industry might be subject to important repercussions through changes to the regulatory frameworks of the UK and the EU that might result in the withdrawal on any potential equivalence determinations.
A risk of future divergence between EU and UK regulations with respect to financial services is palpable when we take into consideration the changes the EU regulatory framework has endured over the past few decades and the way it continues to evolve nowadays.

Banking regulatory capital requirements in the EU, for instance, have changed considerably since the first Basel Accord became official in 1988, with The Basel Committee on Banking Supervision (BCBS) moving over the years from a simplicity-based approach to one based on risk-sensitivity as regards capital standards. (European Parliament-briefing, 2017)
For instance, from an initial focus on credit risk, Basel I was updated in 1996 to include a market-risk component as well.
A second Accord, Basel II, came to life in 2004, bringing in a series of changes in the regulatory framework entailed by Basel I. A new risk component, operational risk, was added to credit risk and market risk. The assessment of the various risks would define minimum capital requirements for banks under the so-called pillar 1 of the Accord. Two further Pillars were included in Basel II, Pillar 2 corresponding to a supervisory review process that would entail additional capital requirements for banks on top of the ones defined by Pillar 1, and Pillar 3 introducing disclosure and market discipline principles. Importantly, Basel II had resulted in greater reliance on self-regulation and market discipline (Ibid.).
Further changes to the EU capital-requirement framework came in response to the 2008 financial crisis, with a third Accord, Basel III, increasing both quality and quantity of capital in comparison with the requirements entailed by Basel II, while also introducing a non-risk based leverage ratio along with two liquidity ratios, the Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR). (Ibid.)
Importantly, a further set of revisions of Basel III is underway at present, with the BCBS proposing a series of amendments to the regulatory framework entailed by the Accord. Potential changes could involve, for instance, capital floors, which entail that capital requirements cannot be lower than a floor calculated according to the Basel I framework, now considered obsolete.
For a detailed exposition of the revisions that may lead to Basel IV, we refer the reader to the European Parliament briefing listed among this study's references.

Moving away from the Basel Accords, another instance of the changes EU regulation keeps enduring over the years can be found in the insurance sector. Legislation for the industry has seen considerable transformation since 2016, with the introduction of the Solvency 2 Directive and the Insurance Distribution Directive.
The Solvency 2 Directive, which became fully applicable on insurers and reinsurers on 1 January 2016, entails risk-based capital requirements, governance and risk-management requirements and supervisory reporting and public information disclosure (European Commission).

The Insurance Distribution Directive (IDD), whose rules became effective on 1 October 2018, envisages, among other benefits for consumers and retail investors, greater transparency when it comes to pricing and costs of insurance products (European Commission).
Both new laws are expected to have a positive impact for all stakeholders in the insurance industry. (Marano, Siri, 2017)

A further instance of the evolution that the EU regulatory framework continues to be part of can be found in the banking union envisioned for the 27 Member States by the European Commission, created in response to the 2008 financial crisis and the result of a series of initiatives forming a single rulebook for financial actors in the EU, including stronger prudential requirements for banks, improved protection for depositors and rules for managing failing banks. (European Commission)
A Single Supervisory Mechanism (SSM), under which the European Central Bank provides central prudential supervision to financial actors in the EU, and a Single Resolution Mechanism (SRM), which covers the orderly restructuring by a resolution authority of a failing bank or a bank likely to fail, are the first two pillars of the banking union and are already in place and effective. However, the union is not complete, with additional measures needing implementing, including a system for deposit protection, in light of which a European deposit insurance scheme (EDIS) was proposed by the Commission back in 2015 but is yet to be established. (European Commission)

The instances discussed above show that the EU regulatory landscape for financial services is very dynamic. At present, regulation in the UK is very aligned to that of the EU, by virtue of both the UK's Union membership, which required abiding by EU law, and also the British role of influence in shaping EU legislative initiatives. As a result, obtaining positive equivalence determinations within the EU regulatory regimes should be straightforward. From a short-term standpoint, therefore, access to the EU single market would seem to be warranted for UK firms, at least for those financial services for which EU regulation provides an equivalence regime, although access would inevitably be not as broad as in the case of EU or EEA membership, due to the limited scope of sectors that equivalence regimes apply to; nonetheless, the negative economic impact that would have resulted from a loss of access to the Single Market would be cancelled out, at least for services that fall within equivalence regimes.
As to a longer-term perspective, however, the impact with respect to the same sectors might be harder, due to a possible divergence between the regulatory frameworks of the UK and the EU. Future developments in EU legislation might lead to important distances from British law that the UK may be simply not willing to bridge. The British have been adamant in stressing how important it is to claim back control over their own legislation and have repeatedly stated that they will not be mere rule takers. Financial services in the UK and the EU might therefore see their regulatory landscapes diverge in time. If regulatory differences prove to be significant, potential positive equivalence determinations may be subsequently withdrawn by the EU. In that case, access to the Single Market via the equivalence rout would vanish and financial services providers in the UK would face the prospect of losing substantial market share. At that point, the economic impact of an EU exit on the UK industry could become significant.

2.4.3 Implications through UK regulation
Unless the UK decides to become a signatory party to the EEA agreement, whereby EU legislation would be binding for UK regulation, Brexit introduces the possibility for the UK to bend its financial regulatory framework as it pleases.
The UK may be interested in loosening its regulatory landscape for financial services in order to attract more business into the London hub, similarly to what offshore financial centres such as Hong Kong and Singapore have done. However, it remains to be seen whether less strict regulation would indeed be seen as an advantage by financial services actors. Even though a looser regulatory framework might bring in benefits for financial-services providers, at the same time financial stability, deemed increasingly important by investors and financial services providers alike, may suffer.
Besides, as MacFarlanes (2016) argues, different factors seem to indicate that future drastic changes to UK financial-services regulation might be improbable.
Firstly, the UK is keen on maintaining access to the EU single market for UK based financial firms. As already discussed, financial services are a key sector to the UK economy and the EU single market provides a major source of business for services providers based in Britain. Even without an EU passport granting firms general access to the Single Market, as discussed earlier, equivalence regimes may still allow UK-based businesses to operate in the EU. By loosening its regulatory framework and diverging from EU legislation, the UK would increase the likelihood of any positive equivalence determinations being withdrawn or ruled out to start with, henceforth hindering access to the EU single market and potentially eroding major revenue for UK-based financial services providers.
Secondly, recent developments with regard to EU financial-services legislation have been strongly shaped by British influence, an indication that the UK's interests are certainly represented in the EU regulatory framework. An instance of such influence on EU legislation is the Solvency II Directive, which was shaped by the UK to match British relevant legislation and raise the standards of European insurance capital requirements; another example can be found in the Capital Requirements Directive and Regulation, whereby the UK is allowed to set high capital reserve standards for financial institutions based in the EU while being able to set higher rates at the national level. (City of London Corporation, June 2016, pp 5)
Therefore, it seems difficult to envisage how the UK might want to move away from EU legislation it played an important role in bringing forth.
On the other hand, it is easy to foresee that the UK will not enjoy the same level of influence on EU legislation that it has been able to as an EU member state. As a matter of fact, even EEA/EFTA countries, despite abiding by EU legislation, have little influence on EU law-making, which would lead us to think that the UK, in light of its third-country status, would enjoy a similarly limited influential role. Therefore, while the UK would not seem to be inclined to move away from recent legislative initiatives on which it played an influence role, it remains to be seen whether the UK would stand by future new legislation that it may not approve of and has little influence on.
Thirdly, legislative initiatives for financial services have had standards set on the international stage since the Great Recession (2007-2009). EMIR, for instance, has fundamental basis in commitments made at the G20 held in Pittsburgh in 2009 (MacFarlanes, 2016). Hence, given that the UK is still bound to the commitments it made, room for regulatory divergence would therefore be inevitably limited.
In light of the above, although the UK is presented, on the other side of Brexit, with the opportunity to make changes to its legislation regardless of EU law with the aim of

loosening its regulatory framework, in light of the role of influence played by the UK in shaping EU legislation and, as a result, its own, considerable divergence from EU regulation, at least in the short term, is unlikely.
In the long run, with the UK's influential role possibly waning, the UK might opt to diverge from future EU legislation. As a result, potential equivalence determinations that allow UK-based financial firms access to the Single Market might be at risk. That, coupled with an increasing aversion towards regulatory races to the bottom among businesses and investors, would lead us to expect no drastic regulation overhauls in the UK.

2.5 Implications through cluster engines

Brexit can have repercussions on the financial services sector in the UK not just through regulatory implications that can result in a potential loss of access to the EU single market, but also through a potential negative impact on the cluster benefits that the sector enjoys. We discuss in the next section what implications Brexit may imply for one cluster engine through the immigration system.

2.5.1 Brexit and immigration

As previously discussed, the labour pool is one of the major cluster engines that make London and the UK the prominent global financial centre that it is today. However, Brexit is bound to cause important changes to the UK's immigration system, entailing significant implications for financial-services professionals in the UK, potentially impacting the ecosystem those workers are part of and the cluster benefits they contribute to.
The UK government detailed its intentions as to the future developments of the country's immigration system in a White Paper published in December 2018. The publication envisages an end to the free movement of workers which has been in place by virtue of the UK's EU membership and a shift from an immigration system based on where migrants come from to one based on skills.
The current UK immigration framework is composed of two parallel systems, one for EU citizens and another for non-EU nationals. As to the former, by virtue of the EU Free Movement Directive, which continues to be implemented in UK law until Brexit materialises, EU citizens are entitled to the right to reside and work in the UK, with no need for individual immigration status. (White Paper, December 2018, 1.2) On the other hand, as regards citizens from a country outside of the EU, UK immigration law applies and permission to enter and remain in the UK is necessary, under the Immigration Act 1971.(Ibid., 1.4) In particular, with respect to economic migration, the UK policy has been a very selective one for non-EU nationals since 2010, with migrants needing sponsorship by employers or a place of study at colleges/universities in order to move to the UK. (Ibid., 3.2)
However, once the UK leaves the EU, the White Paper informs us, the UK government intends to apply a similarly selective policy to EU migrants and subject both EU and non-EU nationals to a single, skills-based immigration system (Ibid., 3.3), in light of the general principle put forth by the Migration Advisory Committee (MAC) that it should be easier for higher-skilled workers to migrate to the UK than lower skilled workers.
Parameters such as salary levels, qualifications and skill levels will help determine the status of all migrants, regardless of their nationality.
The newly designed system will include, on recommendation by the (MAC), changes that favour such skills-oriented approach. Among such changes, for instance, the White Paper

brings forth the abolishment of caps on skilled migration, which currently see a limit of 20,700 places for the main immigration high-skilled route. (Ibid., 6.13)
Moreover, the current immigration framework contains a sponsorship system, by which migrants from outside the EU need to be sponsored by their employer in order to work in the UK. On the other side of Brexit, sponsorship arrangements will apply to EU nationals as well. Furthermore, the White Paper informs us that the sponsorship system will not just broaden its scope, but it will also face reforms aimed at making the process of hiring skilled migrants more streamlined and efficient for UK employers.
The presence of a minimum-salary threshold (of £30,000) in the current framework, which will remain in the new immigration system and apply to all migrants, including EU nationals, might be an important obstacle for skilled migrants at the start of their careers. Graduate entrant jobs, however, will be subject, as they are under the current framework, to a lower threshold (Ibid., 6.25), diminishing the potential negative impact on the numbers of EU nationals in the UK labour force.
A potential dent in the depth of the UK labour pool as a result of the new immigration policies may be counteracted further by the introduction of a youth mobility scheme for EU citizens similar to arrangements already in place between the UK and different countries, including Australia, Canada and Japan. Such arrangements allow people between 18 and 30 years of age to reside in the UK for up to 2 years to either work or study. A youth mobility scheme between the UK and the EU is put forth in the White Paper. However, it remains to be seen whether the EU is open to such a possibility and what exact arrangement would result from negotiations between the two sides.

A reformed immigration system for the UK may have an impact on the country's labour pool through its implications for university students, not just workers. Among the factors affecting prospective students' decisions on study destinations, one certainly concerns the prospects they are presented with after graduating. EU prospective students might decide against applying to UK universities if permanent residence after graduation is not an option anymore because of Brexit.
On the other hand, more international students from a country outside of the EU might decide to study in the UK if the newly designed immigration system is more favourable for them compared to the current framework.
The overall impact on the total influx of international students and its consequential potential effect on the UK's labour pool might depend on the potentially contrasting implications of the future immigration system for EU prospective students on one side and non-EU prospective students on the other.
The White Paper informs us that "generous work rights will be afforded to those studying full time at degree level", which would work in favour of both EU and non-EU international students.
Among the changes concerning international students, the new immigration system will see an increase in the post-study leave period that international postgraduate students are entitled to, with the new limit set at 6 months. According to the Paper, this change will 'benefit tens of thousands of postgraduate students by providing them with more time to gain valuable experience or find employment in the UK in accordance with the skilled work migration routes.'(Ibid., 7.12) It remains to be seen, however, whether a mere post-study leave-period extension will have enough of a counteracting effect on the negative impact that Brexit may have on many EU nationals' decisions on whether to study in the UK.

On the other hand, the UK is renowned for its world-leading education system, with its universities constantly performing well in rankings and attracting top talent from all over the globe. For many prospective students, including EU nationals, Brexit may not be enough of a deterrent as the opportunity to study in the UK may outweigh a potentially narrower range of opportunities after graduation.

Any impact of Brexit on the UK's labour market and, particularly, its financial services' labour market, through the new immigration system, however, might not be seen in the short term after the UK leaves the EU, as the implementation of the new system will be carried out through stages. The UK officially departed from the EU by means of the European Union (Withdrawal) Act 2018, which revoked the European Communities Act 1972. In doing so, however, current EU law was converted into UK law so that continuity of law could be maintained until changes were brought forward by the British parliament. (Ibid., 14.1)
A similarly phased process is envisaged in the White Paper for immigration, with UK law allowing for free movement of people to be in place for European citizens even after the UK left the EU. Free Movement will cease (except for Irish citizens) once the Immigration and Social Security Co-ordination (EU Withdrawal) Bill, which will revoke retained EU law, is enacted and commenced. (Ibid., 14.2)

Considerations on a potential negative impact that different immigration arrangements may have on the UK labour market may be mitigated by literature on the impact of EEA migration in the UK, including a 2018 MAC report, whose evidence implies an impact on the UK labour market which is, on average, small. (Ibid., pp 112)

Recognising that an element of uncertainty surrounding estimates on future migration numbers is inevitable, warning readers to take such numbers cautiously, the White Paper estimates that annual inflows of EEA long-term workers could decrease by as much as 80%. However, it must be noted, the largest share of EEA citizens working in the UK is found in low-skilled jobs, meaning that the decrease in migrants would largely relate to professions that do not concern financial services. (Ibid., pp 116)

Salary and skills thresholds are bound to have a negative impact on the labour supply of EEA workers because of its current high proportion of low-skilled workers.
The labour pool for financial services, though, is mostly composed of medium- to high-skilled workers and wages in the sector, even for entry level positions, are relatively high. Consequently, although other factors may affect a prospective migrant's decision to relocate to the UK, including sponsorship requirements and visa fees, which would make the process of migrating to the UK burdensome and could affect the labour market as a whole rather than just low-skilled intensive sectors, the thresholds are likely to have little impact on the UK financial services sector.

A further consideration relates to the proportion of EEA workers to the UK financial-services labour pool: a significant variation of the future influx of EEA migrants will only have a considerable impact on the supply of financial-services professionals if the current UK labour pool is already significantly dependent on EEA workers. In such regard, the White Paper informs us that the proportion of EEA inflows on the total resident labour pool is very

small for financial services, with an estimated annual flow of just above 0.2%. In light of this, even drastic drops of the number of EEA inflows via the newly designed immigration system are bound to have little effect on the total supply of workers for the sector.

Considering that the labour pool for financial services is high-skill intensive, an immigration system based on skills rather than talent might lead to consequences for the sector in the UK not as severe as feared when the 2016 referendum made Brexit inevitable. UK financial-services firms' access to talent will be affected by the actual burden that the new immigration system may have on EU migrants but also the benefits it may entail for non-EU incoming workers.

Concluding remarks

The financial services sector in the UK enjoys important cluster benefits that make it stand out among financial centres across Europe. Although Brexit is certainly bound to result in some loss of EU market share for UK-based financial services providers, as an EEA membership is not an option for the UK and the EU's equivalence regimes do not provide the same access to the Single Market that is granted to Member State firms, the competitive edge London enjoys over the rest of Europe is expected to stay on the other side of Brexit, due to the fact that no European hub has an ecosystem as complete as London does. We were able to see that in the relocations out of the UK that have taken place so far across Europe, which provide us with no clear winner and see London only impacted to a certain extent. On the other hand, the long term may see London and the UK suffer more as financial centres across Europe aim to increase their competitiveness and capacity and consequently enjoy cluster benefits to a higher extent.

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