WHAT DO EU CAPITAL MARKETS LOOK LIKE ON THE OTHER SIDE OF BREXIT?

ANALYSIS OF THE SIZE AND DEPTH OF CAPITAL MARKETS IN THE EU27

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> This report shows that post-Brexit capital markets in the EU will be significantly smaller and less developed relative to GDP than they are today. The UK's current dominance of EU capital markets activity will be replaced by the dominance of France and Germany.

What do EU capital markets look like post-Brexit?

With Brexit just a few weeks away, this short paper presents a snapshot of what capital markets in the EU will look like on the other side after the departure of the UK. It makes for sobering reading: in short, EU capital markets will be significantly smaller and less developed than they are today, and the EU economy will be even more reliant on a struggling banking sector than it is today. Brexit also means that the EU will replace the current dominance in capital markets of the UK with an effective duopoly of France and Germany, who between them will account for nearly 45% of all capital markets activity in the EU.

This is likely to lead to a shift in the tone and direction of policy around capital markets in Europe, not least on the future of the capital markets union initiative and the future supervisory framework. The EU will lose its largest and deepest capital market and the supervisory and regulatory expertise that has built up in the UK over many decades. The EU will also lose a significant part of its footprint in global capital markets, with its share of global activity shrinking by one third.

At the same time, large parts of EU capital markets activity will effectively be based offshore in the UK - particularly in sectors such as trading and asset management where firms have chosen to concentrate large parts of their EU activity in London. In highlighting the relative underdevelopment of capital markets in the EU27, the report also underlines the urgency for policymakers across Europe to focus on developing bigger and better capital markets to support growth and investment in the EU economy.

Sample & methodology

We analysed the size and depth of capital markets in the following 26 different sectors of activity in all 28 EU countries:

> Pools of capital: pensions assets, insurance assets, household retail investments (exc pensions, insurance, cash deposits & unlisted equity)
> Equity markets: stock market, IPOs, secondary equity issues, convertible bonds, equity trading volumes
> Bond markets: corporate bond market value, all bond market value, investment grade bond issuance, high-yield bond issuance, bank lending relative to corporate bonds
> Loans & securitisation: value of outstanding securitisation, securitisation issuance, leveraged loan issuance
> Assets under management: assets under management, investment funds by domicile
> Corporate activity: M&A by target nationality, M&A by acquiror nationality, domestic M&A
> Private equity & venture capital: private equity activity, venture capital activity, private equity fundraising
> Trading: OTC derivatives trading, foreign exchange trading

(Note that for the analysis of market share by country in each sector, we also included four additional sectors: bank assets, bank deposits, bank lending to corporates, and hedge fund assets.)

We measured the size of capital markets in each country by the average share of total EU capital markets activity across all sectors. This approach helps to include sectors of vastly different value: the value of stock markets runs into trillions in large countries, while in most countries venture capital is measured in the tens of millions.

We measured the depth of capital markets in each country and sector by the value of activity as a percentage of GDP on a three-year average from 2015 to 2017 to iron out the annual volatility in capital markets. To enable a comparison between different sectors we rebased these percentages in each sector to the EU average, with 100 representing the average depth across the EU in the three years to the end of 2017.

For example, the combined value of EU stock markets in the three years to 2017 was 73% of combined EU GDP. We rebased this 73% to 100, meaning that a country with a score of 50 has a stock market that is half as deep relative to GDP as the EU average, and one with a score of 200 is twice as deep. The overall depth in each country is the average of the depth in individual sectors. While this methodology has the advantage of simplicity, in a handful of countries with a particularly large sector relative to GDP (for example, investment funds by domicile in Luxembourg) it can distort the overall ranking. To reduce these distortions, we capped each metric at two standard deviations from the mean for every country.

SUMMARY

Here is a short summary of this report:

1. **That shrinking feeling:** Brexit means that the EU is losing its largest and deepest capital. The UK accounts for nearly a third (31%) of all capital markets activity in the EU across 26 different sectors that we analysed, meaning that EU capital markets post-Brexit will be nearly a third smaller than they are today. The UK's share of activity today is nearly double that of France - and more than France and Germany combined.
2. **A smaller global footprint**: Brexit will significantly reduce the EU's global footprint in capital markets. Today the EU is the second largest capital market in the world with a combined share of 21% of global activity. That is nearly half the size of the US, but a significant lead over its nearest rival China. The departure of the UK will reduce this share of global activity to 14% - around one third the size of the US and roughly the same as China.
3. **The impact by sector:** the impact of Brexit on the size of capital markets in the EU will vary hugely between different sectors. In derivatives and foreign exchange trading, activity in the EU27 is only around one fifth of the wider EU. Bond markets in the EU will be around one fifth smaller, equity markets will shrink by around one quarter, while pensions assets and assets under management will shrink by more than half.
4. **Less developed:** in addition to being significantly smaller, capital markets in the EU will be less developed relative to GDP than they are today. Capital markets in the UK are roughly twice as deep relative to GDP as in the rest of the EU, meaning that on the other side of Brexit the overall depth of capital markets in the EU will shrink by around one eighth.
5. **A wide range:** there is a wide range in the depth of capital markets in the EU27 between different sectors. In all but two sectors markets in the UK are bigger relative to GDP than in the EU27. In some sectors of the fixed income market, such as high-yield bond issuance and leveraged loans, Brexit will have a minimal impact on the depth of EU capital markets, but in others, such as pensions and asset management, the depth of EU capital markets relative to GDP will fall by nearly one third.
6. **Banking on banks:** Brexit means that the EU economy will be even more exposed to a struggling banking sector than it is today. The share of corporate debt coming from bank lending in the EU27 is 77% (compared with 74% if you include the UK), with corporate bonds representing just 23% (versus 26% for the wider EU). Market-based financing, such as stock markets or corporate bonds, will represent a smaller share of GDP in the EU post-Brexit than today.
7. **Safety first:** the same effect is apparent with savings and investments. The share of household financial assets held in bank deposits in the EU will increase slightly as a result of Brexit to 32%, while the share held in pensions or insurance products will fall. Total household assets as a percentage of GDP in the EU will decrease by around one tenth to 224%.
8. **A loss of UK dominance:** the UK currently dominates EU banking and finance and is the largest market in the EU in 24 out of 30 sectors that we looked at (France is the largest market in four sectors). This has given the UK an outsize influence in EU banking and finance: it will lose much of that influence, and the EU will lose much of the UK's experience.
9. **Vive le Brexit?:** France will be by far the biggest capital market in the EU on the other side of Brexit with a share of total activity of around 24%, ahead of Germany on 19%. It will be the biggest market in the EU in 14 of the 30 sectors we looked at, ahead of Germany with 10 sectors.
10. **A change in tone and direction:** this shift in influence from the UK to France and Germany is likely to lead to a change in the tone and direction of policy and regulation in EU capital markets on the other side of Brexit. Not least, the capital markets union initiative is likely to look very different under the leadership of France and Germany than it does today.

A changing landscape

One of the most immediate impacts of Brexit is that the EU is losing its largest capital market, and as a result capital markets in the EU will be significantly smaller on the other side of Brexit than they are today. Fig.1a ranks countries in the EU by the size of their capital markets as measured by their average share of EU capital markets activity across 26 sectors.

The UK dominates the rankings with an average share of nearly 31% of all capital markets activity in the EU. This is nearly double the size of capital markets in its nearest rival France (in second place with a share of 16%). To put the UK's dominance in perspective, its capital markets are slightly larger than France and Germany combined.

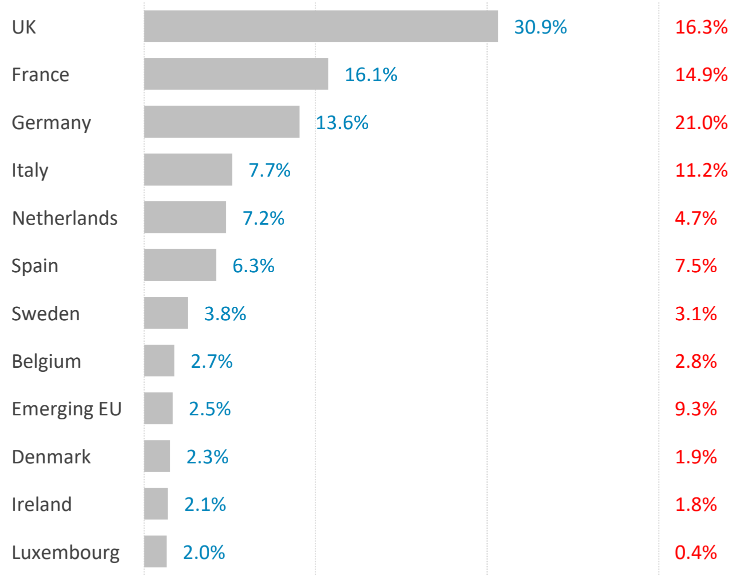
On the other side of Brexit, France will take the place of the UK as the largest capital market in the EU with a share of 24% of EU27 activity. Germany will be second with 19%, and Italy and the Netherlands will account for 11% each.

Another immediate impact of Brexit is that the EU will have a reduced global footprint. Fig.1b shows that the EU has the second biggest capital markets in the world with a share of 21% of global capital markets activity. This is around half the size of capital markets in the US but significantly bigger than China. Without the UK, the EU's share of global capital markets activity will shrink by nearly a third to just 14%. That is less than one third the size of markets in the US and about the same share as China.

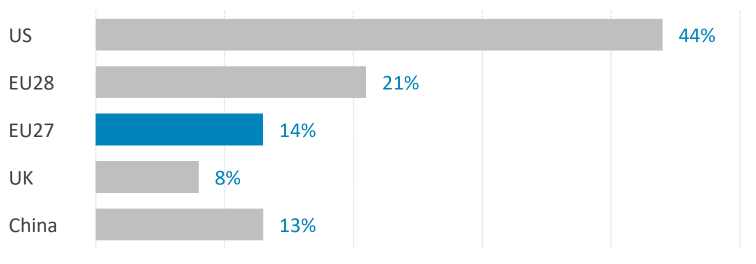
Capital markets in Asia have already overtaken European capital markets (see Fig.1c). In our recent report '*The New Financial Global Capital Markets Growth Index*' we found that even without taking into account the impact of Brexit, capital markets in Europe are likely to grow at only half the rate of global capital markets over the next decade. Without a renewed sense of urgency, in 10 or 20 years' time capital markets in the EU will represent a significantly smaller share of global activity than they do today.

Fig.1 The size of capital markets in the EU by country

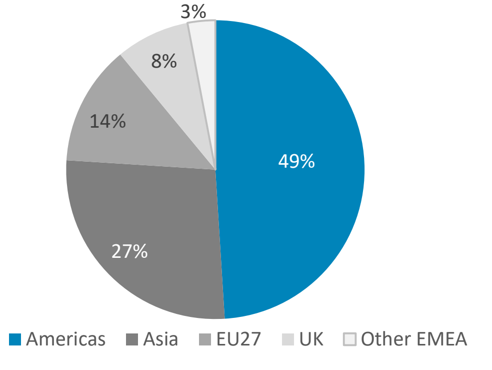
a) Size of capital markets in a selection of EU countries measured by the average share of total activity across 26 different sectors in the three years to 2017, %
Note: the column in red shows each country's share of EU GDP



b) Share of global capital markets activity: US, EU28, EU27, UK and China



c) The share of global capital markets activity by region



Source: New Financial

EU CAPITAL MARKETS WILL BE SMALLER - BY SECTOR

That shrinking feeling

The starting point for any analysis of the impact of Brexit on capital markets is understanding how big markets are in the EU27 compared to markets across the whole of the EU today.

Fig.2 shows the value of capital markets activity in the EU27 as a percentage of total activity in the EU in different sectors. As a benchmark, the UK accounts for roughly 16% of EU GDP, so any sector where the EU27 share is less than 84% - virtually all of them - shows that capital markets in the EU27 are less developed than in the UK.

On average, activity in the EU27 is nearly one third smaller than in the EU as a whole across 26 different sectors. The only sector where the share of the EU27 is bigger than its share of GDP is in investment funds by domicile. This highlights the challenges for the EU27 on the other side of Brexit and the urgent need for action to boost capital markets.

The gap is less pronounced in bond markets, where the EU27 accounts for between 75% and 78% of all activity in the EU (although it is worth noting that while bond markets activity in the EU27 has grown strongly over the past decade, the gap in depth with the UK has widened).

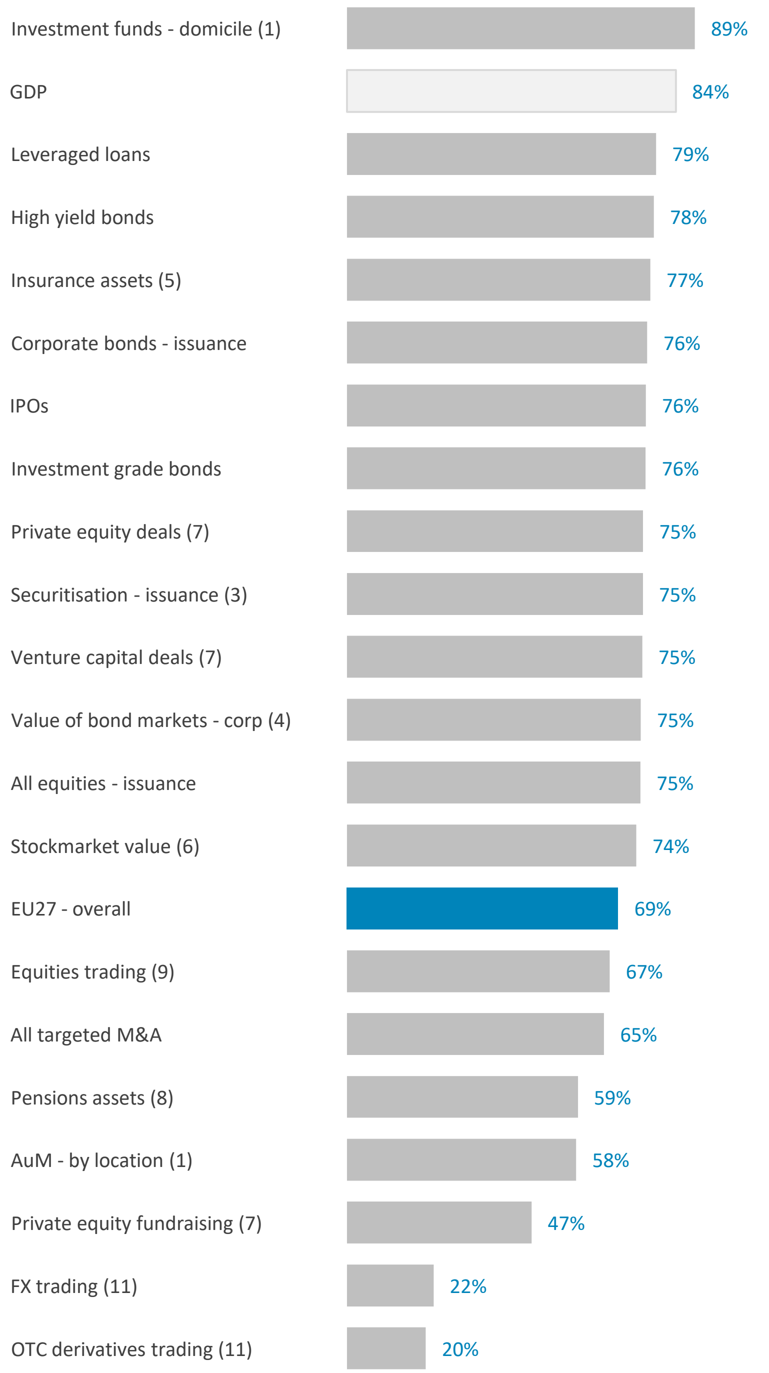
The gap is slightly wider in equity markets, where the EU27 accounts for around 73% of all activity in the EU (equities trading 67%, equity issuance 75%, IPOs 76% and stock market value 74%).

Towards the bottom end of the table, pensions assets in the EU27 represent just 59% of all pensions assets in the EU (and around 40% of those assets are in the Netherlands), and the EU27's share of assets under management is just 58%, slightly lower than its share before the financial crisis.

The lowest share for the EU27 is in derivatives and FX trading, where just one fifth of activity in the EU takes place outside of the UK. This reflects London's dominance as a financial hub, and is proving to be one of the main challenges for policymakers and the industry around Brexit.

Fig.2 The size of capital markets in the EU27

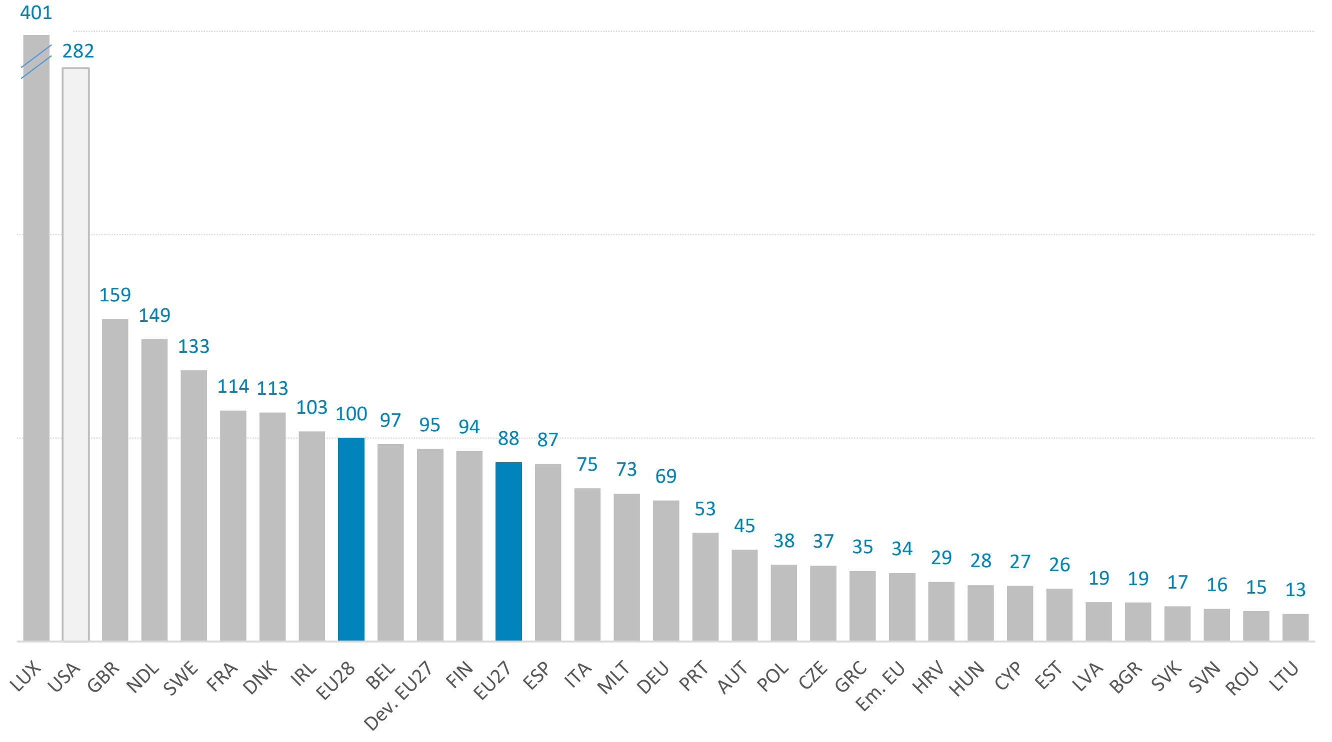
The value of EU27 activity by sector as a share of total EU activity in the three years to 2017, %



Sources: all data from Dealogic except 1) EFAMA 2) Eurostat 3) AFME 4) ECB / BIS 5) Insurance Europe / EIOPA / US Treasury 6) WFE / local exchanges 7) Invest Europe / NVCA / AIC / Preqin 8) OECD / EIOPA / Willis Towers Watson 9) Fidessa / WFE 10) ECB 11) BIS survey (from 2016)

Fig.3 The depth of capital markets

The average depth of capital markets relative to GDP across 24 different sectors of activity in the three years to 2017
Rebased to EU average = 100



Source: New Financial

A wide range

The range in the depth of capital markets across the EU is far greater than the difference in depth between the EU and the US, or between the EU27 and the UK. Fig.3 shows the wide range in the depth of capital markets across 24 sectors of activity in each country over the three years to 2017, rebased to the EU average of 100.

Capital markets in the US are nearly twice as large relative to GDP as in the UK, which in turn is roughly twice as deep as in the rest of the EU. If the depth of capital markets in the EU28 today is 100, the depth of capital markets in the EU27 is just 88. Luxembourg has the deepest capital markets in the EU (401), mainly because of its role as a regional hub for investment funds, but in terms of size its capital markets are very small (2% of EU activity). The UK (159) has by far the largest capital markets in the EU and also the deepest of any large economy.

There are three clear groups of countries in terms of the depth of their capital markets. The first group is made up of wealthier countries in the north west of the EU such as the UK, the Netherlands, Sweden, France, and Denmark. These countries have capital markets that are significantly more developed than the EU average (mainly because of their large pools of pensions assets, stock markets and corporate bond markets).

The countries in the second group have relatively developed capital markets but less developed than the EU average (between 69% and 97% of the EU average) and there is a big disparity between the depth of capital markets and the size of their economy. Three out of the four biggest economies in the euro area - Germany, Italy and Spain - have capital markets that are significantly less developed than the EU average. And finally, there is a long tail of smaller economies with much less developed capital markets (between 13% and 53% of the EU average). These countries are Austria, Greece, Portugal, Cyprus and the most recent member states to join the EU from the Baltic region and Central and Eastern Europe.

Playing catch-up

Brexit highlights the relative under-development of capital markets in the EU27 and underlines the need for policymakers across Europe to take concerted action to boost capital markets.

Fig.4 shows the depth of different sectors of capital markets in the EU27 and in the UK (that is, the value of activity relative to GDP). In each sector the average depth across the EU28 has been rebased to 100, the numbers in blue show the depth of activity in the EU27, and the numbers in red show the depth of activity in the UK. Markets in the UK are deeper than the EU average in the vast majority of sectors and as a result markets in the EU27 are less developed than the EU average.

On average, markets in the EU27 are just over half as developed relative to GDP as in the UK, and are only deeper in three sectors: household retail investments (excluding pensions and insurance products), bank lending to companies, and the value of investment funds by domicile.

Deep pools of long-term capital are the starting point for deep and effective capital markets, but pensions assets in the EU27 are little more than a quarter as large relative to GDP as in the UK (in other words, if pensions assets were as deep as in the UK, they would be four times larger). If you combine pensions and insurance assets, pools of long-term capital in the EU27 are around half as deep as in the UK.

Bond markets in the EU27 are around two thirds as developed as in the UK, while equity markets are only around 60% as large relative to GDP as in the UK. Private equity and venture capital activity are around 60% as developed as in the UK.

Brexit will bring significant challenges for capital markets but it also presents an opportunity for growth. According to our report *'Unlocking the growth potential in European capital markets'* if EU27 countries closed the gap with the deepest markets it would mean an additional €575bn per year in capital markets funding for companies and nearly €19tn in additional long-term capital that could be put to work in the economy.

Fig.4 The depth of EU27 capital markets relative to the UK

Depth of capital markets by sector in the EU27 and the UK, adjusted for GDP, in the three years to 2017

Sources: all data from Dealogic except 1) EFAMA 2) Eurostat 3) AFME 4) ECB / BIS 5) Insurance Europe / EIOPA / US Treasury 6) WFE / local exchanges 7) Invest Europe / NVCA / AIC / Preqin 8) OECD / EIOPA / Willis Towers Watson 9) Fidessa / WFE 10) ECB

Kicking the habit

While there are some encouraging signs that companies in the EU have begun to reduce their reliance on bank lending over the past decade, the EU27 economy will be more reliant on and more exposed to a struggling banking sector than the EU is today.

Fig.5 shows the extent to which companies in the EU, the UK and the EU27 rely on bank lending as a source of funding.

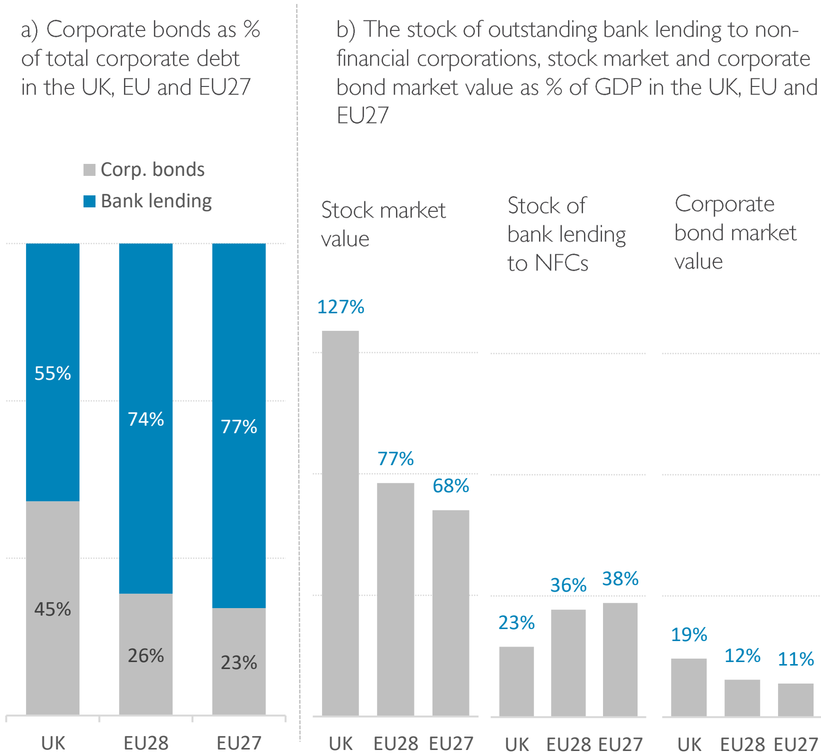
On average, bank lending represents 74% of corporate borrowing for EU companies and bond markets account for 26% (Fig.5a). This is the inverse of the US, where bank lending accounts for just 26% of corporate borrowing. In the UK, corporate bonds represent nearly half of all corporate debt (45%) compared to just 23% in the rest of the EU.

Stock markets and corporate bond markets in the UK are around double the size of stock markets and corporate bond markets in the EU27 relative to GDP (see Fig.5b). On the flipside, the value of bank lending to companies in the EU27 is roughly a two thirds bigger relative to GDP than bank lending in the UK.

The starting point for deep and effective capital markets is deep pools of long-term capital - but households in the EU27 are just as dependent on bank deposits as companies are on bank lending. Fig.6 shows how households in the EU, UK, and EU27 invest their assets. In the EU27 nearly a third (32%) of their financial assets are in bank deposits, a third of assets are held in pensions and insurance products (with insurance taking the lion's share), and the rest is invested directly in stocks, bonds and funds.

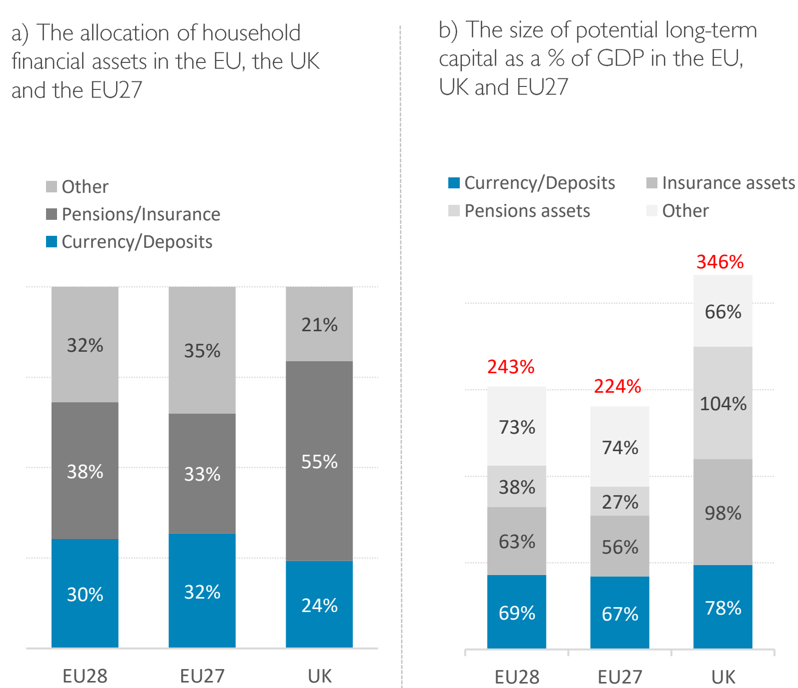
Fig.6b shows the total size of financial assets in the EU, UK and EU27 relative to GDP. Total financial assets in the UK are 50% bigger than in the EU27 relative to GDP and much bigger compared to any of the other big economies in the EU. This difference is mainly explained by pensions. Pensions assets in the UK are nearly four times bigger relative to GDP than in the EU27.

Fig.5 The reliance on bank lending



Source: ECB, New Financial

Fig.6 Pools of capital



Source: ECB, New Financial

A single EU hub

Perhaps the most striking aspect of capital markets when it comes to Brexit is how dominant the UK capital markets are today within the EU and how consistent that dominance is across sectors.

Fig.7 shows the share of EU capital markets activity of the top three countries and of the rest of the EU28 member states in the three years to 2017 across different sectors. The UK is the largest market in 80% of the financial sector metrics that we looked at (24 out of 30). In other words, Brexit means that the EU will be losing its largest market in the vast majority of the different sectors of banking and finance.

The UK's dominance is most pronounced in sectors where firms can choose the location of a particular activity: for example, around 80% of hedge funds assets, OTC derivatives trading and foreign exchange trading in the EU is conducted in the UK, and the UK accounts for over 40% of all assets under management and more than half of all private equity fundraising.

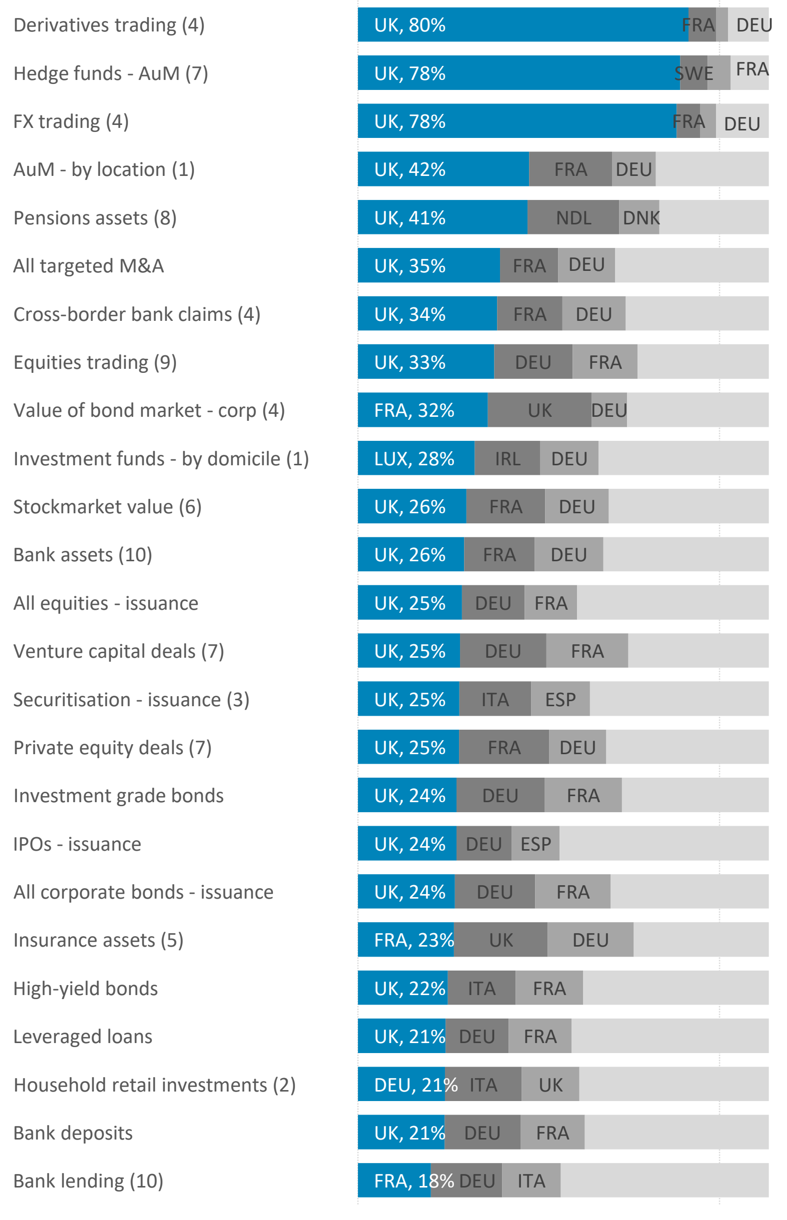
This reflects London's role as the dominant hub in European banking and finance which has accelerated over the past 20 years within the single market. However, this dominance is also evident in sectors based on the nationality of activity, such as pensions assets, M&A and stock market value, which underlines the high level of development of UK capital markets.

France is the biggest market in the EU today in four sectors (value of corporate bond market, insurance assets, bank lending to corporates, and convertible bonds), and it is the second largest market in another 10 sectors. Germany and Luxembourg are the largest markets in just one sector each.

The few areas where the UK does not have the biggest market are the value of corporate bonds and insurance assets (where it ranks 2nd), investment funds by domicile (5th), household retail investments (3rd), bank lending (4th), and foreign direct investments in the financial services industry (3rd).

Fig.7 The concentration of financial activity in the EU

Share of financial activity of the top three countries in the EU by sector



Largest market in EU28 out of a total 30 financial market metrics:

UK: 24 France: 4 Germany: 1 Luxembourg: 1

Overall share of EU28 capital markets activity:

UK: 31% France: 16% Germany: 14% Luxembourg: 2%

Sources: all data from Dealogic except 1) EFAMA 2) Eurostat 3) AFME 4) ECB / BIS 5) Insurance Europe / EIOPA / US Treasury 6) WFE / local exchanges 7) Invest Europe / NVCA / AIC / Preqin 8) OECD / EIOPA / Willis Towers Watson 9) Fidessa / WFE 10) ECB

Balance or fragmentation?

Brexit means that capital markets in the EU will become a lot more French: that is, France will have a market share in the EU27 that is almost as dominant as that of the UK in the wider EU today.

That is likely to lead to a shift in the tone and direction of policy around capital markets in the future. For example, a capital markets union in which the largest market is France is likely to look very different to a CMU in which the largest market is the UK.

Fig.8 shows the distribution of banking and finance activity across the EU27 in each sector. France is the largest market in nearly half of the sectors we looked at (14 out of 30), and its overall share of capital markets activity in the EU27 will be 24%.

This is a clear margin ahead of Germany, which will be the largest market for banking and finance in 10 sectors with an overall market share of 19% (the Netherlands is a distant third with 11%). Between them France and Germany have a duopoly in 21 out of 24 sectors, underlining the extent to which they will dominate post-Brexit capital markets in the EU.

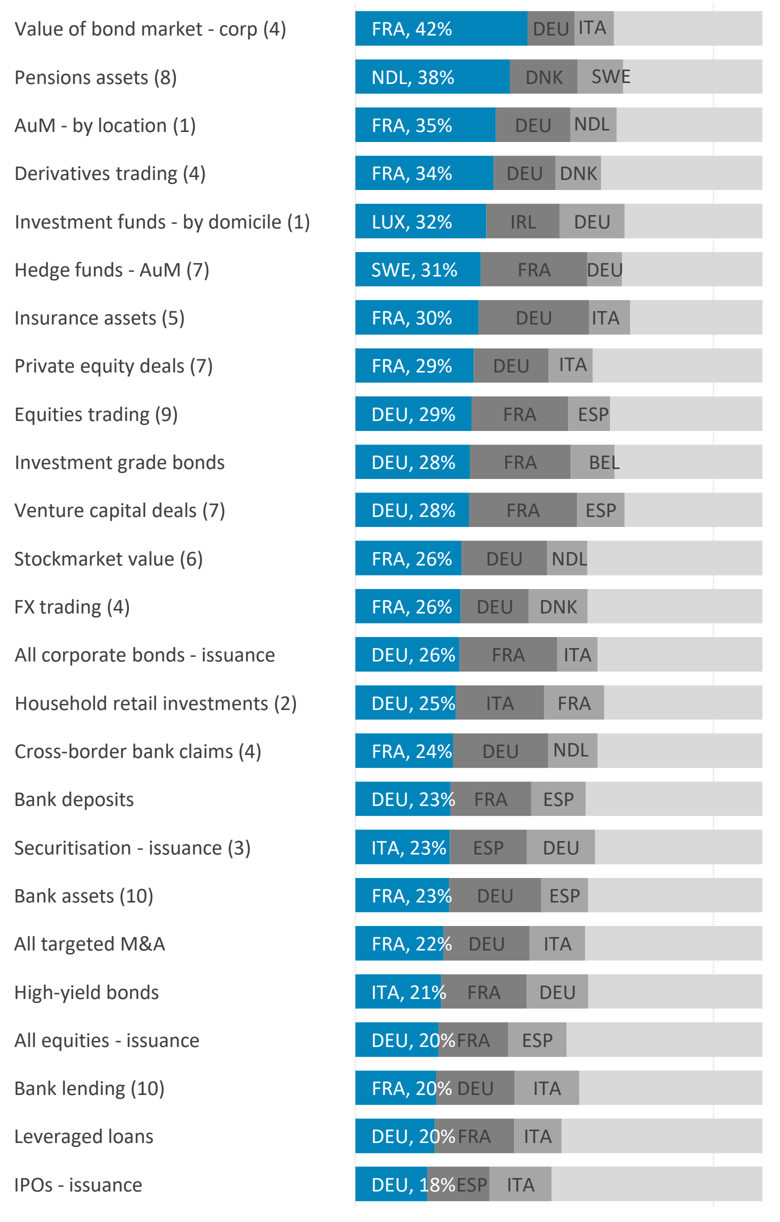
France will be the largest market in many of the most important sectors of banking and finance: such as the value of bank assets, insurance assets, stock market, corporate bond market, assets under management, bank lending to companies, and trading in derivatives and FX. This supports France's pitch to be the biggest financial centre in the EU on the other side of Brexit.

The overall concentration is not hugely affected by Brexit as the average share across all sectors of the top three countries in the EU27 is 62% compared to 65% in the EU. However, the distribution of activity across the EU27 is more balanced than today, with some smaller economies dominating individual sectors.

For example, the Netherlands will account for nearly 40% of all pensions assets in the EU27, Sweden nearly one third of hedge fund assets, and Luxembourg one third of investment funds.

Fig.8 The concentration of financial activity in the EU27

Share of financial activity of the top three countries in the EU27 by sector



Largest market in EU27 out of a total 30 financial market metrics:

France: 14 Germany: 10 Italy: 2 Netherlands: 2

Overall share of EU27 capital markets activity:

France: 24% Germany: 19% Italy: 11% Netherlands: 11%

Sources: all data from Dealogic except 1) EFAMA 2) Eurostat 3) AFME 4) ECB / BIS 5) Insurance Europe / EIOPA / US Treasury 6) WFE / local exchanges 7) Invest Europe / NVCA / AIC / Preqin 8) OECD / EIOPA / Willis Towers Watson 9) Fidessa / WFE 10) ECB

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New Financial is a think tank that believes Europe needs bigger and better capital markets to help drive growth and prosperity.

We think this presents a huge opportunity for the industry and its customers to embrace change and rethink how capital markets work. We work with market participants and policymakers to help make a more positive and constructive case for capital markets around four main themes: unlocking capital markets; rebuilding trust; driving diversity; and the impact of Brexit.

We are a social enterprise funded by institutional membership from different sectors of the capital markets industry. For more information on our work, please contact us:

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