



DRIVING GROWTH: THE NEW FINANCIAL GLOBAL FINANCIAL CENTRES INDEX

ANALYSIS OF THE SIZE & GROWTH OF FINANCIAL
CENTRES IN 65 MARKETS AROUND THE WORLD

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> Our unique index measures the scale of banking and finance in more than 60 markets across more than 40 metrics of domestic and international activity. It also shows how different financial centres have grown over the past few years - and sets a benchmark to measure future growth and shifts in activity.

The New Financial Global Financial Centres Index

Brexit and the potential impact on the City of London has catalysed the debate around the relative strengths and weaknesses of different financial centres around the world. With Brexit now a reality and the debate on financial centres gaining more traction among governments, policymakers and regulators, we thought it was important to revisit this topic by updating and improving our research. The New Financial Global Financial Centres Index is an attempt to inform the debate by ranking financial centres primarily in quantitative terms based on the scale and value of financial activity.

Most existing studies on financial centres focus mainly on qualitative factors - in some cases 90% of the metrics used to produce the rankings are not based on the value of activity. In this report we focus mainly on measures of size and volume of financial activity to rank financial centres around the world. This approach captures the differences in scale between financial centres and identifies the relative position of each financial centre. We think that the actual value of activity in a particular financial centre (particularly international activity) is a better reflection of the attractiveness of that financial centre than qualitative metrics of perceived attractiveness. We also make a clear distinction between domestic and international financial activity, which provides separate rankings for the size of domestic and international financial centres. In addition, we have analysed how international different financial centres are by comparing international activity as a percentage of total activity in those sectors where we were able to do so.

Another key distinction to other studies is that our analysis is conducted at a country level rather than the city level for three reasons. First, it would be difficult - if not impossible - to allocate activity to different cities in the same country. Second, in most countries the majority of financial activity takes place in one city. And third, countries operate under distinct legal and regulatory frameworks.

In addition to our main index and rankings for domestic and international activity, this report includes an analysis of the change in financial activity since 2016, which enables us to see how financial centres have evolved over time and identify trends and changes in the rankings (such as the rapid growth of financial centres in Asia for international activity). We have also grouped the different metrics of financial activity into sectors which helps us identify the strengths and weaknesses of each financial centre (such as the dominance of the UK in FX and derivatives trading).

Finally, we also included a ranking based on the wider environment and ecosystem around the financial sector in each country and a ranking combining financial activity and wider environment metrics, which provide a broader picture and an insight into other factors contributing to the size and depth of financial centres.

We collected data from 2014 to 2019 for 65 countries around the world that represent around 94% of global GDP and roughly 95% of global financial activity. Our main dataset includes: 42 metrics of financial activity (21 domestic and 21 international), 18 metrics of the wider economic, political, business, regulatory and social environment, and 13 metrics measuring the share of international activity. For each metric and country we used a rolling three year average to 2016 and 2019 to iron out annual volatility in financial markets, assigned a score of a 100 to the country with the highest value in each metric, and rebased others accordingly (*for a detailed methodology see page 20*).

Our approach will enable us to track more effectively the relative shifts in activity over time between different financial centres resulting from Brexit and other geopolitical and economic trends. It is a work in progress that we hope will complement existing studies rather than replace them.

I would like to thank Eivind Friis Hamre and Michelle Hoh for their valuable contribution to the data collection, William Wright for his support and feedback, Dealogic and Prequin for providing access to much of the data, and our members for supporting our work on bigger and better capital markets. Any errors are entirely my own.

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Here is a short summary of this report:

- 1. The dominant global financial centre:** the US is the world's top financial centre by a wide margin: its overall score of 84 out of 100 is more than double that of the UK (35), and it is by the far the largest finance centre in absolute terms for both domestic activity (17 out of 21 sectors) and international activity (11 out of 21).
- 2. The dominant European financial centre:** the UK is by far the dominant European financial centre. Its overall score of 35 is nearly three times that of France, Germany or Luxembourg. The large gap between the US and the UK and the wider gap between the UK and the rest of Europe in our rankings compared with other studies is mainly because of the focus on quantitative metrics of financial activity rather than qualitative metrics.
- 3. Rising stars:** China is the third largest financial centre in the world, ahead of Japan, Hong Kong and Singapore. This is mainly because China has a huge domestic financial sector, which compensates for its relatively weak performance as an international financial centre. Markets in the Asia Pacific account for four of the top 10 financial centres and eight of the top 20 in the world, and have grown most rapidly since 2016.
- 4. Brexit and the City:** our rankings highlight the dominance of the UK as a financial centre in Europe. In terms of the overall size of domestic and international financial activity, the UK is nearly three times larger than France, Germany or Luxembourg. For international activity, which is most at risk from Brexit, the UK is in a league of its own: its score of 56 is more than double that of Luxembourg and roughly five times higher than Germany and France. It is too early to capture the impact of Brexit on international financial activity but the UK's lead in key sectors such as foreign equity trading and foreign bank assets will already have been dented.
- 5. Domestic activity:** the US is the dominant market for domestic activity with a score of 93 out of a possible 100. It is the largest market in 17 out of 21 metrics and its score is double that of China (47), which in turn is nearly double Japan's score of 25. The US domestic market is more than six times larger than the UK.
- 6. International financial activity:** the US is also the biggest market for international financial activity although it is less dominant than for domestic activity with a score of 76 out of 100. The UK ranks a strong second with an overall score of 56, more than double the score of its nearest rivals Luxembourg (22) and Hong Kong (21). The UK's score in international activity is four times higher than for domestic business.
- 7. The evolution over time:** since 2016 domestic activity has grown on average by 16% and international activity at a slightly faster rate of 21%. Our index shows several clear growth trends: the UK has lost market share in both domestic and international activity (domestic activity effectively stagnated in the three years after 2016); the EU has lost market share across the board; and markets in the Asia Pacific have gained market share, particularly Hong Kong and Singapore in international activity.
- 8. The share of international activity:** we analysed how international financial centres are based on those metrics where we are able to compare international activity as a percentage of total activity. Luxembourg and Singapore are the most international financial centres, with international business accounting for roughly 60% of all financial activity, closely followed by Hong Kong and the UK. In contrast, some big financial centres are much less international: just 14% of activity in the US is international, and just 3% in China.
- 9. The bigger picture:** when it comes to wider environment metrics such as the economic and business environment, quality of life, infrastructure and human capital, the US ranks first and it is closely followed by the UK in second place and smaller financial centres such as Switzerland, Luxembourg, Singapore and Hong Kong.
- 10. A broader perspective:** while we have not included qualitative metrics in our main index as it results in a much narrower distribution of scores that flatters smaller financial centres, the combination of all financial activity and wider environment metrics confirms our main thesis. The US is by far the top financial centre with the UK strong second, followed by China, Japan, and Hong Kong.

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FINANCIAL CENTRES AT A GLANCE

At a glance

This table summarises the scores for the top 40 financial centres in the world and the rankings for 2019 and 2016. Our main index is measured by the size of financial activity across 42 metrics of domestic and international financial activity with the highest potential value being a 100.

Unlike other studies that use mainly qualitative factors to rank financial centres, our main index uses strictly metrics of size and volume of activity to rank countries as financial centres. This approach enables us to capture the relative scale between countries.

For example, we show that the gap between the US and the UK and that between the UK and its European rivals are much wider than other studies suggest. Focusing too much on qualitative factors results in a much narrower distribution and flatters smaller financial centres with much lower volumes of activity.

Another important distinction is that our analysis is conducted at the country level and not the city level, for two reasons: a) it is impossible to allocate activity or size of sectors to different cities within a country and b) In most countries the majority of activity takes place in one city.

Finally, we also present an analysis of the size of domestic financial activity (eg. a UK firm listing in the UK) and international financial activity (eg. a UK firm listing in the US), the wider environment, and the changes since 2016, as well as a sector analysis, an overall ranking including both financial activity and wider environment metrics, and a ranking based on the average share of international activity in each country across 13 metrics.

Fig.1 The world's top financial centres

Scores by country across our main index, domestic financial activity metrics, international financial activity metrics and wider environment metrics.







(Top 40 countries, based on 3 years to 2019 average - maximum possible score = 100)

Rank		Country	Main Index	Domestic	International	Wider environment	
2019	2016						
1	1	—	US	84	93	76	76
2	2	—	UK	35	14	56	72
3	3	—	China	29	47	9	48
4	4	—	Japan	19	25	12	62
5	8	▲	Hong Kong	14	7	21	69
6	5	▼	France	13	14	11	63
7	6	▼	Germany	12	11	12	66
8	7	▼	Luxembourg	11	1	22	71
9	9	—	Canada	10	10	9	66
10	11	▲	Singapore	8	3	14	70
11	10	▼	Netherlands	7	4	10	68
12	12	—	India	7	12	1	42
13	14	▲	Switzerland	6	4	9	71
14	13	▲	Australia	6	7	5	65
15	16	▲	South Korea	5	8	1	64
16	18	▲	Ireland	4	1	8	66
17	15	▼	Italy	4	5	2	58
18	17	▼	Spain	4	5	2	63
19	19	—	Taiwan	3	4	2	59
20	20	—	Brazil	3	5	1	44
21	21	—	Sweden	3	3	2	64
22	22	—	Belgium	2	2	2	62
23	23	—	Russia	2	3	1	47
24	26	▲	Indonesia	2	3	0	44
25	28	▲	Thailand	1	2	0	48
26	36	▲	Saudi Arabia	1	2	0	56
27	25	▼	South Africa	1	1	1	49
28	27	▼	Norway	1	1	1	61
29	29	—	Mexico	1	2	1	51
30	30	—	Malaysia	1	2	0	57
31	24	▼	Denmark	1	1	1	67
32	32	—	Poland	1	2	1	60
33	31	▼	Austria	1	1	1	65
34	38	▲	UAE	1	1	1	58
35	34	▼	Israel	1	1	0	59
36	33	▼	Finland	1	1	1	63
37	35	▼	Chile	1	1	1	58
38	37	▼	Turkey	1	1	0	51
39	39	—	New Zealand	1	1	1	65
40	40	—	Philippines	1	1	0	45

KEY TAKEAWAYS FOR TOP FINANCIAL CENTRES

Fig.2 A summary for the top financial centres


These are the key takeaways for each of the top financial centres in the world

Country	Key takeaways
<p>United States</p>  <p>Overall: 1st / 84 Domestic: 1st / 93 International: 1st / 76</p>	<ul style="list-style-type: none"> The dominant global financial centre across all our main rankings (total, domestic and international financial activity) Largest market in 28 out of 42 metrics of financial activity Biggest lead in pools of capital, asset management, equity and debt markets. Dominance is less pronounced in international activity (top score in 11 metrics out of 21) than in domestic (top score in 17 metrics out of 21) Best wider economic, financial, business, and regulatory environment in the world
<p>United Kingdom</p>  <p>Overall: 2nd / 35 Domestic: 4th / 14 International: 2nd / 56</p>	<ul style="list-style-type: none"> Much bigger overall than its main European rivals: around three times bigger than France, Germany, or Luxembourg. Boosted by international financial activity (much bigger relative to the size of its economy). More than double that in Luxembourg and five times higher than in Germany and France. Global leader in trading & clearing and 2nd in banking and asset management. Largest in the world in 6 international metrics and in the top 3 in another 10. Largest European hub for trading & clearing, equity markets, private equity & venture capital, asset management and banking. Best wider environment in Europe and 2nd best in the world. International activity has grown at a lower rate than the global average since 2016 while domestic activity has stagnated.
<p>China</p>  <p>Overall: 3rd / 29 Domestic: 2nd / 47 International: 10th / 9</p>	<ul style="list-style-type: none"> Third biggest financial centre in the world. Its high score in domestic activity, where China is the second largest market in the world, partially offsets its low scores in international financial activity (10th) and wider environment (53rd) Global leader in banking metrics and 2nd in private equity and venture capital 2nd globally for domestic and foreign issuance of green, social and sustainable bonds Lowest share of international activity of any significant financial centres (just 3%).
<p>Japan</p>  <p>Overall: 4th / 19 Domestic: 3rd / 25 International: 6th / 12</p>	<ul style="list-style-type: none"> Strongly positioned in the world's top 10 across all our main rankings (total, domestic & international) Big domestic market (3rd largest) and in the top 5 for all but two domestic financial activity metrics 2nd highest score in the world for pools of capital and 3rd for debt markets International financial activity has grown faster than the global average since 2016, but represents just 7% of total activity. In the top 5 for FX trading, IR derivatives trading, AuM, clearing, cross border bank claims and leveraged loans to foreign companies.
<p>Hong Kong</p>  <p>Overall: 5th / 14 Domestic: 10th / 7 International: 4th / 21</p>	<ul style="list-style-type: none"> By far the largest international financial hub in Asia Punching well above its economic weight in domestic financial activity Nearly 40% growth in financial activity since 2016, driven by international activity (moved up three places in the rankings) 6th in the world for wider economic, financial, business and regulatory environment (lost 2 places since 2016) and 2nd in Asia. Biggest international IPO market in the world
<p>France</p>  <p>Overall: 6th / 13 Domestic: 5th / 14 International: 8th / 11</p>	<ul style="list-style-type: none"> In the top 5 for banking, asset management, debt markets, pools of capital and private equity Largest domestic market in the EU post-Brexit: bigger than Germany in 14 out of 21 domestic metrics Europe's leader in insurance assets, corporate bond market value, corporate bonds issuance and bank lending to non-financial corporations. Top three market globally for ESG Domestic and international financial activity have grown at a much higher rate than the EU and global average since 2016.

KEY TAKEAWAYS FOR TOP FINANCIAL CENTRES

Fig.3 A summary for the top financial centres

These are the key takeaways for each of the top financial centres in the world

Country	Key takeaways
<p>Germany</p>  <p>Overall: 7th / 12 Domestic: 7th / 11 International: 7th / 12</p>	<ul style="list-style-type: none"> • Ranks 7th in the world across all our main rankings (total, domestic & international financial activity) • Biggest strengths in banking and pools of capital and to a lesser extent in debt markets and trading and clearing. • 3rd in the world for foreign bank assets - likely to increase post-Brexit • In the world's top 10 in all but four international financial activity metrics • Total financial activity has grown at a lower rate than the global average since 2016, driven by much lower growth in international activity.
<p>Luxembourg</p>  <p>Overall: 8th / 11 Domestic: 41st / 1 International: 3rd / 22</p>	<ul style="list-style-type: none"> • Ranks 3rd in the world and 2nd in Europe for international activity, but very small domestic market. • Global leader in corporate bond issuance and issuance of green, social and sustainable bonds by foreign companies • The most international of any financial centre with international activity representing 60% of total. • 4th in the world for wider economic, financial, business and regulatory environment. • 2nd biggest hub for investment funds, 2nd biggest recipient of FDIs in the financial sector and 3rd largest exporter of financial services in the world
<p>Canada</p>  <p>Overall: 9th / 10 Domestic: 8th / 10 International: 11th / 9</p>	<ul style="list-style-type: none"> • In the world's top 10 overall and for domestic activity • 3rd in the world for pensions assets and in the top 5 for private equity and venture capital • In the top 5 for foreign IPOs, AuM, foreign employees in its financial sector and interest rate derivatives • International activity has grown significantly by three quarters since 2016 • Strong growth in domestic financial activity since 2016 (30%)
<p>Singapore</p>  <p>Overall: 10th / 8 Domestic: 21st / 3 International: 5th / 14</p>	<ul style="list-style-type: none"> • Second largest international hub in Asia • Second highest average share of foreign activity out of total. • 5th globally and top in Asia in wider economic, financial, business and regulatory environment • In the top 5 for investment funds, foreign companies listed, foreign corporate bonds issuance and ESG bonds issuance, FX trading, financial services exports and FDIs in the financial sector • Nearly 50% growth in total and international financial activity since 2016 (moved up 2 places in the international rankings)
<p>Netherlands</p>  <p>Overall: 11th / 7 Domestic: 15th / 4 International: 9th / 10</p>	<ul style="list-style-type: none"> • 4th in Europe for international financial activity, ahead of Switzerland • 3rd biggest hub for foreign equity trading in the world • World's number one recipient of FDI in the financial sector • Financial activity has grown at a much lower rate than the global average since 2016 • 7th in the world for its wider economic, financial, business, and regulatory environment.
<p>Switzerland</p>  <p>Overall: 13th / 6 Domestic: 16th / 4 International: 12th / 9</p>	<ul style="list-style-type: none"> • 6th largest financial centre in Europe • In the world's top 10 in four domestic metrics: pensions assets, bank lending to corporations, stock market value and equity trading. • In the world's top 10 in half of all international metrics. Stronger in financial services FDI, foreign secondary and convertibles issuance, leveraged loans to foreign companies and FX trading. • 30% growth in total and international financial activity since 2016 • 3rd globally and 2nd in Europe for wider economic, financial, business, and regulatory environment

The main index

In this section we present our main index - the scores and ranking for the top 40 financial centres in the world based on the scale of financial activity - and a sector analysis for the top financial centres in the world and in Europe.

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MAIN INDEX - SCORES AND RANKING

Raw financial muscle

Our main index uses strictly metrics of scale of activity to rank countries as financial centres. It highlights the dominance of the US and the UK as the top two financial centres in the world and reveals the extent of their lead compared to other markets.

Fig. 4 shows the average score across 42 metrics of domestic and international financial activity for the top 40 countries in the world. The US is by far the biggest financial centre with an overall score of 84 out of a possible 100. This is well over double its nearest rival the UK and nearly three times higher than China.

The US is the largest market in 28 out of 42 metrics. Of the remaining 14, China is the biggest in three domestic metrics and India in one. The UK is top in six international metrics, Luxembourg in two and Hong Kong and the Netherlands in one each. While the US and China are boosted by the sheer scale of their domestic activity, the UK is boosted by international activity: its score for international activity is four times higher than its score for domestic business.

Our index casts a fresh perspective on the UK as a financial centre compared to other studies: while it the gap between the UK and the US is much bigger than in other studies, the UK is much bigger than its main European rivals. Its score is almost three times that of France, Germany or Luxembourg, and more than five times the Netherlands, Switzerland and Ireland.

Although any impact of Brexit is not reflected in the period we looked at, we know that in some sectors it's lead over EU rivals will already have been dented. However, even if 10% to 20% of the UK's international activity were to relocate to France, Germany and Luxembourg in the coming years (a very big 'if') the UK would still be more than double their size. However, the UK should not be complacent: four of the top 10 financial centres are countries in Asia that have been catching up rapidly since 2016 (Hong Kong is up three places).

Fig.4 The top financial centres

Average score by country across 42 metrics of domestic and international financial activity (Top 40 countries, 3 years to 2019 average - maximum possible score = 100)



SECTOR ANALYSIS - THE GLOBAL COMPETITION

Fig.5 The global competition

Average score and global ranking for each of the top five financial centres in the world based on our main index and Singapore in a selection of groups of sectors. (Maximum possible score = 100)

	US		UK		China		Japan		Hong Kong		Singapore	
	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score
Main Index	1	84	2	35	3	29	4	19	5	14	10	8
Pools of capital	1	100	4	14	3	18	2	21	14	2	22	1
Banking	3	51	2	54	1	56	4	43	7	24	18	6
Equity markets	1	97	4	25	3	27	5	19	2	40	12	7
Debt markets	1	92	4	23	2	29	3	25	15	5	10	9
Asset management	1	100	2	15	11	4	6	6	13	3	7	5
Trading & clearing	2	78	1	79	3	10	4	10	6	7	5	7
Private equity & venture capital	1	100	3	12	2	50	9	4	7	4	11	3

A one horse race

One way to identify the strengths and competitive advantage of each financial centre and what is driving their score is to group the metrics into different groups of sectors of the banking and finance industry. In our analysis we have divided the 42 metrics of domestic and international financial activity into nine broad groups of sectors (see pages 24 and 25 for a full list of metrics under each sector group).

Fig. 5 shows the average score and global ranking for each of the top financial centres in the world in a selection of different sectors. The US is the largest market in six groups of sectors and its dominance in most of them is striking. Pools of capital in the US are nearly five times larger than its nearest rival Japan, while its score in asset management is more than six times higher than that of the UK in second place.

The gap is less pronounced but still big in equity markets, debt markets and private equity and venture capital. The average score of the US in debt markets is more than three times that of China (2nd), Japan (3rd) and the UK (4th). In equity markets its score is more than double that of Hong Kong which ranks second and more than three times higher than that of China (3rd) and the UK (4th). Private equity and venture capital activity in the US is twice the size of activity in China and roughly eight times larger than activity in the UK.

China leads in banking, slightly ahead of the UK, the US and Japan while the UK is just one point ahead of the US in trading and clearing. The UK and the US are roughly eight times bigger as financial centres for trading and clearing. The top financial centre for ESG bonds (our analysis at this stage is limited to domestic and international green, social and sustainable bonds issuance) is Luxembourg and is followed by China, the US and France

SECTOR ANALYSIS - THE EUROPEAN COMPETITION

Fig.6 The European competition

Average score and global ranking for each of the top five financial centres in Europe based on our main index and Switzerland in a selection of groups of sectors. (Maximum possible score = 100)

	UK		France		Germany		Luxembourg		Netherlands		Switzerland	
	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score
Main Index	2	35	6	13	7	12	8	11	11	7	13	6
Pools of capital	4	14	5	12	6	10	27	1	10	4	12	3
Banking	2	54	5	28	6	28	15	7	10	10	12	9
Equity markets	4	25	13	6	10	7	26	2	27	2	15	4
Debt markets	4	23	5	17	7	14	8	13	12	6	9	11
Asset management	2	15	4	7	8	5	3	7	15	2	14	3
Trading & clearing	1	79	9	3	7	5	23	1	8	4	10	3
Private equity & venture capital	3	12	5	5	10	3	24	0	14	2	19	1

A single hub

The same analysis identifies the relative strengths of each financial centre in Europe. Fig. 6 shows the average score and global ranking for each of the top financial centres in Europe in a selection of different groups of sectors. The UK is the largest market in all of the main groups of activity above.

Its dominance is the most pronounced in trading and clearing and in equity markets. In trading and clearing the UK's score of 79 is more than 14 times higher than any other country in Europe, and in equity markets it is more than three times bigger than its nearest rival, Germany.

The dominance of the UK is less pronounced but still quite striking compared to the other big European financial centres in private equity and venture capital, asset management and banking. Its score is around double that of its nearest rivals in each of these sectors. The only two areas that the UK is not the top is in ESG finance and cross-sectoral metrics (financial services exports, FDI in the financial sector, foreign and total employment in the financial sector).

In both of these areas Luxembourg scores higher than any other European country. Its lead is more pronounced in ESG finance where its score is roughly 40% higher than that of France in second place (although France's position is driven by domestic companies whereas Luxembourg's by foreign). In cross-sectoral metrics Luxembourg scores just one point ahead of the UK. France and Germany are strongest in banking and debt markets, while the Netherlands is particularly strong in trading and clearing, and cross-sector metrics (3rd in Europe). Switzerland is the 5th largest financial centre in Europe and scores higher than its closest competitor the Netherlands in just two sectors, debt markets and asset management.

DISTRIBUTION OF SCORES

A balancing act

One of the key differences between our index of financial centres and others is the distinction we make between measures of domestic and international financial activity. The challenge with this approach is that it can be difficult to gauge how much financial centres owe their overall ranking to being a large domestic market and how much to having a vibrant international financial sector.

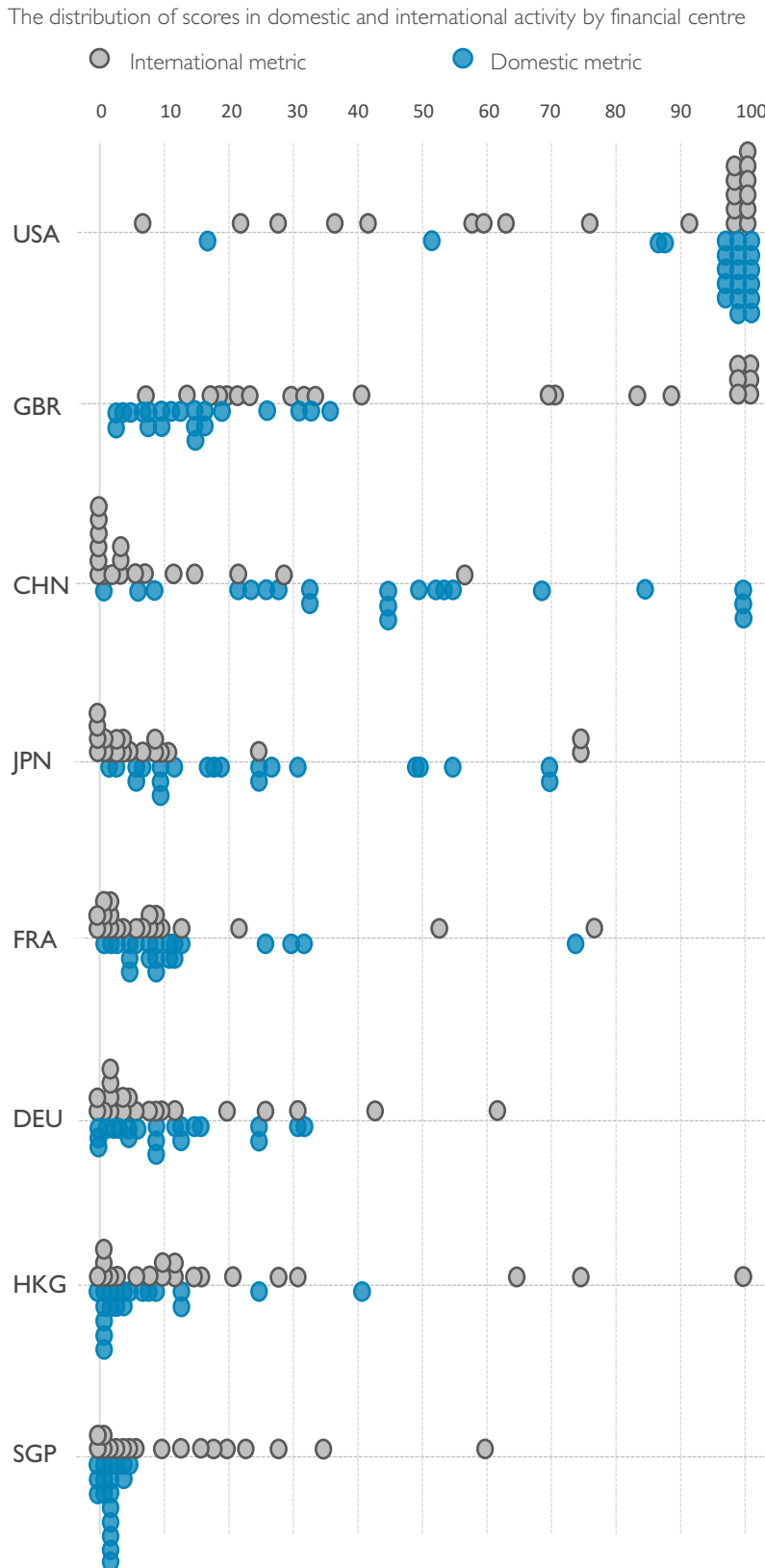
Fig.7 shows the distribution of scores in each sector for a selection of countries. The grey circles represent international metrics and the blue circles show domestic metrics. For each metric, a score of 100 represents the largest market in the world and the size of other countries is expressed relative to that. The chart shows at a glance which financial centres are particularly strong in domestic and international activity.

For example, the cluster of scores of 100 for the US underlines its dominance in terms of sheer scale in both domestic and international finance. It is the biggest market in 17 out of 21 domestic metrics, and the largest market in 11 out of 21 international metrics.

The distribution for the UK, Hong Kong and Singapore highlights that they are relatively small domestic markets (with a concentration of blue circles to the left hand side of the chart) but much more significant international financial centres. For example, the highest score for the UK in domestic activity is 36 (value of bank assets), but the UK scores more than 40 in 11 of the international metrics and is the largest market in six of them.

With China and Japan the inverse is the case: a big cluster of grey circles to the left shows that they are relative small international financial centres, but the wider distribution of blue circles underlines that they are significant domestic markets. For France and Germany, the distribution of scores for domestic and international activity is more balanced with a slight bias towards domestic metrics. That may change in the next few years in light of Brexit.

Fig.7 The balance between domestic and international metrics



The domestic rankings

In this section we present the scores and ranking for the top 25 financial centres based on the scale of domestic financial activity; and a comparison between the US, the UK, France and Germany across all domestic metrics.

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DOMESTIC FINANCIAL CENTRES

A function of scale

When measuring the scale of a financial centre it is important to distinguish between domestic activity, which mainly reflects the size of the economy, and international activity. Our index shows that the US is by far the largest domestic market, double the size of China, which in turn is nearly two times the size of Japan.

Fig.8 shows the average scores for the top 25 countries across 21 metrics that capture the size of domestic financial activity. These metrics are primarily based on the nationality of activity and include the value of bank assets, pensions assets, insurance assets, stock markets, bond markets, and domestic equity and bond issuance.

The dominance of the US is not surprising given the sheer size of its economy: it is 50% bigger than the Chinese economy, four times that of Japan and nearly six times that of Germany. The US score of 93 out of a possible 100 reflects the fact that it is the largest market in 17 out of 21 metrics of domestic financial activity.

China and India are the only countries to beat the US on any domestic financial sector metric. China leads in the value of bank assets, the value of bank lending to nonfinancial corporations, and the issuance of ESG bonds. India has the highest number of domestic companies listed on its stock exchanges.

While the UK ranks fourth, it has lost ground since 2016. Its domestic market is roughly the same size as in France whereas in 2016 it was a fifth bigger. Their score (14) may be less than a fifth of the US, but it is much higher than their European rivals. Domestic activity in the UK and France is nearly a quarter larger than in Germany and roughly three times larger than in Italy, Spain, and the Netherlands.

In Asia, Japan is the largest domestic market after China, followed by India in 6th place. South Korea and Hong Kong are also in the top 10, punching well above their economic weight. Luxembourg and Singapore, which score highly in our main index and international ranking, are in 41st and 21st place respectively.

Fig.8 The top financial centres based on domestic activity

Average score by country across 21 metrics of domestic financial activity (Top 25 countries, 3 years to 2019 average - maximum possible score = 100)



DOMESTIC FINANCIAL CENTRES - COMPARISON

Leading the pack

It can sometimes be hard to grasp the sheer scale of domestic financial activity in the US. Fig.9 puts the size of domestic markets in the US into perspective by comparing them with the UK, France and Germany across each of the 21 domestic financial sector metrics in our ranking.

The US is the largest market in 17 out of 21 metrics and the size of its markets can be eye-popping. For example, pensions assets in the US are nearly 10 times larger than in the UK, and roughly 100 times bigger than in France or Germany. The value of US stockmarkets and equity trading are around 10 times bigger than in the UK, and more than 12 times larger than in France and Germany.

The only areas in which the US is not the largest domestic market in the world are bank assets (Chinese bank assets are roughly twice as big); bank lending to non financial corporations (6 times higher in China); issuance of ESG (green, social and sustainable) bonds (China); and number of domestic companies listed (India).

This table also highlights that while on average domestic financial activity in the UK and France stands roughly at the same level, the UK ranks ahead of France in 13 of the 21 metrics and in most of them the lead is substantial. Compared to Germany, UK and France score higher in 16 and 14 metrics respectively.

The difference in scale in some metrics between the UK, France and Germany is striking. Pension assets in the UK are more than 10 times bigger than in France or Germany, the number of listed companies roughly four times, equity trading double, and bank assets are 40% larger. The IPO market in Germany is roughly the same size as in the UK and three times larger than France.

France has its biggest lead in ESG bonds where issuance is nearly four times larger than in the UK and more than double Germany. It also has a clear lead in the value of insurance assets which is nearly a fifth bigger than in the UK and a quarter bigger than in Germany.

Fig.9 Ranking of selected countries based on domestic activity

Comparison of the ranking & score for the US, UK, France and Germany across 21 metrics of domestic financial activity (best=100, 3 years to 2019 average - max = 100)

	US		UK		France		Germany	
	Rank	Score	Rank	Score	Rank	Score	Rank	Score
Pensions assets	1	100	2	11	12	1	16	1
Insurance assets	1	100	5	26	3	32	6	25
Household financial assets	1	100	8	4	5	5	7	4
Bank assets	3	52	4	36	5	26	6	25
Bank deposits	1	100	5	31	6	30	4	31
Bank lending to NFCs	2	17	12	5	4	9	5	9
Total credit to government	1	100	6	12	5	13	7	12
Total credit to households	1	100	4	15	8	11	5	13
Stock market value	1	100	5	10	6	8	9	6
IPOs	1	100	8	15	14	5	6	15
Secondary issuance & convertibles	1	100	4	16	9	9	5	13
No of domestic companies listed	2	88	9	33	19	9	18	9
Equity trading	1	100	3	10	6	5	5	5
Outstanding bonds-all	1	100	4	15	5	12	6	9
Outstanding bonds-corporate	1	100	7	8	4	11	8	3
Domestic corp. bonds issuance	1	100	5	7	4	8	21	1
Domestic leveraged loans	1	100	5	3	4	3	11	1
PE deals	1	100	3	8	6	6	7	5
VC deals	1	100	9	3	13	2	14	2
Domestic ESG bonds	2	87	7	19	3	74	4	32
Employees in financial services	1	100	7	16	10	12	8	16

The international rankings

In this section we present the scores and ranking for the top 25 financial centres based on the scale of international financial activity; a comparison between the US, the UK, France and Germany across all international metrics; and an analysis of how international financial centres are.

International financial centres	Page 17
International financial centres - comparison	Page 18
How international are financial centres?	Page 19



The international elite

While the rankings of domestic financial activity are largely a function of the size of a country's economy adjusted for the level of development of its financial sector, the rankings of international financial activity are a clearer indication of the relative size and attractiveness of different financial centres.

Fig.10 shows the average score for the top 25 countries across 21 metrics that capture the size of international financial activity. These metrics are primarily based on the location rather than the nationality of activity in those sectors where market participants have a choice: for example, FX and derivatives trading; a company choosing to list on an exchange in a different country, or where hedge funds choose to manage their assets (see page 25 for a list of the metrics included).

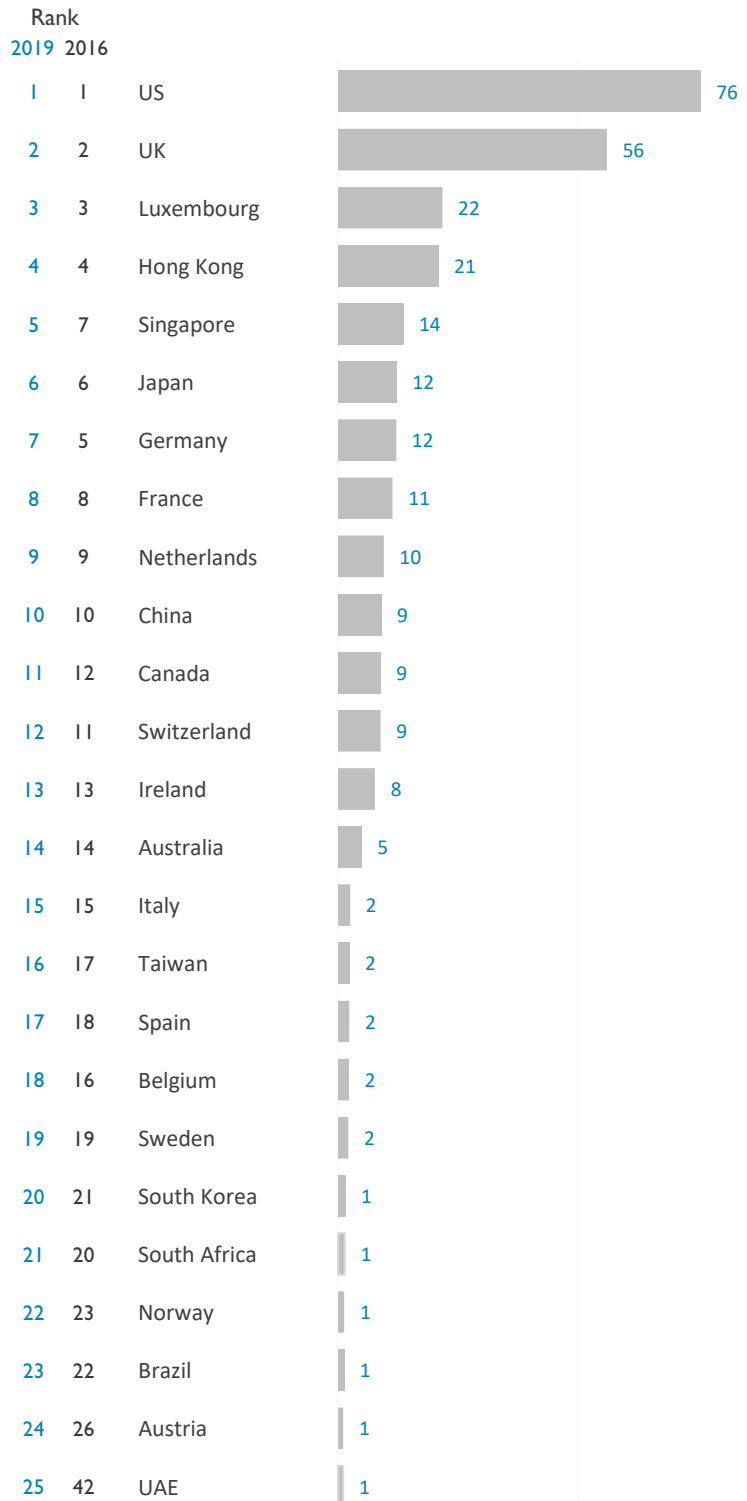
Perhaps not surprisingly, the US is the biggest international financial centre although its dominance is not as pronounced as in domestic. Its score of 76 out of a possible 100 is much lower than its domestic score and its lead over its nearest rival (the UK) is not as wide.

The UK ranks a strong second globally with a score of 56 and it is by far the dominant international financial hub in Europe. The gap between the UK and the US is bigger than other studies suggest - the US is a third bigger as an international financial centre - mainly because our rankings focus more on quantitative measures rather than qualitative measures.

At the same time, our ranking shows that the gap between the UK and its European rivals is much larger than other studies suggest. International financial activity in the UK is more than double the activity in Luxembourg, nearly five times larger than in Germany and France and more than six times larger than Switzerland and Ireland. Hong Kong, which ranks fourth globally behind Luxembourg, is by far the largest international market in Asia: its score of 21 is 50% higher than that of its arch rival Singapore, and not far short of double that of Japan.

Fig.10 The top financial centres based on international activity

Average score by country across 21 metrics of international financial activity (Top 25 countries, 3 years to 2019 average - maximum possible score = 100)



INTERNATIONAL FINANCIAL CENTRES - COMPARISON

Flowing across borders

The US and UK have been jostling for the title of the world's top international financial centre for decades. Fig. 11 puts the size of international financial markets in the US into perspective by comparing them with the UK, France and Germany across each of the 21 international metrics in our ranking.

While the US is still the largest international financial centre by the size of activity, it is not as dominant as in domestic financial markets. The US is the largest market in 11 of the 21 metrics of international financial activity (compared with 17 out of 21 of domestic).

In many cases, the size of international activity in the US is much bigger than in the UK. For example, assets under management in the US are five times bigger than the UK, the value of foreign IPOs is three times larger, and private equity fundraising four times.

On the other hand, the UK is the top market for international financial activity in six metrics, and it is in the top three in a further 10 metrics. The UK is the dominant financial centre for foreign exchange spot and derivatives trading (more than double the US), interest rate derivatives trading (more than 50% higher), foreign bank assets, cross-border bank claims, and leveraged loans for foreign companies.

These rankings underline the dominance of the UK in international finance compared with its European rivals: for example, the value of assets under management in the UK is more than double that in France and four times bigger than in Germany. The value of FX and derivatives trading in the UK is between 16 and 65 times higher than in Germany and France. The only sector where the UK is smaller than France and Germany is investment funds by domicile.

This demonstrates the scale of the prize for other European financial centres now that Brexit took place, but it also dispels any suggestion that Paris or Frankfurt are about to displace London as an international financial centre anytime soon.

Fig. 11 Ranking of selected countries based on international activity

Comparison of the ranking & score for the US, UK, France and Germany across 21 metrics of international activity (best = 100, 3 years to 2019 average - max = 100)

	US		UK		France		Germany	
	Rank	Score	Rank	Score	Rank	Score	Rank	Score
AuM by location	1	100	2	20	3	9	7	5
Investment funds by domicile	1	100	8	8	6	9	4	10
Hedge funds AuM	1	100	2	19	5	2	14	0
Foreign bank assets	4	28	1	100	5	22	3	31
Cross border claims by bank location	3	60	1	100	4	53	5	43
Foreign IPOs	2	92	3	30	9	1	12	1
Foreign secondary issuance & converts	1	100	3	32	14	2	4	4
Foreign companies listed - number	1	100	2	41	9	8	12	5
Foreign corporate bonds issuance	3	58	6	22	15	1	7	12
Foreign leveraged loans	4	76	1	100	3	77	7	62
Foreign equity trading	1	100	2	89	25	0	4	6
IR derivatives trading	2	64	1	100	6	3	9	2
FX derivatives trading	2	37	1	100	7	6	8	4
FX spot trading	2	42	1	100	9	2	12	2
Clearing	1	100	2	84	5	7	4	20
Private equity fundraising	1	100	3	24	5	8	10	2
Foreign ESG bonds issuance	6	7	4	18	11	1	9	2
Commodity derivatives - notional	1	100	2	71	8	0	9	0
Financial services exports	1	100	2	70	9	13	4	26
Financial services FDI	3	22	6	14	15	4	8	8
Foreign employees in financial services	1	100	2	34	5	10	6	9

HOW INTERNATIONAL ARE FINANCIAL CENTRES?

Punching above their weight

Another way to analyse financial centres is to look at how international they are by measuring international activity as a proportion of total activity.

Fig.12 is a ranking across metrics that measure the size of international activity as a percentage of total activity taking place in that market. We were able to construct 13 metrics across equity and debt markets, trading and clearing, ESG bonds and employment in finance (see page 27 for a list of the metrics)

Luxembourg is the most international financial centre in our sample, closely followed by Singapore, Hong Kong and the UK. On average roughly 60% of the total financial activity taking place in Luxembourg and Singapore is international, while in Hong Kong and the UK international business is roughly half of the total.

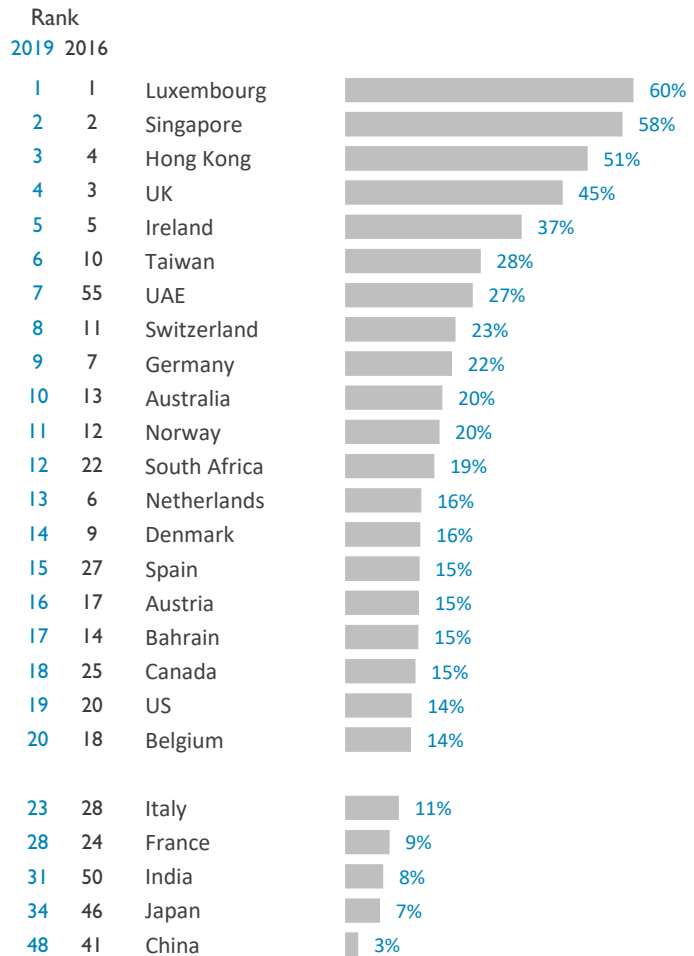
The share of Luxembourg is mainly driven by secondary listings, corporate bond issues and ESG bonds listings by foreign companies. Singapore and Hong Kong are preferred for corporate and ESG bond issuance and for trading in derivatives. Hong Kong is also a big destination for foreign IPOs and secondary listings (more than 50%)

In the UK, the share of foreign activity is particularly high in FX and derivatives: Fig.12ii) shows that 83% of all FX derivatives trading in the UK does not involve sterling - more than double the proportion of trading in France that doesn't involve the euro. In the US, just 11% of trading doesn't involve the dollar.

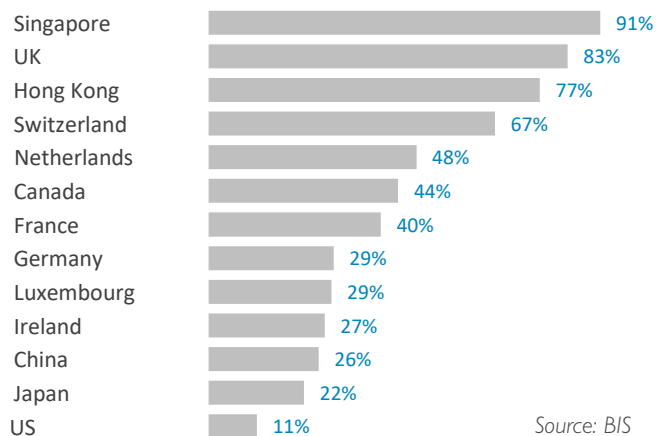
This analysis highlights the disparity in many countries between the scale of domestic and international activity. While the US is the largest domestic and international financial centre in the world in absolute terms, it is a much more domestic market than the UK, with international activity representing just 14% of total activity. Other big financial centres rank much lower on how international they are, including France (28th), Japan (34th), and China (48th).

Fig.12 How international?

i) Average share of international activity as a % of total activity across 13 metrics (Top 20 and selection of countries, 3 years to 2019 average)



ii) Share of FX trading conducted in currencies other than the local in each country (eg. the % of FX trading conducted in the UK in currencies other than sterling)



Source: BIS

The international rankings

In this section we analyse the change since 2016 in total financial activity in the top 40 financial centres; in domestic and international activity in the top 25 financial centres; the shift in market share in selected financial centres; and a focus on the changes in activity in the UK since 2016.

The change in total financial activity	Page 21
The change in domestic financial activity	Page 22
The change in international financial activity	Page 23
The change in selected financial centres	Page 24
A focus on the UK	Page 26



THE CHANGE SINCE 2016 - TOTAL ACTIVITY

A changing landscape?

The best way to see how financial centres have evolved over time and identify trends and changes in the rankings is to measure the change in financial activity. While it is perhaps too early to assess the impact of Brexit and the increased competition among financial centres, our approach provides a useful benchmark and lays the foundations for further analysis in the future.

To measure the change in the total financial activity in each country we compared the three years to 2016 with the three years to 2019. We used the three years to 2019 as a benchmark and rebased activity in the three years to 2016 accordingly. Fig.13 shows the change in total financial activity in the top 40 countries of our main index since 2016.

Overall, global banking and financial activity increased by 19% across the 42 sectors we analysed. Activity in the EU lagged behind at 15%, while activity in the US and UK also grew at a slightly slower rate than the global average.

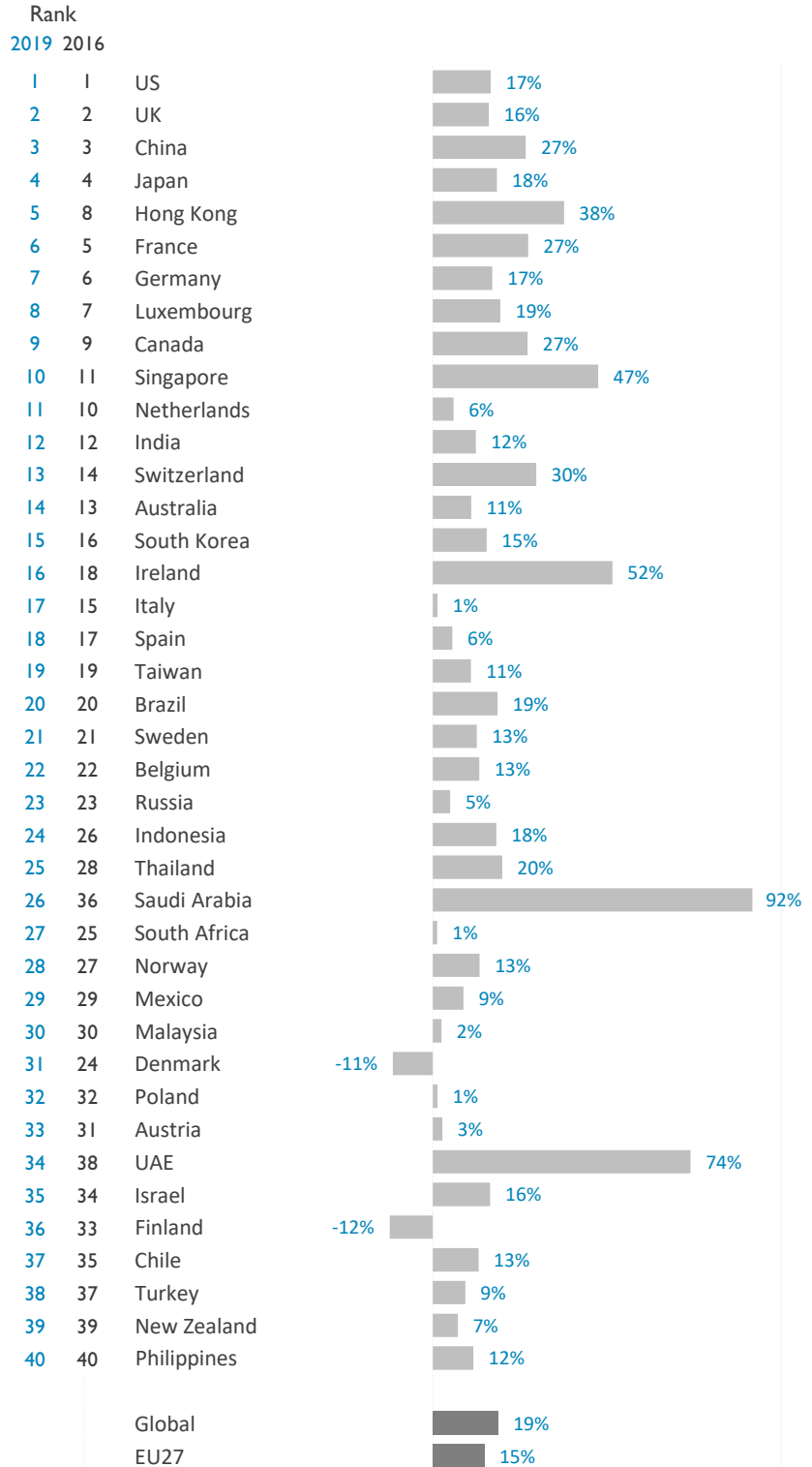
In the largest 10 financial centres, it is striking that the fastest growth came from Asia: overall activity in Singapore increased by 47%, with Hong Kong (38%) and China (27%) not far behind. As a result, Hong Kong has moved up from the 8th place overall in 2016 to 5th place while Singapore edged up one spot to 10th.

Ireland (52%), Switzerland (30%) and France (27%) posted the highest growth in Europe, while large European markets such as Italy and Spain have effectively flatlined. Saudi Arabia posted the highest growth overall with 92% (and climbed 10 places to 26th) while the UAE also grew rapidly (74%).

With Brexit in mind, it is important to note that financial activity in the UK has grown slightly faster than in the EU27 since 2016. While it is still too early to draw any conclusions, current growth rates suggest that it will be some time before a financial centre in the EU27 significant dents the UK's position as the dominant financial centre in Europe.

Fig.13 The change in financial centres since 2016

The change in domestic and international financial activity since 2016
Top 40 countries, comparison of a 3 years to 2019 to a 3 years to 2016 average



THE CHANGE SINCE 2016 - DOMESTIC ACTIVITY

Bridging the gap

The evolution of domestic activity is one driver of the changes in the level of total financial activity in each market since 2016, and helps explain the differences in the overall and domestic rankings of financial centres between 2016 and 2019. Fig.14 shows the change in domestic financial activity in the top 25 markets in the world for domestic business since 2016.

Domestic financial activity in the US, the biggest domestic financial centre today, has grown at a slightly faster rate than the global average. At a global level, domestic activity increased by 16%, just ahead of growth in the EU over the same period of 14%. Big domestic markets that grew faster than the global average include the US (18%), China (29%), and France (30%).

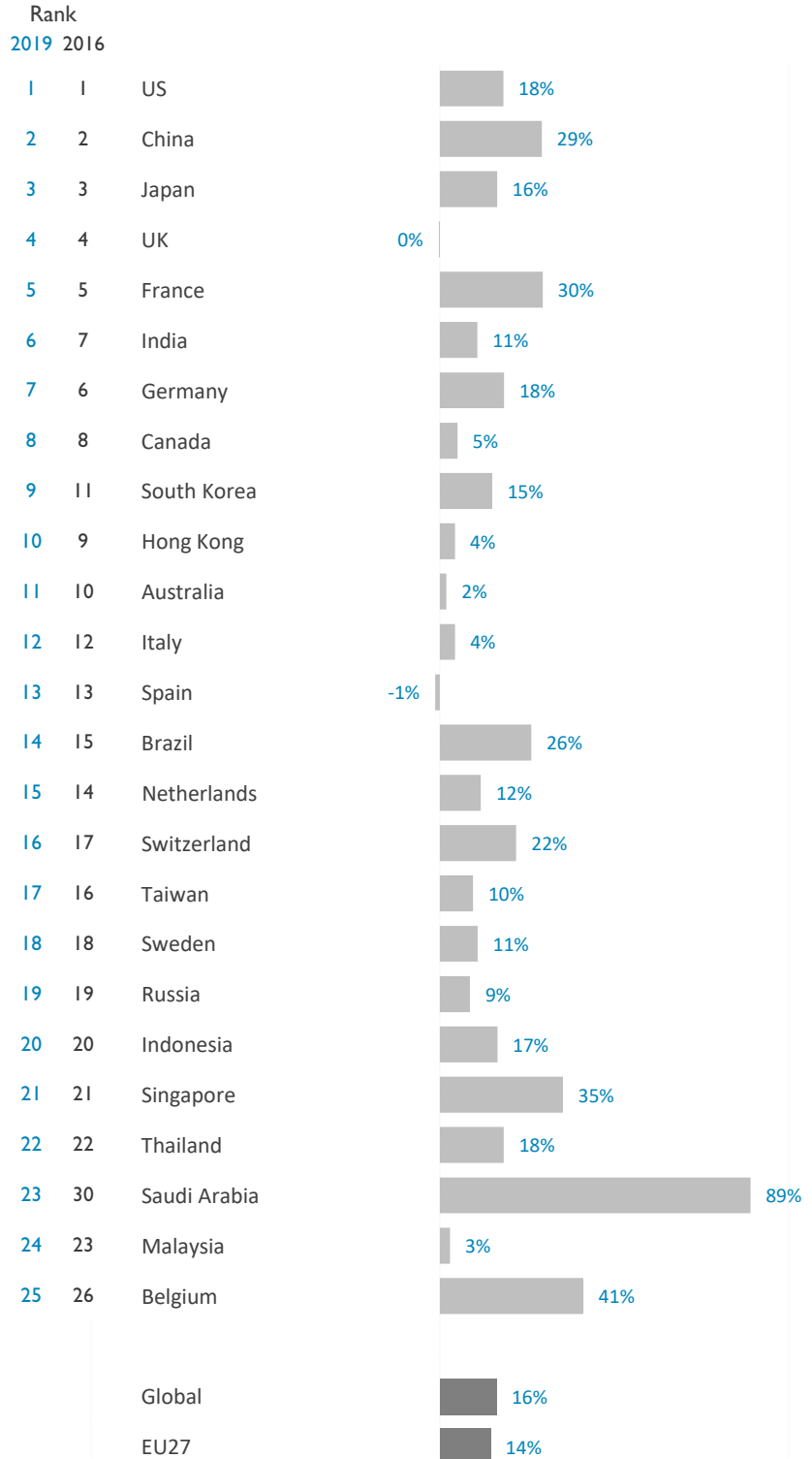
The UK's performance in domestic activity since 2016 is an outlier: it has stagnated since 2016, perhaps the result of the uncertainty created by the Brexit referendum in 2016 and its impact on the UK economy. The UK grew more slowly than the global average in 15 out of 21 sectors of domestic activity (see page 23). Some of this can be attributed to the decline of the value of sterling: our model is based on US dollars, and the average exchange rate in the three years to 2019 has fallen by around 10% compared with the three years to 2016. But even after adjusting for exchange rates, the UK's performance in domestic metrics has been anaemic.

The highest growth in domestic activity has taken place in Saudi Arabia which has gained seven places in the domestic rankings. Several other countries outside of the top 10 have experienced strong growth in domestic financial activity. The domestic market in Singapore has grown by more than a third, in Brazil by more than a quarter, and in Switzerland by a fifth.

Two of the biggest European economies, Italy and Spain, have performed relatively poorly compared to the global and EU27 average. The increase in domestic activity in Italy was just a quarter of the global and EU27 rate, while domestic activity in Spain has shrunk.

Fig.14 The change in domestic financial activity since 2016

The change in domestic financial activity since 2016
Top 40 countries, comparison of a 3 years to 2019 to a 3 years to 2016 average



THE CHANGE SINCE 2016 - INTERNATIONAL ACTIVITY

A fundamental shift?

While domestic activity is mainly linked to the fortunes of the local economy, changes in international activity reflect the attractiveness of a financial centre.

Fig.15 shows the change in international financial activity since 2016 in the top 25 countries in the world for international business. At a global level, international business grew by 21% over the period, a significantly faster rate than the 14% growth in international activity in the EU27. This echoes the findings of our report [Beyond Brexit: the future of UK banking & finance](#) in which we noted that the EU was shrinking in global terms as a financial market.

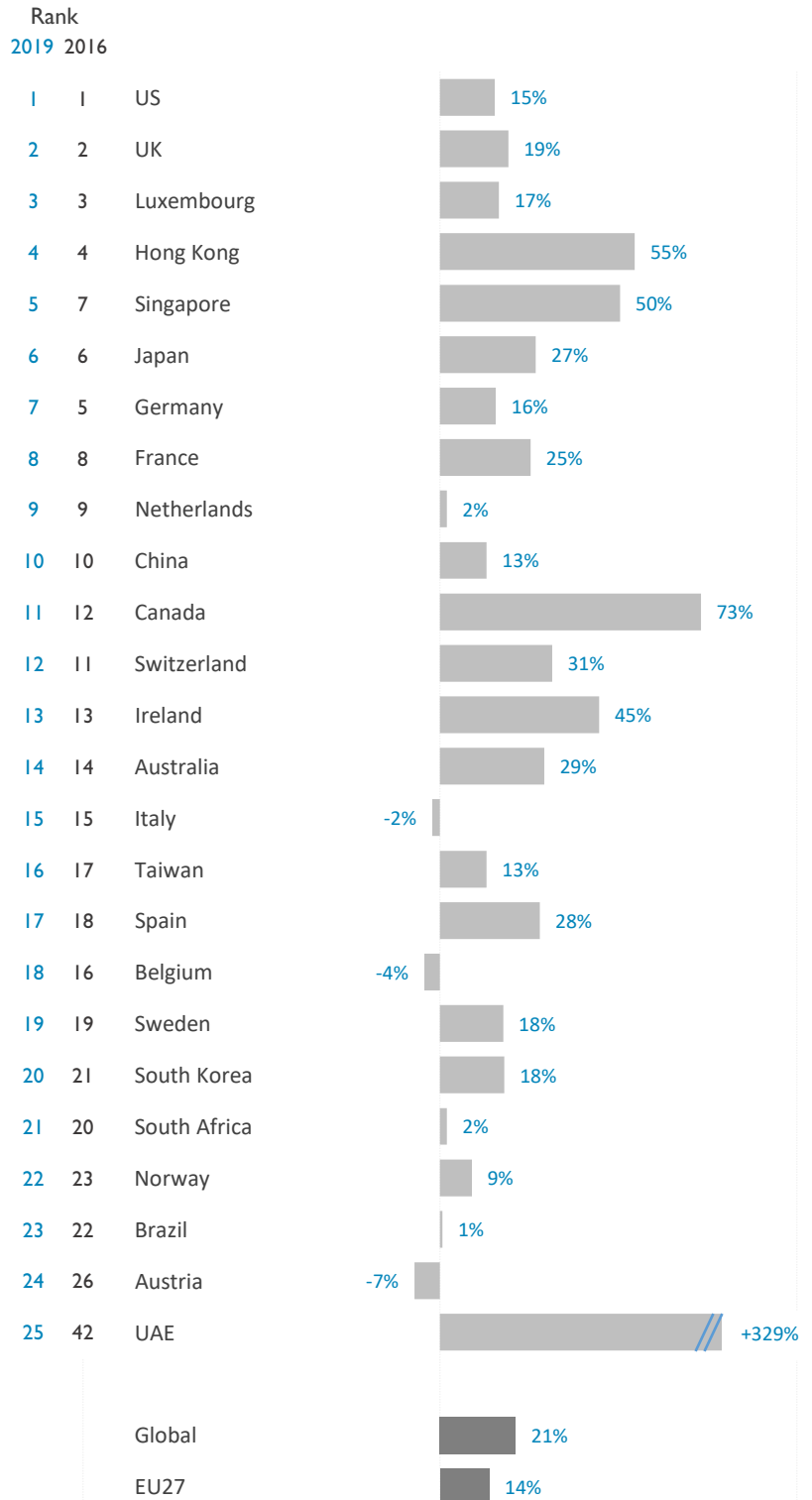
International activity in both the US and the UK grew at a slightly slower rate than the global average. While domestic activity in the UK has stagnated, international activity grew at a slightly higher rate than the US and the EU27 since 2016. However, some key European markets have been growing much faster and could chip away at the UK's lead in Europe including Ireland (45%), Switzerland (31%) and France (25%).

The most striking growth in international activity was in the Asia Pacific: Hong Kong, already the fourth largest international financial centre in 2016, posted growth in international activity of 55%, just ahead of Singapore with 50%. Japan, which is a predominantly domestic market with ambitions to expand as an international financial centre, posted growth of 27%, while Australia increased by 29%. South Korea, another aspiring international financial centre, posted decent growth of 18%.

It is too early from this analysis to measure the impact of Brexit but we know that in some sectors such as foreign equity trading, foreign bank assets, financial services exports and FDI, the UK's position will already have been dented. International activity will be the key metric to watch in future editions of this research to track the impact of Brexit on London's position as a financial centre. However, even if you assume that 10% of the UK's international business is forced to relocate, it would still be the dominant market in Europe by a wide margin.

Fig.15 The change in international financial activity since 2016

The change in international financial activity since 2016
Top 40 countries, comparison of a 3 years to 2019 to a 3 years to 2016 average



SHIFTS IN MARKET SHARE - DOMESTIC METRICS

Fig.16 The change in selected financial centres across domestic metrics compared to the global average

This table shows whether activity in selected financial centres has grown at a faster rate (or declined at a lower rate) than the global average since 2016 across the 21 domestic metrics. If a country has grown at a faster rate than the global average rate - the green traffic lights - it essentially means that it has increased its share of global domestic financial activity, whereas if a country has grown at a lower rate than the global average - the red traffic lights - it means that the share of this country in global activity has declined since 2016.

Hong Kong and Singapore have grown at a faster rate than the global average since 2016 in more than two thirds of the metrics while the US in nearly half. The UK has performed worse than its main European rivals, France and Germany: it has grown at higher rate than the global average in just six metrics, compared to seven for Germany and nine for France.

 Increased share of global activity  Decreased share of global activity

Metric	US	UK	France	Germany	Hong Kong	Singapore
Overall domestic activity						
Pensions assets						
Insurance assets						
Household financial assets					-	
Bank assets						
Bank deposits						
Bank lending to NFC						
Total credit to government						
Total credit to households						
Stock market value						
IPOs						
Secondary issuance & convertibles						
Domestic companies listed - number						
Equity trading						
Outstanding bonds-all						
Outstanding bonds-corporate						
Domestic corporate bond issuance						
Domestic leveraged loans						
Private equity deals						
Venture capital deals						
Domestic ESG bonds - issuance						
Employees in financial services						
No. of metrics above global rate	10 / 21	6 / 21	9 / 21	7 / 21	14 / 21	15 / 21

SHIFTS IN MARKET SHARE - INTERNATIONAL METRICS

Fig.17 The change in selected financial centres across international metrics compared to the global average

This table shows whether activity in selected financial centres has grown at a faster rate (or declined at a lower rate) than the global average since 2016 across 20 international metrics. If a country has grown at a faster rate than the global average rate - the green traffic lights - it essentially means that it has increased its share of global international financial activity whereas if a country has grown at a lower rate than the global average - the red traffic lights - it means that the share of this country in global activity has declined since 2016.

Hong Kong has performed much better than the US, the UK, France, Germany and Singapore: It has grown faster than the global average in all but three of the 20 international metrics we were able to analyse. The UK has performed better than the US and its main European rivals: it has grown its share of global international activity in half (10) of the metrics compared to just eight for the US and France and seven for Germany. Singapore has also grown faster than the global average rate in half of the metrics we analysed.

● Increased share of global activity ● Decreased share of global activity

Metric	US	UK	France	Germany	Hong Kong	Singapore
Overall international activity	●	●	●	●	●	●
AuM - by location	●	●	●	●	●	●
Investment funds - by domicile	●	●	●	●	●	●
Hedge funds AuM	●	●	●	●	●	●
Foreign IPOs	●	●	●	●	●	●
Foreign secondary issuance & convertibles	●	●	●	●	●	●
Foreign companies listed - number	●	●	●	●	●	●
Foreign corporate bond issuance	●	●	●	●	●	●
Foreign leveraged loans	●	●	●	●	●	●
Foreign bank assets	●	●	●	●	●	●
Cross border claims by bank location	●	●	●	●	●	●
Foreign equity trading	●	●	●	●	●	-
IR derivatives trading	●	●	●	●	●	●
FX derivatives trading	●	●	●	●	●	●
FX spot trading	●	●	●	●	●	●
Clearing	●	●	●	●	●	●
Private equity fundraising	●	●	●	●	●	●
Foreign ESG bonds issuance	●	●	●	●	●	●
Commodity derivatives - notional value	●	●	●	●	●	-
Financial services exports	●	●	●	●	●	●
Financial services FDI	●	●	●	●	●	●
No. of metrics above global rate	8 / 20	10 / 20	8 / 20	7 / 20	17 / 20	9 / 18

A FOCUS ON THE EU – DOMESTIC ACTIVITY

That shrinking feeling

With Brexit in mind we thought it would be useful to take a closer look to changes in domestic and international activity in the EU27 since 2016. While in this study we could only use data up to 2019 to ensure consistency and availability, our analysis gives a useful insight and lays the building blocks for future assessments of the impact of Brexit.

Fig.18 shows the change in the EU27 across 21 metrics of domestic financial activity since 2016 and it highlights that overall, the EU27 has performed much better than the UK in domestic activity metrics. While the EU27's global share of domestic activity has declined compared to 2016, it did so by only slightly: activity grew by 14% compared to 16% globally and 0% for the UK.

In 12 out of the total 21 metrics we looked at, the EU27 has grown faster than the UK. Among those are key metrics such as pensions assets, insurance assets, stock market value, and credit to households, governments and companies

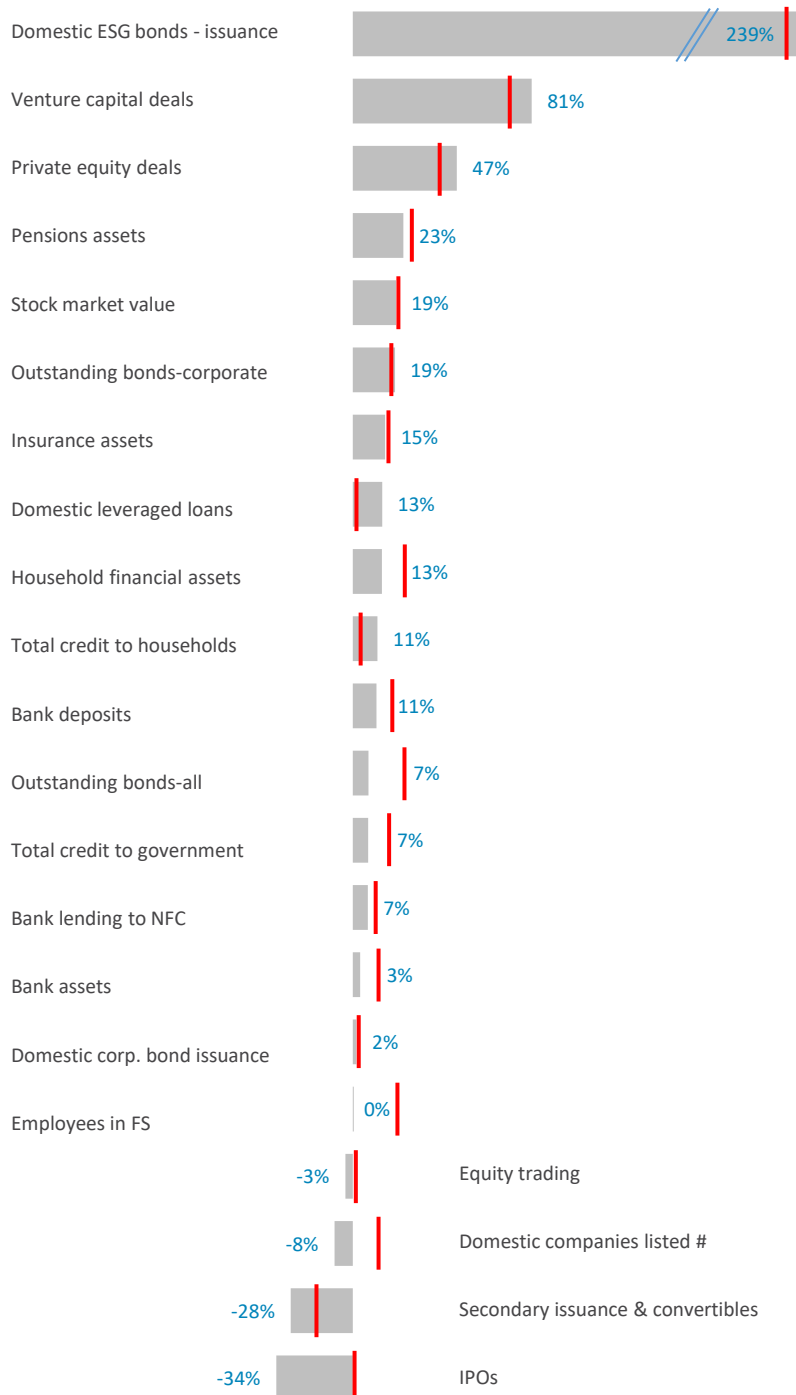
However, the EU27 has grown at a faster rate than the global average in only five metrics, which means that its market share has declined across 16 metrics since 2016. However, in 11 of the 17 metrics where activity has increased, the growth in the EU27 has been relatively strong (above 10%) compared with the UK, where domestic activity has grown by more than 10% in just five metrics.

The metrics where the EU27 has grown the most are ESG bond issuance, venture capital, and private equity. Domestic activity has shrunk in four metrics and in all of them the EU27 has lost market share. The most striking aspect is the decline in EU27 equity markets: the value of IPOs and the combined value of secondary issuance and convertibles in the EU27 companies has shrunk by around a third while the number of listed domestic companies fell by 8%, and equity trading by 3%. These results confirm the findings of our recent report [Beyond Brexit: the future of UK banking & finance](#) that in relative terms EU27 financial markets are shrinking.

Fig.18 Change in EU domestic activity since 2016

The change in the EU27 since 2016 across 21 metrics of domestic activity (3 years averages)

Average EU growth: **14%** Average global growth: **16%**
 EU gained market share: **5x sectors** Lost share: **16x sectors**



A FOCUS ON THE EU – INTERNATIONAL ACTIVITY

Closing the gap?

Perhaps the best way to assess to what extent the EU27 will gain from Brexit and the relocation of activity from the City of London is to look at metrics of international financial activity metrics.

While it is too early to assess the full impact of Brexit, this analysis can give an indication of what to expect in future. Fig.19 shows the change in the EU27 since 2016 across 20 metrics of international financial activity. It highlights that EU27 has been losing market share relative to other financial centres: international activity in the EU27 has grown at just thirds the global average since 2016.

International activity in the EU27 has grown at a faster rate than the global average in just five of the total 20 metrics we analysed since 2016. This means that its global share has declined in 15 metrics. In addition, there is huge divergence across member states. International activity has grown at a faster rate than the global in just a handful of the big EU markets such as France (25%), Ireland (45%) and Spain (28%).

The EU recorded the highest growth in foreign equity trading, foreign ESG bonds issuance, commodity derivatives, and private equity fundraising.

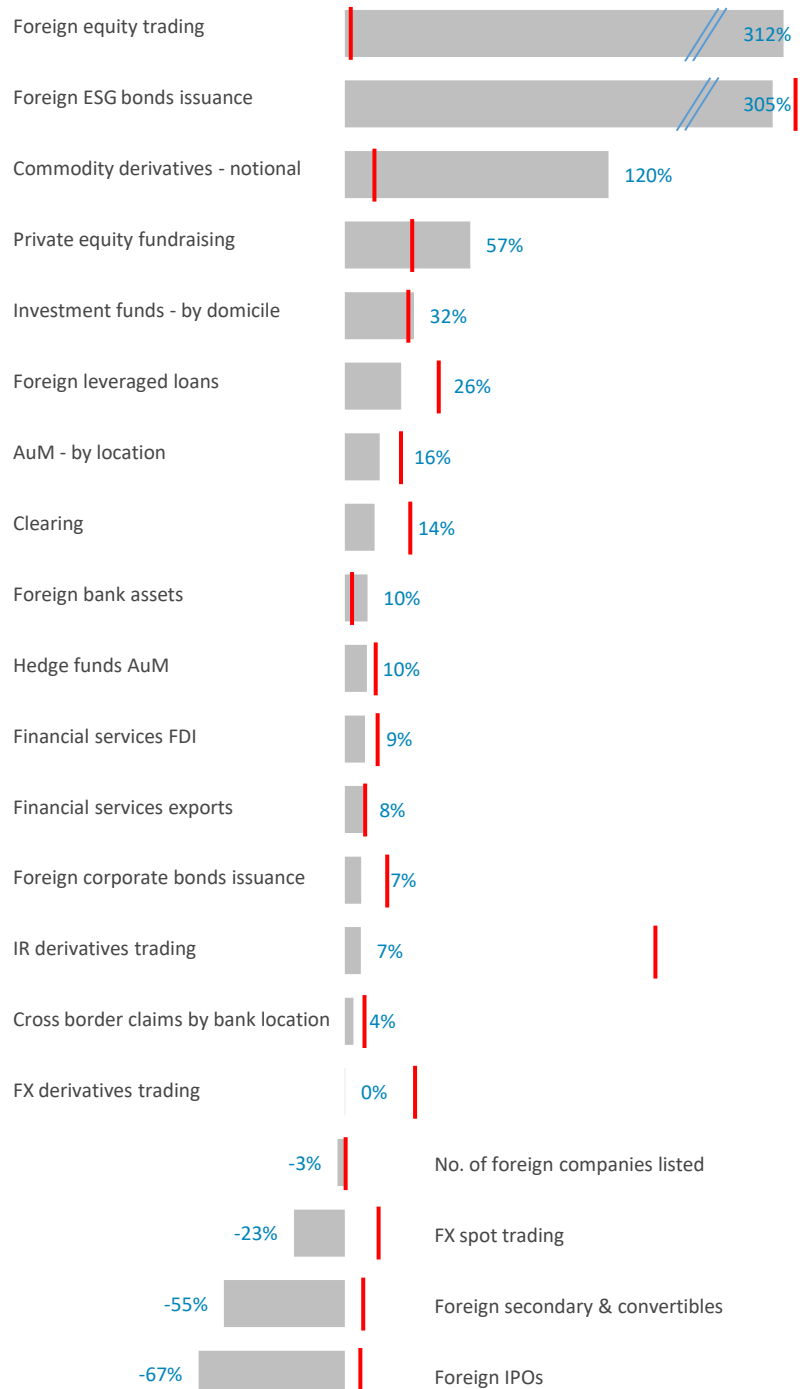
International activity has shrunk in four metrics with the most notable decline in equity markets: the value of IPOs by foreign companies in the EU has shrunk by two thirds, the value of follow-on and convertibles issues by more than 50% and the number of foreign companies listed in the EU is down by 3%.

While it is too early to assess the full impact of Brexit, some activity in sectors like foreign equity trading and foreign bank assets has already relocated from the UK to the EU. In the coming years we expect to see the UK's position dented in sectors such as FDI in financial services, FX and derivatives trading, clearing, investment funds and possibly assets under management as more activity relocates to the EU.

Fig.19 Change in EU international activity since 2016

The change in the EU27 since 2016 across 20 metrics of international activity (3 years averages)

Average EU growth: **14%** Average global growth: **21%**
 EU gained market share: **5x sectors** Lost share: **15x sectors**



The bigger picture

In this section we present the scores and ranking in wider environment metrics for the top 40 countries and for the BRICS as well as a ranking which combines financial activity metrics and wider environment metrics

Wider environment	Page 29
The broad picture index	Page 30



THE BIGGER PICTURE - WIDER ENVIRONMENT

It's not just about size

The success of financial centres cannot be measured based solely on the size and volume of financial activity. More qualitative factors such as the business, legal, political, and economic environment, human capital, and the ecosystem around the financial sector have a part to play.

Fig.20 shows the average scores for the top 25 countries across 21 metrics of the wider economic, financial, political, legal, business and social environment in the different countries (see page 26 for a list of the metrics included and sources used). Perhaps it is not surprising that six of the top 10 countries are also in the top 10 for international financial activity and five of them are in the top 10 in our main index.

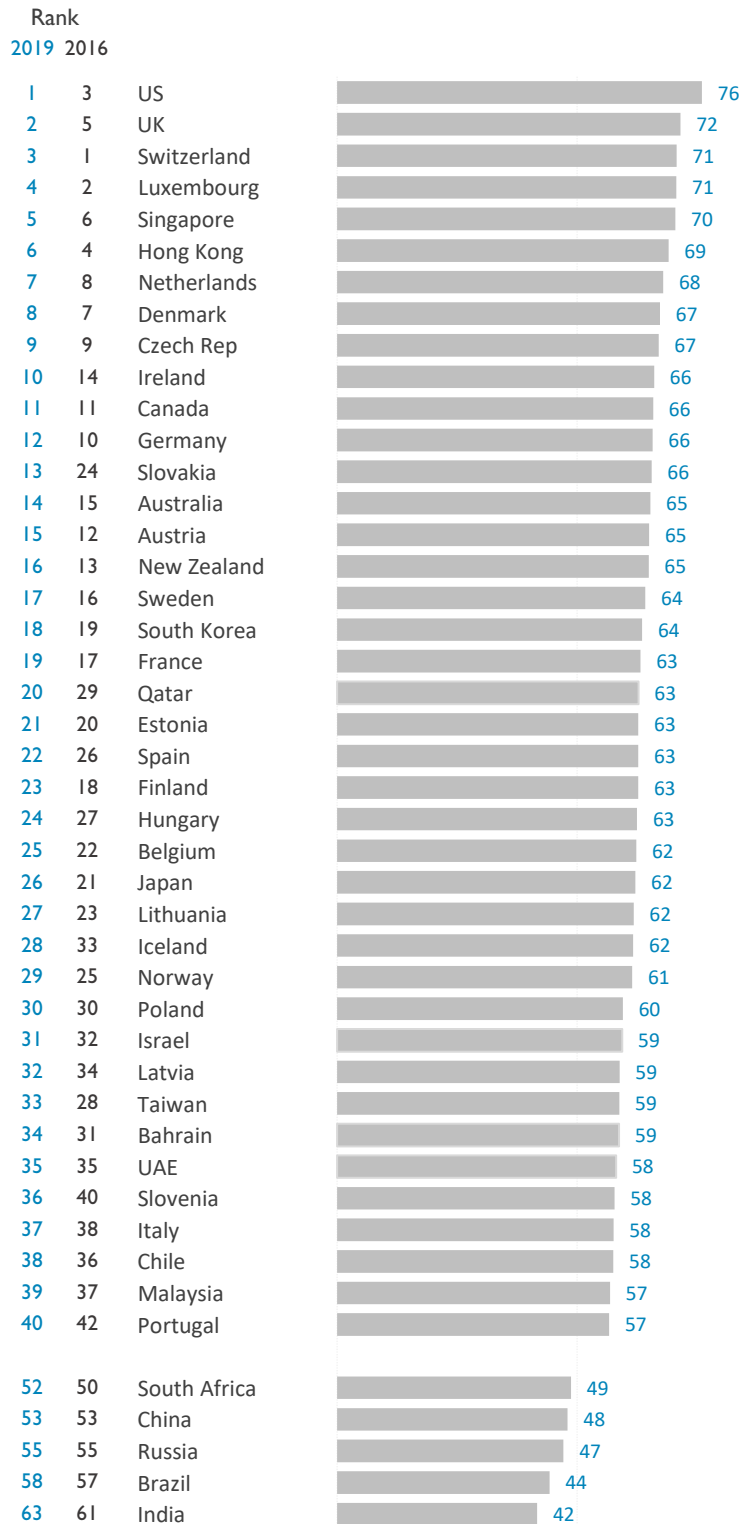
The US is the country with the best wider environment and it is closely followed by the UK in the second place, Switzerland, Luxembourg, Singapore, and Hong Kong. The rest of the spots in the top 10 are held by European countries: the Netherlands (7th), Denmark (8th), Czech Republic (9th) and Ireland (10th).

In Asia, Singapore and Hong Kong have the best environment and are followed by Australia, New Zealand, South Korea and Japan. The biggest economies of the region, China and India, score much lower and are positioned at the bottom of the global rankings with the rest of the countries in the BRICS (South Africa, Russia, and Brazil). In Middle East and Africa, Qatar is leading, followed by Israel, Bahrain and UAE.

While qualitative factors are an important indicator of the size and depth of a financial centre, focusing too much on them to rank cities or countries as financial centres results in distortions and a much narrower distribution with scores that are very close together. For example, the scores for countries at the bottom of the rankings such as India (42) are more than half the score of much more developed markets such as the UK (72) or France (63). Just 13 points separate the top 20 countries. This tends to flatter smaller financial centres despite huge differences in the value of financial activity.

Fig.20 The top financial centres based on the wider environment

Average score by country across 18 metrics of economic, financial, business & regulatory environment (Top 40 countries & BRICS, 3 years to 2019 average)



THE BROAD PICTURE INDEX

A broader view

The combination of factors of the wider environment and metrics of financial activity gives a broader picture on the performance of different financial centres around the world (although we think this ranking is the least useful of any in this report). Fig.21 shows the average score for each country taking into account all 60 metrics of domestic financial activity, international financial activity, and the wider environment.

The rankings confirm the dominance of the US and the UK as the top two financial centres in the world and the extent of their lead compared to other countries. The US is by far the top financial centre. Its score of 82 is nearly double that of the UK and more than double the scores for China, Japan and Hong Kong.

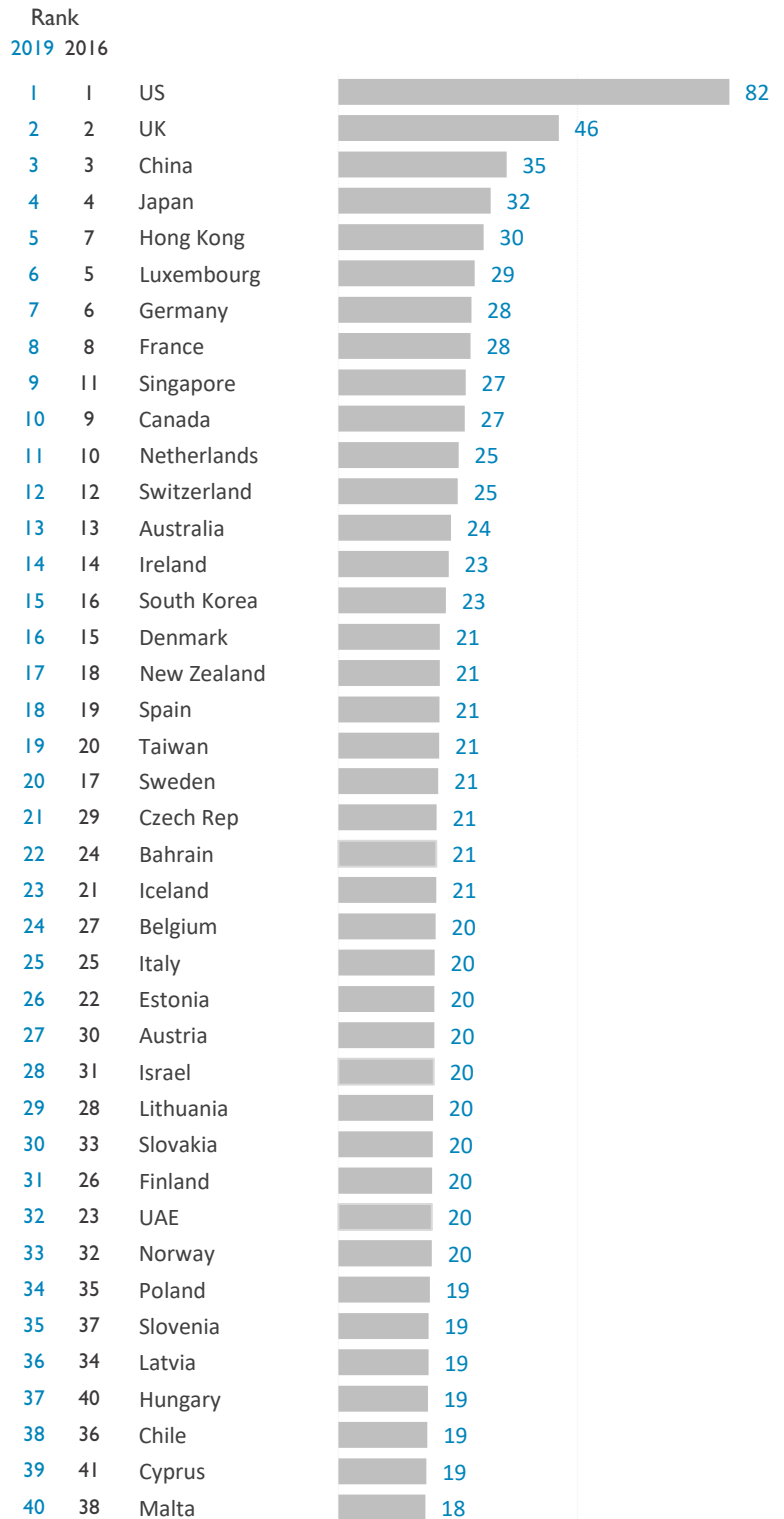
The UK ranks second in the world and is well ahead of other European countries. Its score of 46 is nearly 60% higher than Luxembourg, two thirds bigger than that of Germany and France, and roughly double that of the Netherlands and Switzerland.

The performance of big European economies is mixed. On the one hand Germany (7th), France (8th) and the Netherlands (11th) perform relatively well. On the other hand, Spain (18th) and Italy (25th) are further down, towards the middle of the table and their overall scores are lower than smaller European economies such as Switzerland, Ireland, and Denmark.

Four of the top 10 financial centres are in Asia: China is third overall, just ahead of Japan and Hong Kong, with Singapore in 9th place. China's high score in domestic activity (driven largely by its huge banking system) partially offsets its low scores in international financial activity and wider environment. With the exception of China, the rest of the world's largest developing economies perform poorly: Russia, Brazil and India are all towards the bottom of the rankings, due to low levels of international activity and poor performance in metrics of the wider environment.

Fig.21 The top financial centres based on all metrics

Average score by country across 60 metrics of financial activity and wider environment (Top 40 countries, 3 years to 2019 average)



About New Financial

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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[*The problem with European stock markets*](#)

[*What do EU capital markets look like on the other side of Brexit*](#)

[*A reality check on Capital Markets Union*](#)

[*Beyond Brexit: the future of UK banking & finance*](#)

[*Driving growth: How EU Capital Markets can support a recovery*](#)

[*The value of capital markets to the UK economy*](#)

[*The Covid crisis: how banking & finance can be part of the solution*](#)

APPENDIX I - METHODOLOGY

Methodology

Setting the scene:

We identified and collected data for nearly 90 metrics that could reflect a country's position as a financial centre. We grouped them into domestic financial activity metrics (based mainly on the nationality of an activity, asset or issuer); international financial activity metrics (based mainly on sectors where firms have a choice as to the location of an activity); wider economic, financial, business & regulatory environment metrics; and metrics of 'internationalisation' of activity (the share of international activity as a proportion of total activity). We assessed the suitability, availability and comparability of each metric and whittled the list down to 73 metrics in total.

Sourcing:

The analysis is based on data from a combination of public sources such as the IMF, World Bank, OECD, EFAMA, BIS, WFE, Eurostat, ILO, United Nations, central banks, statistical authorities and private sources such as Dealogic and Preqin. For almost all metrics we were able to collect data for the period from 2014 to 2019. If 2019 data was not available for some countries we used as a reference the nearest year. For those metrics that data was not available for all countries from a single source we used various sources and conducted estimations to ensure the comparability of the data. Such metrics include pension and insurance assets, bank assets, bank deposits, hedge funds assets, and assets under management

Our sample:

Our analysis includes 65 markets around the world: the EU27 countries, the UK, Norway, Switzerland, Iceland, Russia as well as countries in Americas, Asia-Pacific, and Middle East and Africa (for a full list of markets see page 28). Between them they represent around 94% of global GDP, and between 95% and 99% of global financial activity (depending on the sector). Our analysis is conducted at the country level and not the city level for two reasons: First, it would be difficult - if not impossible - to allocate financial activity or the size of sectors to different cities within a country, and second, in most countries the majority of financial activity takes place in one city. For example, while Edinburgh, Manchester and Belfast are all thriving financial centres in their own right, the vast majority of financial activity is based in London.

Our dataset:

Our dataset includes 42 financial sector metrics: 21 domestic metrics that capture the size of the domestic markets and activity and 21 international metrics that capture international financial activity in each country. We also included 18 metrics to measure the performance of the wider economic and financial environment as well as the political, legal, business, regulatory and social environment and 13 metrics of 'internationalisation' which look at the share of international activity as a percentage of total in each country. Finally, we divided domestic and international financial activity metrics into nine broad groups of sectors to identify the strengths of each country: pools of capital, banking, equity markets, debt markets, asset management, trading & clearing, private equity & venture capital, ESG finance, and cross-sectoral metrics. Our main index is the average score across 42 domestic and international financial activity metrics.

Our rankings:

In each metric and country we measured the size of activity for 2019 and 2016 on a three year rolling average basis to iron out the annual volatility in financial markets. We then adjusted the values for each country to a scale of 0 to 100 with the highest value in each metric getting 100. For example, the US has the highest value of pensions assets which translates to a score of 100, and the score for every other country is rebased accordingly. All of our rankings are a raw average across the different metrics so the maximum potential score in each ranking is 100. We analysed the strength of the countries in our sample and calculated rankings in the following ways:

- by the size of domestic markets and activity
- by the size of international markets and activity
- by the performance in wider environment metrics
- by the combined size of domestic and international financial activity (our main index)
- by combining domestic activity, international activity and wider environment metrics
- by the share of international activity as a percentage of total activity

APPENDIX II - DETAILED RANKING

Fig.22 Full rankings and scores of the top 50 countries in our main index

This table shows the rankings and scores of the top 50 countries in each index in 2016 & 2019 (3 year averages)

Main index rank		Country	Main index score		Domestic				International				Wider environment				Overall			
					Rank		Score		Rank		Score		Rank		Score		Rank		Score	
2019	2016		2019	2016	2019	2016	2019	2016	2019	2016	2019	2016	2019	2016	2019	2016	2019	2016	2019	2016
1	1	US	84	85	1	1	93	93	1	1	76	77	1	3	76	73	1	1	82	82
2	2	UK	35	36	4	4	14	16	2	2	56	57	2	5	72	72	2	2	46	47
3	3	China	29	29	2	2	47	45	10	10	9	10	53	53	48	48	3	3	35	34
4	4	Japan	19	18	3	3	25	24	6	6	12	12	26	21	62	65	4	4	32	32
5	8	Hong Kong	14	11	10	9	7	8	4	4	21	14	6	4	69	72	5	7	30	28
6	5	France	13	13	5	5	14	14	8	8	11	11	19	17	63	67	8	8	28	28
7	6	Germany	12	12	7	6	11	11	7	5	12	12	12	10	66	69	7	6	28	29
8	7	Luxembourg	11	11	41	35	1	1	3	3	22	24	4	2	71	74	6	5	29	30
9	9	Canada	10	9	8	8	10	11	11	12	9	6	11	11	66	69	10	9	27	26
10	11	Singapore	8	7	21	21	3	2	5	7	14	12	5	6	70	72	9	11	27	25
11	10	Netherlands	7	8	15	14	4	5	9	9	10	11	7	8	68	70	11	10	25	26
12	12	India	7	6	6	7	12	11	26	29	1	1	63	61	42	42	46	50	17	17
13	14	Switzerland	6	6	16	17	4	3	12	11	9	8	3	1	71	74	12	12	25	25
14	13	Australia	6	6	11	10	7	7	14	14	5	4	14	15	65	68	13	13	24	24
15	16	South Korea	5	4	9	11	8	7	20	21	1	1	18	19	64	65	15	16	23	22
16	18	Ireland	4	3	34	39	1	1	13	13	8	6	10	14	66	68	14	14	23	23
17	15	Italy	4	4	12	12	5	6	15	15	2	3	37	38	58	59	25	25	20	21
18	17	Spain	4	4	13	13	5	6	17	18	2	2	22	26	63	63	18	19	21	21
19	19	Taiwan	3	3	17	16	4	3	16	17	2	2	33	28	59	61	19	20	21	21
20	20	Brazil	3	3	14	15	5	4	23	22	1	1	58	57	44	45	55	55	16	15
21	21	Sweden	3	3	18	18	3	3	19	19	2	2	17	16	64	67	20	17	21	22
22	22	Belgium	2	2	25	26	2	2	18	16	2	2	25	22	62	64	24	27	20	21
23	23	Russia	2	2	19	19	3	3	30	28	1	1	55	55	47	47	57	57	15	15
24	26	Indonesia	2	1	20	20	3	2	46	47	0	0	59	59	44	43	60	59	15	14
25	28	Thailand	1	1	22	22	2	2	42	44	0	0	54	54	48	47	50	53	16	16
26	36	Saudi Arabia	1	1	23	30	2	1	40	46	0	0	41	39	56	59	42	42	18	18
27	25	South Africa	1	1	32	29	1	1	21	20	1	1	52	50	49	52	51	49	16	17
28	27	Norway	1	1	30	31	1	1	22	23	1	1	29	25	61	63	33	32	20	20
29	29	Mexico	1	1	26	25	2	2	31	31	1	1	48	49	51	53	48	46	17	17
30	30	Malaysia	1	1	24	23	2	2	39	37	0	0	39	37	57	59	41	39	18	19
31	24	Denmark	1	2	29	24	1	2	28	24	1	1	8	7	67	70	16	15	21	22
32	32	Poland	1	1	28	27	2	1	34	32	1	1	30	30	60	61	34	35	19	19
33	31	Austria	1	1	35	32	1	1	24	26	1	1	15	12	65	68	27	30	20	20
34	38	UAE	1	1	39	38	1	1	25	42	1	0	35	35	58	60	32	23	20	21
35	34	Israel	1	1	31	34	1	1	38	38	0	0	31	32	59	60	28	31	20	20
36	33	Finland	1	1	38	40	1	1	32	25	1	1	23	18	63	65	31	26	20	21
37	35	Chile	1	1	40	42	1	1	29	30	1	1	38	36	58	59	38	36	19	19
38	37	Turkey	1	1	33	33	1	1	43	43	0	0	49	47	51	54	54	52	16	16
39	39	New Zealand	1	1	42	43	1	1	33	34	1	1	16	13	65	68	17	18	21	21
40	40	Philippines	1	1	36	37	1	1	52	50	0	0	56	56	45	45	59	58	15	14
41	43	Cyprus	1	1	57	57	0	0	27	27	1	1	45	45	55	55	39	41	19	18
42	42	Portugal	0	1	45	44	1	1	41	40	0	0	40	42	57	57	45	44	18	17
43	46	Czech Rep	0	0	53	53	0	0	35	39	1	0	9	9	67	70	21	29	21	20
44	45	Egypt	0	0	44	45	1	1	47	48	0	0	60	58	44	43	53	56	16	15
45	44	Peru	0	0	47	46	0	0	45	36	0	0	51	51	49	51	52	51	16	16
46	51	Argentina	0	0	43	47	1	0	53	55	0	0	57	62	44	41	61	61	13	12
47	41	Greece	0	1	46	41	1	1	50	45	0	0	50	52	50	51	56	54	15	16
48	47	Bahrain	0	0	59	59	0	0	37	35	1	1	34	31	59	60	22	24	21	21
49	50	Hungary	0	0	55	56	0	0	44	41	0	0	24	27	63	63	37	40	19	18
50	48	Malta	0	0	63	64	0	0	36	33	1	1	42	41	56	58	40	38	18	19

APPENDIX III - METRICS AND SOURCES

Type of metric	Sector group	Metric	Source
Domestic	Pools of capital	Value of pensions assets	OECD, FSB, New Financial
Domestic	Pools of capital	Value of insurance assets	OECD, Insurance Europe, FSB, New Financial
Domestic	Pools of capital	Value of household financial assets excluding pensions, insurance, cash & deposits	Eurostat, Allianz, central banks, statistical authorities
Domestic	Banking	Value of bank assets	ECB, FSB, BIS, World Bank, central banks, New Financial
Domestic	Banking	Value of bank deposits	ECB, World Bank, New Financial
Domestic	Banking	Bank lending to non-financial corporations	ECB, central banks, statistical authorities
Domestic	Debt markets	Value of total credit to the government sector	BIS
Domestic	Debt markets	Value of total credit to the household sector	BIS
Domestic	Equity markets	Market capitalisation of domestic listed companies (Stock market value)	FESE, Regional and national exchanges, World Bank, WFE
Domestic	Equity markets	Value of IPOs by domestic companies	Dealogic, New Financial
Domestic	Equity markets	Value of follow on & convertibles issuance by domestic companies	Dealogic, New Financial
Domestic	Trading & Clearing	Equity trading (nationality of issuer)	Fidessa, WFE
Domestic	Equity markets	Number of domestic companies listed	WFE
Domestic	Debt markets	Value of all bonds outstanding	ECB, BIS
Domestic	Debt markets	Value of corporate bonds outstanding	ECB, BIS
Domestic	Debt markets	Value of domestic corporate bond issuance (high yield and investment grade bonds)	Dealogic, New Financial
Domestic	Debt markets	Value of domestic leveraged loans issuance	Dealogic, New Financial
Domestic	PE&VC	Private equity deals - by target nationality	Invest Europe, Preqin
Domestic	PE&VC	Venture capital deals - by target nationality	Invest Europe, Preqin
Domestic	ESG bonds	Value of domestic green, social and sustainable bonds issuance	Dealogic
Domestic	Cross-sectoral	Total number of employees in financial services	International Labour Organisation, Eurostat

APPENDIX III - METRICS AND SOURCES

Type of metric	Sector group	Metric	Source
International	Asset management	Value of assets under management by location	EFAMA, WTW, IPE, statistical authorities
International	Asset management	Value of investment funds by domicile	Investment Company Institute, central banks, statistical authorities
International	Asset management	Value of assets managed by hedge funds	Preqin, New Financial
International	Equity markets	Value of IPOs by foreign companies	Dealogic, New Financial
International	Equity markets	Value of follow ons & convertibles issuance by foreign companies	Dealogic, New Financial
International	Equity markets	Number of foreign companies listed	WFE, regional and national exchanges
International	Debt markets	Value of corporate bond issuance by foreign companies	Dealogic, New Financial
International	Debt markets	Value of leveraged loans issuance by foreign companies	Dealogic, New Financial
International	Banking	Value of foreign banks' assets	ECB, World Bank, BIS, New Financial
International	Banking	Value of cross border claims by bank location	BIS
International	Trading & Clearing	Value of foreign equity trading	WFE, New Financial
International	Trading & Clearing	Value of OTC interest rates derivatives trading	BIS
International	Trading & Clearing	Value of OTC foreign exchange derivatives trading	BIS
International	Trading & Clearing	Value of foreign exchange spot trading	BIS
International	Trading & Clearing	Value of transactions cleared by CCPs	BIS
International	PE&VC	Private equity fundraising	Invest Europe, Preqin
International	ESG bonds	Value of green, social & sustainable bond issuance by foreign companies	Dealogic, New Financial
International	Trading & Clearing	Notional value of commodity futures and options	WFE, New Financial
International	Cross-sectoral	Value of financial services exports	UNCTAD, New Financial (incl pension & insurance)
International	Cross-sectoral	Value of foreign direct investment in financial services	OECD, International Trade Centre
International	Cross-sectoral	Number of foreign employees in financial services	International Labour Organisation, OECD, Eurostat, New Financial

APPENDIX III - METRICS AND SOURCES

Type of metric	Sector group	Metric	Source
Wider economic, financial, Business & regulatory environment	Business & regulation	Financial freedom index	The Heritage Foundation
Wider economic, financial, Business & regulatory environment	Business & regulation	Trade restrictiveness in commercial banking & insurance	OECD
Wider economic, financial, Business & regulatory environment	Economy & finance	Productivity	ILO
Wider economic, financial, Business & regulatory environment	Business & regulation	Corporate taxes	KPMG
Wider economic, financial, Business & regulatory environment	Business & regulation	Income tax	KPMG
Wider economic, financial, Business & regulatory environment	Business & regulation	Ease of doing business	World Bank
Wider economic, financial, Business & regulatory environment	Business & regulation	Labour freedom index	The Heritage Foundation
Wider economic, financial, Business & regulatory environment	Business & regulation	Strength of government & institutions	World Bank, New Financial
Wider economic, financial, Business & regulatory environment	Economy & finance	Quality of infrastructure	World Economic Forum
Wider economic, financial, Business & regulatory environment	Economy & finance	Quality of Life	Numbeo
Wider economic, financial, Business & regulatory environment	Economy & finance	Social globalization index	KOF/ETH Zurich
Wider economic, financial, Business & regulatory environment	Economy & finance	Human capital, education, research and innovation index	World Economic Forum, New Financial
Wider economic, financial, Business & regulatory environment	Shipping	Liner shipping connectivity index	World bank, UNCTAD
Wider economic, financial, Business & regulatory environment	Fintech	Global fintech index	Findexable
Wider economic, financial, Business & regulatory environment	Economy & finance	Foreign portfolio investment	IMF
Wider economic, financial, Business & regulatory environment	Business & regulation	Investment freedom index	The Heritage Foundation
Wider economic, financial, Business & regulatory environment	Economy & finance	Macroeconomic stability	World Economic Forum
Wider economic, financial, Business & regulatory environment	Economy & finance	Financial stability	World Economic Forum

APPENDIX III - METRICS AND SOURCES

Type of metric	Sector group	Metric	Source
Internationalisation	Equity markets	Value of IPOs by foreign companies as a % of total IPOs	Dealogic, New Financial
Internationalisation	Equity markets	Number of IPOs by foreign companies as a % of total IPOs	Dealogic, New Financial
Internationalisation	Equity markets	Value of follow on and convertibles issuance by foreign companies as a % of total follow on issuance	Dealogic, New Financial
Internationalisation	Equity markets	Number of follow on and convertible issues by foreign companies as a % of total follow on issuance	Dealogic, New Financial
Internationalisation	Equity markets	Number of foreign companies listed as a % of total number of companies listed	WFE, regional and national exchanges, associations, New Financial
Internationalisation	Debt markets	Value of corporate bonds issuance by foreign companies as a % of total	Dealogic, New Financial
Internationalisation	Debt markets	Number of corporate bonds issues by foreign companies as a % of total	Dealogic, New Financial
Internationalisation	Trading & Clearing	Value of foreign exchange derivatives trading in all currencies other than local as a % of total	BIS, New Financial
Internationalisation	Trading & Clearing	Value of interest rates derivatives trading in all currencies other than local as a % of total	BIS, New Financial
Internationalisation	Trading & Clearing	Value of foreign equity trading as a % of total	WFE, regional and national exchanges, associations, New Financial
Internationalisation	Cross-sectoral	Number of foreign employees in financial services as a % of total employees in financial services	ILO, OECD, New Financial
Internationalisation	ESG bonds	Value of green, social & sustainable bonds issuance by foreign companies as a % of total	Dealogic, New Financial
Internationalisation	ESG bonds	Number of green, social & sustainable bond issues by foreign companies as a % of total	Dealogic, New Financial

APPENDIX IV - FULL LIST OF COUNTRIES IN THE SAMPLE

Americas

Argentina
Brazil
Canada
Chile
Colombia
Mexico
Peru
United States

Asia Pacific

Australia
China
Hong Kong
India
Indonesia
Japan
Malaysia
New Zealand
Pakistan
Philippines
Singapore
South Korea
Taiwan
Thailand
Vietnam

Middle East & Africa

Bahrain
Egypt
Israel
Nigeria
Qatar
Saudi Arabia
South Africa
UAE

Europe

Austria
Belgium
Bulgaria
Croatia
Cyprus
Czech Republic
Denmark
Estonia
Finland
France
Germany
Greece
Hungary
Iceland
Ireland
Italy
Latvia
Lithuania
Luxembourg
Malta
Netherlands
Norway
Poland
Portugal
Romania
Russia
Slovakia
Slovenia
Spain
Sweden
Switzerland
Turkey
Ukraine
United Kingdom