



UNLOCKING THE GROWTH POTENTIAL IN EUROPEAN CAPITAL MARKETS

ANALYSIS OF THE SIZE, DEPTH & GROWTH POTENTIAL OF CAPITAL MARKETS IN THE FU

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by Panagiotis Asimakopoulos and William Wright

> This report identifies the potential for game-changing growth in capital markets to support investment, jobs, and growth in the EU economy. We estimate that an additional 4,000 companies could raise an extra €600bn per year in the capital markets — and that an additional €16tn in long-term capital could be put to work in the economy.

INTRODUCTION

Unlocking the growth potential in EU capital markets

This report is our fifth annual report on European capital markets, and this year it focuses on what we think is a game-changing growth opportunity. We hope it will help inject a greater sense of urgency and ambition across the EU into efforts to develop bigger and better capital markets over the coming years.

Making a tangible case

While the capital markets union initiative has laid some of the foundations for future growth, it has been relatively modest in terms of concrete progress. One of the main factors behind this is the often lukewarm political commitment to - and continued mistrust of - bigger capital markets in many countries.

This report outlines an ambitious vision of the potential benefits of deeper capital markets to the European economy and the economies of individual countries in concrete and practical terms. Bigger capital markets are not an end in themselves. They help diversify the sources of funding for companies; reduce the reliance of the EU economy on bank lending; increase the availability and scale of risk capital to support innovation and growth; boost the pools of long-term capital that could be put to work in the economy; and help reduce the increasingly unsustainable burden of future pensions provision.

We have expressed the growth potential in terms of what it would mean for the number of additional companies in each sector and each country that could potentially access capital markets, and how much more money they would be able to raise. To pick one example, our model estimates that around 500 additional companies in Italy could benefit from an additional €725m in investment each year. Another way of looking at this is that 500 potential high growth companies a year in Italy are not getting that investment today.

For pools of long-term capital – pensions and insurance assets – we have expressed the growth potential in terms of what the increase in assets per household might look like.

The report has five sections:

- 1) Introduction, summary and headline conclusions
- 2) Measuring the depth of capital markets across the EU
- 3) Analysis of the reliance on bank lending and bank savings
- 4) Measuring the potential growth opportunity
- 5) Outlining how to achieve that growth potential

The report highlights the significant progress in capital markets in the EU over the past five years as markets have recovered from the financial crisis, and measures the wide range in the level of development of capital markets across the EU. It also forecasts where we might expect capital markets to be in 10 years based on some conservative growth assumptions based on current trends.

What if...?

More importantly, it also presents a much more ambitious growth analysis based on a 'what if...?' scenario: what if capital markets in each country in the EU were as large relative to GDP as they are in the five most developed countries in each sector? While this growth may seem improbable from where we are standing today, it is based on what five member states in each sector have already shown is perfectly possible.

This growth – or even modest progress in the right direction – would have a significant impact on national economies across Europe. We think that with a renewed commitment from EU policymakers, national authorities, and market participants, significant growth is realistically achievable.

Here is a short summary of this report:

- I. Game-changing growth: there is huge potential for growth in capital markets across the EU27. On our ambitious but achievable analysis, an additional 4,000 companies in the EU27 could raise an extra €600bn per year in the capital markets roughly double the current levels of activity. This growth or significant progress towards it would significantly reduce the reliance of the EU economy on bank lending, drive innovation, and boost investment in jobs and growth.
- 2. A more sustainable future: alongside this growth in capital markets activity, our analysis shows the potential to transform the pools of long-term capital in the form of pensions and insurance assets that the EU needs to provide for a more sustainable future. An additional €16tn in long-term capital could be put to work in the EU27 economy more than double the current levels with the average value of long-term capital per household rising from €58,000 today to €143,000.
- 3. Mind the gap: capital markets in the EU27 are relatively underdeveloped, and the departure of the largest and deepest capital market in Europe has highlighted the urgency of the capital markets union initiative. On average, capital markets across the EU27 are half as large relative to GDP as in the UK, which in turn is half as developed as the US.
- 4. A wide range in depth: there is a wide range in the depth of capital markets across the EU. The good news is that there are a number of countries in the EU27, such as the Netherlands, Sweden and to a lesser extent France and Denmark with well-developed capital markets that can lead the way in terms of the future growth across the EU27.
- 5. Playing catch-up: on the other hand, capital markets in large economies such as Germany, Italy and Spain are significantly underdeveloped, and there is a long tail of smaller countries mainly the most recent member states with relatively nascent but high potential capital markets.
- 6. The reliance on banks: companies in the EU are still heavily reliant on bank lending for their funding. In the US the split between bank lending and corporate bonds is 26% and 74%. In the EU27, just 23% of corporate borrowing comes from the bond markets, exposing the economy to the sharp decline in bank lending since the financial crisis. On the plus side, the reliance on bank lending has fallen significantly in the past decade.
- 7. Deeper pools of capital: deep pools of long-term capital such as pensions and insurance assets as well as direct retail investment are the starting point for deep and effective capital markets. But pensions assets in the EU27 are less than a third as big relative to GDP as in the UK. Households in the EU27 hold nearly a third of their assets in bank savings, nearly three times the level in the US.
- 8. Fuelling the growth economy: the EU doesn't have a start-up problem or an SME problem but it does have a problem channelling investment into the sort of high growth and scale-up companies that drive job creation. On our growth analysis, nearly 2,000 additional companies a year could benefit from an additional €3bn a year in venture capital funding roughly double the current levels and the number of companies listed on growth stock markets could nearly triple.
- 9. Laying the foundations: it is important to distinguish between what measures can be taken at an EU level and at a national level to help develop capital markets. At the EU-level (the 'more union' part of CMU), there needs to be a renewed commitment from EU and national authorities to reform the supervisory architecture and accelerate convergence to reduce cross-border barriers, enhance competition and improve transparency.
- 10. Pulling the big levers: this top down approach can only go so far. We think a more fundamental, bottom up approach (the 'more capital markets' part of CMU) is needed and could have a much bigger impact. Ultimately bigger and better capital markets in Europe can only be achieved if national governments recognise the potential benefits to their economy of deeper capital markets, and pull the big levers around pensions reform and tax policy to help them grow.

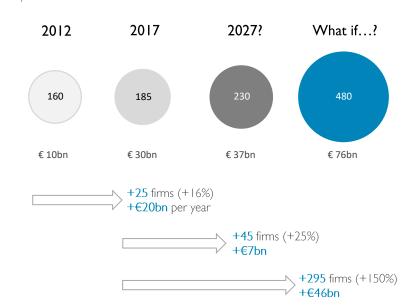
HOW WE MEASURED THE GROWTH POTENTIAL

Fig. I: An example: measuring the growth potential for the IPO market in the EU27

How we estimated the growth potential for the IPO market in the EU27 under the two different growth scenarios Note: We use a three year rolling average for the value of activity in 2012 and 2017.

Source : New Financial





Game-changing growth

Here is an outline of how we calculated the 'game-changing' potential growth in European capital markets and how we have presented our analysis in this report, using the IPO market as an example. First, we started with where we have come from: in the three years to 2012, an average of around 160 companies in the EU27 raised nearly €10bn a year in the IPO market.

Second, we looked at where we are today: in the three years to 2017, an average of 185 companies a year raised around €30bn a year from IPOs in the EU27. In other words, the IPO market has grown by around 15% in terms of the number of companies in the EU27 going public and the amount of money being raised has tripled.

Next we estimated where we are likely to be in 10 years, assuming that the EU economy and market depth continue to evolve on current trends. To calculate this, for each country we used a conservative forecast that real GDP growth would continue over the next decade at half its historic rate over the past 20 years, and that the depth of the IPO market relative to GDP would continue to grow at half its historic rate over the past 10 years. For the EU27 as a whole, this translates into an additional 45 companies a year going public raising an additional €7bn a year.

While that growth is welcome, it's not really going to move the dial. So finally, we ran a 'what if...?' scenario where we analysed what the IPO market in each developed EU country would look like if it were as big relative to GDP as the five most developed IPO markets in the EU over the past three years (Denmark, Sweden, the Netherlands, Finland and Malta, which between accounted for one third of IPOs in the EU by value and 45% by number). We compared emerging EU economies to the 'best in class' (Latvia) to reflect the lower level of development in capital markets in these countries.

On this basis, the number of IPOs in the EU27 would more than double to around 480 a year (an additional 300 or so companies a year) and the amount of money being raised would jump from around €30bn a year today to €76bn. While this may look improbable, we believe that this sort of game-changing growth is perfectly achievable given that a range of EU countries have shown it can be done). We repeated this exercise for each country and each sector to create a more ambitious vision for capital markets across the EU.

AT A GLANCE: THE GROWTH OPPORTUNITY BY SECTOR

Fig.2 The growth opportunity for EU27 capital markets

This chart shows the potential growth in the number of companies using capital markets and how much money they could raise each year in a selection of sectors in the EU27.



AT A GLANCE: THE GROWTH OPPORTUNITY BY COUNTRY

Fig.3 The growth opportunity in selected sectors by country

This map shows the growth opportunity in selected sectors for each country if capital markets closed the gap with the deepest and most developed markets in each sector (our 'What if...?' scenario).

For each country we picked what could be achieved in one sector to highlight the growth potential in concrete terms. We have expressed this growth potential in terms of the number of additional companies that could access capital markets per year and how much money they would be able to raise.

For pools of long-term capital - pensions and insurance assets - we have expressed growth in terms of what the increase in assets per household might look like to make it more relevant at a national level.



AT A GLANCE: THE GROWTH OPPORTUNITY BY COUNTRY



THE BENEFITS OF DEEPER CAPITAL MARKETS

Why should we care about bigger and better capital markets?

Large and deep capital markets are not an end in themselves. The value of deeper capital markets is that they support sustainable economic growth in several ways: they diversify the range of financing for companies and reduce their reliance on bank lending; they boost the shock absorption capacity of an economy and strengthen financial stability; they improve productivity through more efficient allocation of capital; and they provide more people with more opportunities to invest or save towards their retirement. Here is a summary of some of the benefits of healthy capital markets:

- I. A wider range of funding: capital markets provide a valuable additional source of financing for companies that complements traditional bank lending and provides companies with a wider range of sources of potential funding. It reduces the economy's reliance on bank lending. For example, since the financial crisis, the growth in corporate bond markets in Europe has offset more than 90% of the decline in bank lending.
- 2. Access to capital: capital markets offer the right companies the ability to raise a larger amount of capital, for a longer period, and at a lower cost than borrowing from their bank. Through venture capital and equity financing, they provide risk capital to support innovation and high potential growth companies that banks are not designed to provide.
- 3. Capital allocation: capital markets improve what economists call the 'allocative efficiency' of capital, by effectively crowdsourcing decisions about value and potential to a wide range of investors and channelling investment to those companies that can make the best use of it.
- 4. Raising standards: the need to compete for capital and be accountable to investors helps improve discipline, operational standards, corporate governance, performance and transparency at companies (or governments) that issue bonds or equities.
- 5. More resilient: while capital raising can come to an abrupt halt in the wake of market disruption, capital markets rebound faster than bank lending. The flow of gross new bank lending in the eurozone has fallen by roughly 40% since the financial crisis, but issuance in European bond markets has nearly doubled relative to GDP since 2007, and activity in the equity markets has rebounded to the same relative levels as it was before the crisis.
- 6. Long-term returns: while market performance is often volatile in the short term, investing in capital markets across a range of assets over the long term generates higher returns than keeping your savings under a mattress or in a bank account, providing a better future income in retirement. Long term pensions savings also significantly reduce the future economic burden of pensions provision on taxpayers and government budgets under pay-as-you-go pensions systems.
- 7. Managing risks: capital markets provide investors with the ability to buy and sell assets more easily than markets such as property. And they provide companies and investors mechanisms to effectively manage their risks, such as future changes in exchange rates or credit worthiness.
- 8. Longer-term investing: capital markets provide longer-term investors such as pension funds and insurance companies with a wider range of potential assets in which to invest that better match their liabilities. Annual pension contributions by employers and employees add up to billions of euros a year that can be put to work supporting the economy.
- 9. **More focus:** capital markets are not a realistic financing option for most small and medium-sized companies (SMEs), but wider use of capital markets by companies that are large enough to access them can help free up bank balance sheets and enable banks to focus their lending on smaller companies that need it most.
- 10. Wealth creation: capital markets help democratise wealth creation by enabling a wider range of people to share in high growth and successful companies through their investments and pensions.

> SECTION 2: THE DEPTH OF CAPITAL MARKETS

The range in the depth of capital markets in the EU

In this section we analyse the wide range in the levels of development of capital markets across the EU. It shows that there is a wide range in the depth of capital markets across the EU (between individual countries and between different sectors); that capital markets in the EU27 are significantly less developed than in the UK; and as such that there is significant potential for growth in capital markets in the EU27.

The depth of capital markets in the EU28 by country Comparing the depth of capital markets with the size of each economy	Page 10
A ranking of the depth of capital markets by country	Page 11
A ranking of the size of capital markets by country. An overall ranking of countries by the size of their capital markets	Page 12

What we measured:

- We calculated the overall depth of capital markets in the following way:
- We measured the value of activity in each member state in 24 different sectors of capital markets activity in the three years to 2017
- We converted these values in each sector and each country to a percentage of GDP.
- Within each sector, we rebased these figures to 100, with 100 representing the average depth across the EU.
- The overall depth of capital markets in each country is the average of these 24 sectors. A country with a depth of 200 has capital markets that are twice as big relative to GDP as the EU average, and a country with a depth of 50 has capital markets that are half as developed as the EU average (for a full methodology, see page 27)
- We measured the size of capital markets in each country by the average share of total EU capital markets activity across the 24 sectors in our sample.

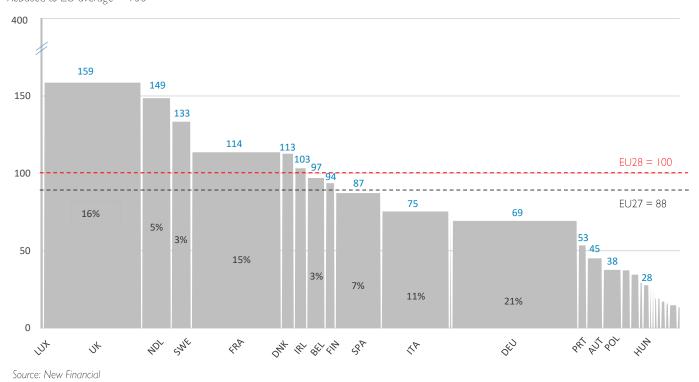


THE RANGE IN DEPTH IN EU CAPITAL MARKETS

Fig.4 The depth of capital markets relative to the size of the economy

This chart shows the average depth of capital markets relative to GDP across 24 different sectors of activity over the three years to 2017 for individual countries, and the size of their economy as a % of EU GDP.

Rebased to EU average = 100



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.4 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. The chart also compares the depth of capital markets with the size of each economy.

Capital markets in the US (on 282) are nearly twice as large relative to GDP as in the UK, (on 159) which is turn is roughly twice as deep as the rest of the EU (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 and just 0.4% of EU GDP). The UK 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. These countries are Austria, Greece, Portugal, Cyprus and the most recent member states to join the EU from the Baltics region and Central and Eastern Europe.

THE DEPTH OF CAPITAL MARKETS - BY COUNTRY

Fig.5 The depth of capital markets across EU countries

This table is a ranking of the overall depth of capital markets in each country across 24 sectors of the capital markets. It is divided into four groups, from most developed (top quartile) to least developed (bottom quartile). We have also included a selection of sector rankings across five broad groups (pools of capital; equity markets; bond markets; asset management; and private equity & venture capital) to highlight the different level of development in different countries.

	Rank	Country	Overall depth	Pools of capital	Equity markets	Bond markets	Asset management	Private equity & VC
	I	Luxembourg						
	2	UK						
Top quartile	3	Netherlands						
	4	Sweden						
о фо	5	Denmark						
F	6	Ireland						
	7	France						
	8	Belgium						
Second quartile	9	Finland						
quai	10	Spain						
puo	11	Malta						
Seco	12	Italy						
0,	13	Germany						
	14	Portugal						
	15	Austria						
<u>e</u>	16	Cyprus			0	0		
Third quartile	17	Czech Republic					0	0
рp	18	Poland		0				
H F	19	Greece		0			0	0
	20	Croatia						0
	21	Hungary				0	O	
<u>a</u>	22	Estonia	0	0	0			
Bottom quartile	23	Latvia	0	0		0	0	
n qu	24	Bulgaria	0	0	0		0	0
ttor	25	Slovakia	0		0	0		0
Bot	26	Slovenia	0		0	0	0	0
	27	Romania	0	0	0	0	0	0
	28	Lithuania	0	0	0	0		

THE SIZE OF CAPITAL MARKETS IN THE EU - BY COUNTRY

Size matters

The starting point for any analysis of the depth and growth potential of capital markets in the EU is understanding how big they are today. In terms of size, the UK is in a league of its own.

Fig.6 ranks countries by the size of their capital markets as measured by their average share of EU capital markets activity across 24 sectors. This approach enables us to include sectors of vastly different value: the value of stockmarkets runs into trillions of euros in large countries, while in most countries venture capital is measured in the tens of millions.

The UK dominates the rankings with an average share of nearly 27% of all capital markets activity in the EU, well ahead of France in second place with a 17% share, and nearly double the size of capital markets in Germany (in third place with just under 15%). The UK is the largest market in 19 out of the 24 sectors that we analysed.

On the other side of Brexit France will take the place of the UK as the largest capital market in the EU. Its share will increase to 23% of EU27 activity, Germany will be second with 19%, and Italy and the Netherlands will account for 11% each.

The chart also shows the disparity between the size of capital markets activity and GDP in each country. For example, although the German economy is significantly larger than the UK, capital markets in Germany are only half as big. And while the Italian economy is roughly two thirds the size of the UK, its capital markets are just one third as big as in the UK. Only a quarter of countries in the EU have bigger capital markets than you would expect based on the size of their economy.

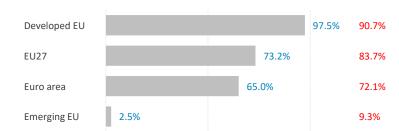
Overall, the 16 developed markets in the EU account for almost all the capital markets activity in the bloc (97.5%) while markets in the euro area account for only two thirds of total activity and are significantly smaller than you would expect based on the size of the eurozone economy.

Fig.6 The size of capital markets in the EU

Size of capital markets by country measured by the average share of total activity across 24 different sectors in the three years to 2017 %

Note: the column in red shows each country's share of EU GDP





Source: New Financial

> SECTION 3: BANK LENDING & HOUSEHOLD ASSETS

Banking on banks

In this section we analyse how reliant companies are across the EU are on bank lending to fund their business; how that varies between different countries; what has happened to levels of bank lending over the past decade; and how households across the invest their savings.

Bank lending in the EU	Page 14
The shift from bank lending to markets The relative size of bank lending and corporate bond markets across the EU and how that balance has changed since the financial crisis.	Page 15
Pools of long-term capital in the EU How households in the ELL invest their financial assets	Page 16



BANK LENDING IN THE EU

A drop in capacity

Boosting EU capital markets is more urgent than ever: since the financial crisis banks across Europe have struggled to provide funding to businesses and overall levels of bank lending have fallen sharply. Deeper capital markets would provide companies with access to more diverse and complementary sources of finance.

Fig.7 shows the value of outstanding bank lending to non-financial corporates – a measure of the total amount of bank lending being put to work in the economy – in absolute terms and as a percentage of GDP in the EU.

After growing rapidly in the five years before the crisis (the value of bank lending increased by half from 2004 to 2008) it has since shrunk by around 10% to €5.4 trillion in nominal terms. This means that there is €600bn less in bank lending to companies than at the end of 2008, and in real terms (adjusted for inflation) the value of bank lending has fallen by around one fifth.

The decline in bank lending is even more pronounced when you compare it to the size of the European economy: the value of bank lending peaked at 47% of EU GDP in 2009, and has since fallen sharply to 36% of GDP.

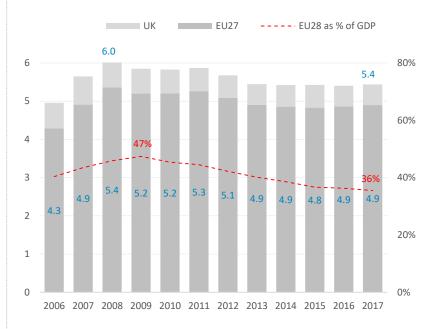
A drop in supply

The decline in the supply of new bank lending has been even more pronounced. Gross new bank lending to companies in the eurozone has shrunk by more than 40% in absolute terms (see Fig.8). In 2017 banks in the eurozone made new loans to companies of €2.5 trillion, which is roughly €1.6 trillion less in new lending than in 2008.

In countries such as Greece, Ireland, Portugal, and Spain new bank lending has more than halved since 2008. Relative to GDP, the decline in new lending is yet more stark: it has nearly halved from 42% of eurozone GDP in 2008 to just 23% of GDP in 2017.

Fig.7 The value of outstanding bank lending to companies

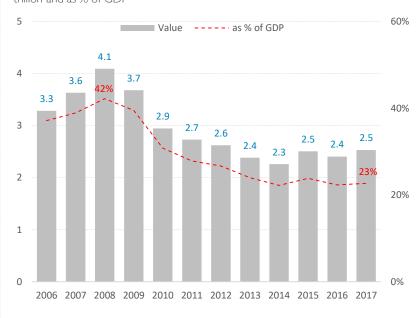
The stock of outstanding bank lending to non-financial corporations 2006 to 2017 in € trillion and as % of GDP



Source: ECB, New Financial

Fig.8 The value of gross new bank lending in the eurozone

The value of gross new lending to non-financial corporations 2006 to 2017 in € trillion and as % of GDP



Source: ECB, New Financial

THE SHIFT FROM BANK LENDING TO MARKETS

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 EU economy is still heavily exposed to a struggling banking sector. Fig.9 shows the extent to which companies in the EU and the US 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%. This is the inverse of the US, where bank lending accounts for just 26% of corporate borrowing.

There is a wide range in the level of adoption of corporate bond markets in the big five economies in the EU. On the one hand, in the UK and France, corporate bonds represent a significant part of corporate borrowing (with 45% and 37% respectively).

On the other, corporate bond markets are far less developed in Germany, Italy and Spain: companies in Germany and Italy rely on banks for more than 80% of their borrowing – and in Spain it's more than 90%.

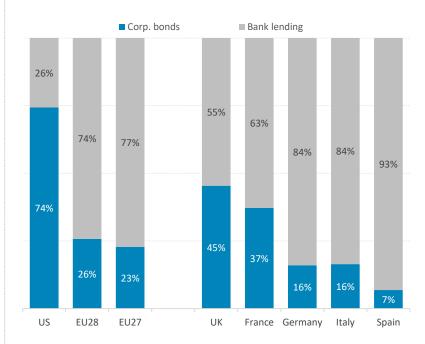
However, the reliance on bank lending for companies in the EU and EU27 has fallen significantly since 2007 (see Fig.10). Corporate bond markets have increased from 16% to 26% of corporate borrowing in the EU, and from just 13% of corporate borrowing in the EU27 to 23% in 2016.

This increase in corporate bond markets translates into growth of the corporate bond market in the EU27 of nearly €600bn since 2008, offsetting the €600bn fall in the value of outstanding bank lending to companies over the same period.

In the US, corporate bonds have settled at around three quarters of all corporate borrowing over the past decade, while in the UK, after rapid growth since the financial crisis, bonds have settled at around 45% of corporate borrowing – roughly double the level for the rest of the EU.

Fig.9 Bank lending vs corporate bonds

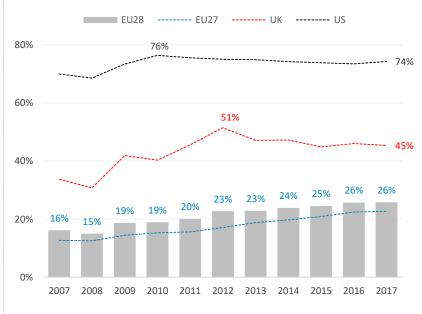
Bank lending and corporate bonds as a % of corporate borrowing in the EU, US and a selection of countries



Source: ECB, New Financial

Fig.10 The shift from bank lending to corporate bonds

The evolution of corporate bonds as a % of corporate debt 2006-2017



Source: ECB, New Financial

POOLS OF LONG-TERM CAPITAL IN THE EU

A long way to go

The starting point for deep and effective capital markets is deep pools of long-term capital – but households in the EU and EU27 are just as dependent on bank deposits as companies are on bank lending. Fig. I I shows how households in the EU and US invest their assets.

Households in the EU divide their financial assets excluding property roughly equally in three ways. Nearly a third (32%) of their financial assets are in bank deposits – nearly three times the level in the US. A third of assets are held in pensions and insurance products with insurance taking the lion's share in the EU27. And the rest is invested directly in stocks, bonds and funds (a significantly lower level than the 55% in the US).

There is a wide range across the EU. In the UK, Netherlands, Denmark, and Sweden the share of bank deposits is relatively small and well below the EU average. In 19 countries the share of bank deposits is above the EU average ranging from a third to more than 60% of total household financial assets

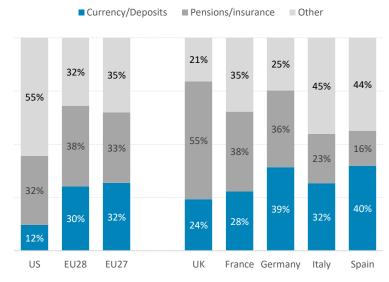
While the share of long-term pools of capital in the EU27 has grown by nearly a quarter over the past decade, the share of investments in stocks, bonds and funds has fallen. If households in the EU27 reduced their preference for bank deposits to the same level as in the UK, it would free up nearly $\[\in \] 2$ trillion that could be invested in the economy.

Fig. I 2 shows the total size of financial assets in the EU and the US relative to GDP. Total financial assets in the US are nearly twice as large as in the EU28 and the EU27 relative to GDP. This is largely explained by the fact that both pensions assets and direct investments in funds, stocks and bonds, are roughly three times the size as in the EU.

The difference in pensions assets also explains why total financial assets in the UK are so much bigger than in the EU27 relative to GDP (346% vs 224%) and much bigger compared to the other big economies in the EU.

Fig. I I How households invest their assets

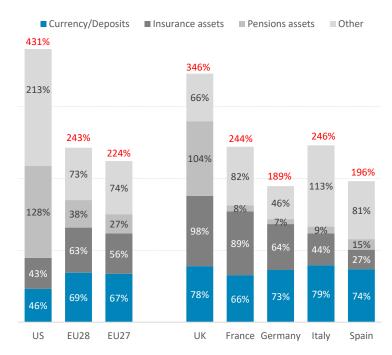
The allocation of household financial assets in the EU, the US and a selection of countries



Source: Eurostat, Federal Reserve, New Financial

Fig. 12 Pools of capital

The size of potential pools of long-term capital as a % of GDP in the EU, US and a selection of countries



Source: ECB, New Financial

> SECTION 4: MEASURING THE GROWTH OPPORTUNITY

Game-changing growth

In this section we paint an ambitious picture of the potential for game-changing growth in European capital markets across a range of sectors. It is important to note that this is not a forecast of the future growth in capital markets, more a directional indicator of what we believe is realistically achievable.

To make the analysis more tangible and to underline the potential benefits of deeper capital markets to the European economy, we have expressed this growth potential in terms of what it would mean for the number of additional companies in each sector and each country that could potentially access capital markets, and how much more money they would be able to raise.

For pools of long-term capital – pensions and insurance assets – we have expressed the growth potential in terms of what the increase in assets per household might look like.

Pools of long-term capital The combined potential growth in pensions and insurance assets at a per household level	Page 18
The IPO market	Page 19
The corporate bond market	Page 20
Venture capital	Page 21
Growth & SME stockmarkets	Page 22

What we measured:

In each sector we ran two growth scenarios:

- What might capital markets in the EU look like in 10 years' time, based on historic growth trends.
- What if...?: what could capital markets in each country and each sector look like if they closed the gap with the five most developed countries in each sector the EU? For emerging economies we measured the growth potential on the basis that markets closed the gap with the best performer in the emerging economies group.

(for a full methodology, see page 27)



THE GROWTH OPPORTUNITY - POOLS OF CAPITAL

A deeper pool

The relatively low depth of pools of capital in many countries across the EU presents many challenges for policymakers - but it also represents a huge opportunity for growth.

We analysed the potential growth of pools of capital (that is, funded pensions assets and insurance assets) in each country based on two growth scenarios: one based on historic growth trends over the past 10 years, and one on what could be achieved in the future if each country closed the gap with the fivemost developed markets in the EU. To make this growth more tangible, we expressed it in terms of the growth in assets per household in thousands of euros.

Fig.13, shows the growth potential in pensions and insurance assets per household across the EU27. In the three years to 2012, the average combined value of long-term assets per household in the EU27 was €45,000. This had increased to around €58,000 in 2017 as a result of a recovery in markets and growth in the annual contributions to pensions and insurance products.

We estimate that over the next 10 years the average will grow by nearly a quarter to €70,000 - an additional €12,400 for each household in today's money. But if each country had pools of capital as big relative to GDP as in the five most developed markets it would more than double to €143,000 per household (an increase of €85,500 per household). This translates into an additional €15.7 trillion in long-term capital in the EU27 that would significantly lower the future pensions burden.

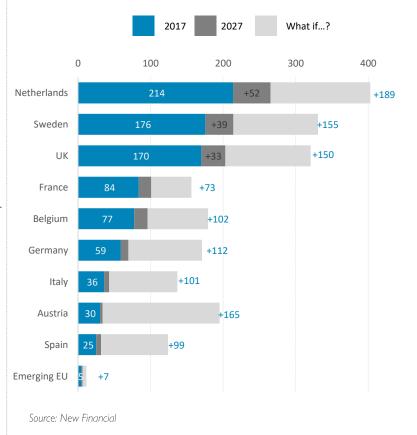
At a country level, there is a wide range in the growth potential, depending on how developed pools of capital are today. On our conservative growth forecast, longer-term assets per household would increase in today's money by between €7,000 and €20,000 in large economies such as France, Germany, Italy and Spain. However, on our 'what if' scenario, long-term assets per household would increase by €100,000 or more in large parts of the EU27.

Fig. 13 The growth opportunity in pools of capital

i) The growth opportunity in pools of long-term capital per household in the EU27 (pensions and insurance assets) expressed in terms of additional assets per household in thousands of euros



ii) The growth opportunity in pools of long-term capital per household in a selection of countries: potential additional assets per household in thousands of euros



THE GROWTH OPPORTUNITY - IPOs

Full steam ahead?

Fig. 14 shows the growth potential in the IPO market in terms of additional billions of euros in funding and number of companies raising funds in capital markets per year in different countries and the EU27.

In the three years to 2012, an average of around 160 companies in the EU27 raised nearly €10bn a year in the IPO market. By 2017, an average of 185 companies a year raised nearly €30bn a year from IPOs. In other words, the number of companies going public in the EU27 has grown by around 15% and the amount of money being raised had tripled. While the growth in value is impressive, in the three years to 2012 EU capital markets were still scarred by the financial crisis and the euro crisis.

On our conservative growth scenario (that is if real GDP and the depth of the IPO market relative to GDP continue to grow at half their historic rate over the previous 20 years) it would translate into an additional 45 companies a year going public and raising an additional €7bn a year.

While this growth is welcome, it's not really going to move the dial. Under our 'what if...?' scenario, the number of IPOs in the EU27 would more than double to around 480 a year (an additional 295 or so companies a year) and the amount of money being raised would jump from around €30bn a year today to around €76bn.

The potential for the big economies in the EU27 is huge. In Germany an additional 84 companies a year would go public raising an additional €13bn a year compared to an average of 13 companies going public today and raising €5bn. In France the number of companies could increase by 67 a year, from 18 today, raising an extra €10bn a year. The IPO market in Italy, Spain and the Netherlands would add a combined 60 companies a year raising an additional €10bn a year.

Fig. 14 The growth opportunity in IPOs

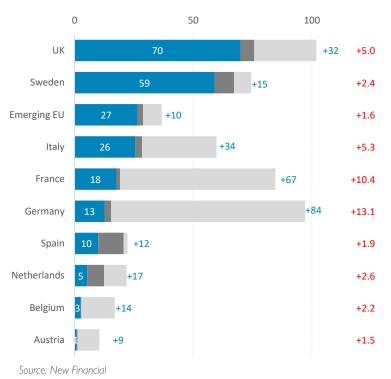
i) The growth opportunity in IPOs in the EU27, expressed in terms of additional companies



ii) The growth opportunity in IPOs in a selection of countries: potential additional number of companies



Note: the number in red shows the additional capital that could be raised in €bn)



THE GROWTH OPPORTUNITY - CORPORATE BONDS

A fundamental shift

Corporate bond issuance in the EU has grown at a significantly higher rate than equity issuance since the global financial crisis. Although the gradual normalisation of interest rates will have an impact on bond markets, in most EU countries there is scope for further growth as corporate bond markets are still relatively underdeveloped.

Fig. I 5 shows what the growth potential in corporate bond issuance looks like in percentage terms and in euro value in a selection of countries and the EU27 under our two different scenarios.

In the three years to 2012, an average of around 580 companies in the EU27 issued nearly €195bn a year in bonds. By 2017, an average of 760 companies a year raised nearly €300bn a year from the bond market. This is more than 50% growth in value and roughly 30% in the number of companies issuing bonds.

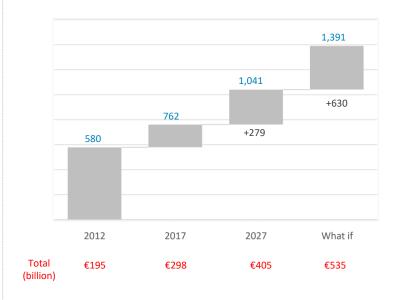
Under our conservative growth scenario, we estimate that over the next decade, an additional 280 companies in the EU27 would issue bonds each year raising an extra €105bn a year. This is an increase of more than a third on the current number of companies raising money from the bond markets.

On our 'what if?' scenario, we estimate that 630 additional companies would raise an extra €240 bn a year in bonds. This translates into roughly twice as money companies using the bond markets to raise almost twice as much money as they do today. This would significantly reduce the reliance on bank lending across the EU.27.

At a country level, the number of companies issuing bonds every year in Germany would nearly double, raising an additional €23bn a year. In both Italy and Spain the number of companies would more than double adding an extra €65bn in bond issuance a year that could be put to work by issuers.

Fig. 15 The growth opportunity in corporate bonds

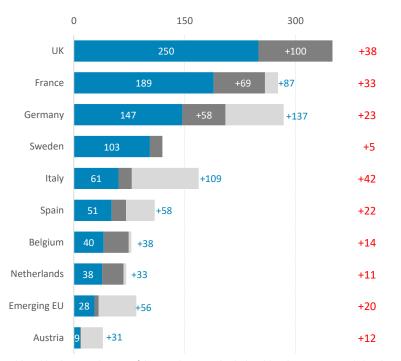
i) The growth opportunity in corporate bond issuance in the EU27, expressed in terms of additional companies



ii) The growth opportunity in corporate bond issuance in a selection of countries: potential additional number of companies



Note: the number in red shows the additional value in €bn under 'what if...' scenario)



Note: Numbers are the sum of the growth potential in high yield and investment grade bonds Source: New Financial

THE GROWTH OPPORTUNITY - VENTURE CAPITAL

Financing the growth economy

Venture capital is a valuable source of funding for new and high potential companies, but in the EU venture capital investment is only a tenth as developed as in the US. This presents big challenges but it is also a huge opportunity for growth.

Fig. I 6 shows what this potential growth looks like in terms of the number of companies and in euro value in a selection of countries and the EU27 under the two different scenarios. In the three years to 2012 nearly 2,700 companies a year across the EU27 used venture capital to finance their business, raising about €2.4bn a year. By 2017, this had increased to just under 3,000 companies a year raising about €3.6bn a year.

On our conservative growth scenario, we estimate that over the next decade, an additional 250 companies in the EU27 would get venture capital investment each year raising an extra €350 million a year. That would be an increase of nearly 10% in terms of money raised and 8% in the number of companies.

These numbers are only a slight improvement compared to what could be achieved. On our 'what if?' scenario, we estimate that nearly 1,900 additional companies would raise an extra €2.6bn a year in venture capital. The total value of venture capital investment would be just above €6bn. That's nearly double the current level of annual activity.

Not surprisingly, in countries where the venture capital industry is relatively underdeveloped growth will be bigger. For example, in Italy the number of companies getting venture capital investments every year would increase to nearly 600 raising nearly €800 million compared to just 83 companies that raised €77 million in 2017. In France and Germany between them, more than extra 600 companies a year could benefit from an additional € I bn a year in venture capital.

Fig. 16 The growth opportunity in venture capital

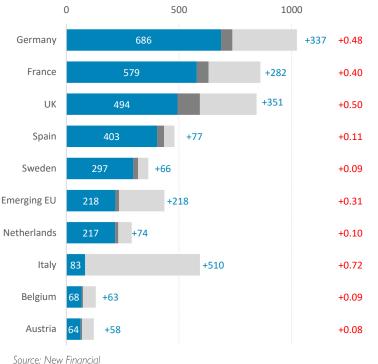
i) The growth opportunity in venture capital in the EU27, expressed in terms of additional companies accessing VC funding



ii) The growth opportunity in venture capital in a selection of countries in terms of the potential additional number of companies that would be able to access funding



Note: the number in red shows the additional value in €bn under 'what if...' scenario)



THE GROWTH OPPORTUNITY - SME & GROWTH MARKETS

Bridging the gap

One of the goals of the European Commission in the context of the capital markets union is to promote SME and growth markets so that it becomes easier for small and medium-sized companies to raise capital in public markets. We analysed the growth potential in these markets for every country in the EU.

Fig. 17 shows what the growth potential in SME growth markets looks like in terms of the number of additional listed companies and in euro value in a selection of countries and the EU27 under our 'what if?' scenario. We were not able to estimate what markets will look like over the next ten years due to lack of historical and consistent data across countries.

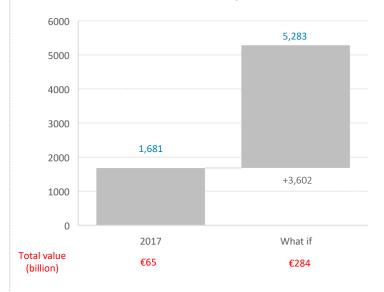
In 2017, 1,681 small and medium-sized companies were listed on SME / growth markets across the EU27 with a combined market capitalisation of €65bn. It's worth noting that the UK is by far the biggest market: nearly a third of the total 2,489 companies in the EU listed on SME growth markets in 2017 were UK companies listed on the AIM market and the market cap of these companies was significantly bigger than the total value of all companies listed on growth markets in the EU27.

We estimate that if SME / growth markets in every country were as deep relative to GDP as the most developed markets in the EU it would translate into a total of 5,283 companies listed in the EU27 worth around €284bn. This is nearly three times more companies listed on SME / growth markets than there are today and a combined market capitalisation nearly four times bigger than today.

SME / growth markets in large economies such as Germany, Italy and Spain would be significantly bigger. In Germany a total of 906 SMEs would be listed on Deutsche Börse's Scale compared to just 48 in 2017, an increase of nearly €80bn in total market value. An additional 426 Italian and 268 Spanish SMEs would have access to public markets, with a combined additional value of €65bn.

Fig. 17 The growth opportunity in SME / growth markets

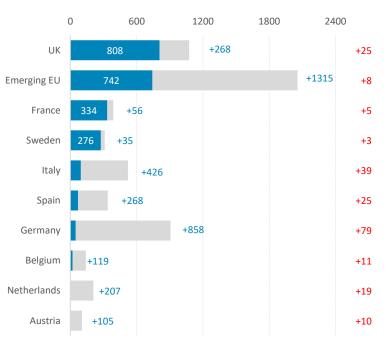
i) The growth opportunity in SME / growth markets in the EU27, expressed in terms of the additional number of listed companies



ii) The growth opportunity in SME growth markets in a selection of countries: potential additional number of listed companies



Note: the number in red shows the additional value in €bn under 'what if...' scenario)



Source: New Financial

> SECTION 4: CONTEXT & POLICY

How to get there

In this section we outline some practical steps that can be taken at an EU-wide and national level to help accelerate the growth in capital markets in the EU. It is important to note this is note a detailed list of specific policy recommendations or changes to specific rules and regulations. Instead it is an outline of some of the broader steps that we believe are the fundamental building blocks of deeper capital markets.

The section also includes a full methodology behind our analysis.

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Regulation, supervision and standards	Page 25
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Market structure, exchanges and equities	Page 26
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CONTEXT & POLICY

Unlocking the growth in European capital markets

There is no silver bullet to unlock the huge growth potential in European capital markets. The wide range between different countries in the level of development of their economy or their capital markets, their tax regimes, legal systems, and cultural attitudes to savings, money and finance, means that this will be a complex and lengthy process.

Here is a series of ideas and policy suggestions to help make a more concrete case for the benefits of bigger and better capital markets, and to help deliver them. Many of the big levers to drive growth can only be pulled at a national and not an EU level, so these suggestions focus not just on 'more union' (removing cross-border barriers within the EU) but also on 'more capital markets' (encouraging the bottom-up development of capital markets at a national level). Some of these suggestions are more practical than others, but all of them are designed to help EU and national policymakers think more broadly about some potential solutions.

Framing the debate

Making the case for capital markets: create an EU-wide 'group of wise men and women' to work with member states to conduct a co-ordinated economic impact analysis of the potential benefits, trade-offs and pitfalls of more developed capital markets. This would help provide more intellectual firepower to the debate and help inject more of a sense of urgency to the capital markets union initiative. Give this group an ongoing mandate to monitor progress (let's call it the European Investment and Finance Council) and to work with EU and national authorities to develop policy initiatives.

An honest debate: too many countries in the EU have avoided an honest debate about the sustainability of their financial systems, from the viability of pay-as-you-go pensions or the efficacy of an economy dominated by banklending provided by a banking industry struggling with overcapacity. The proposed economic impact assessment would include a detailed analysis of the combined impact of an aging population, declining workforce and unrealistic pensions commitments on future taxpayers; as well as issues such as the opportunity cost of existing structures.

A comprehensive audit: conduct an EU-wide and country-level analysis of all of the national and cross-border barriers to more developed capital markets in different sectors, with a particular focus on ensuring a level playing field between domestic and non-domestic firms and that national authorities are applying both the spirit and the letter of existing regulations. This would (most probably) identify that while cross-border factors act as a significant brake on the development of capital markets in Europe, national issues are a more important barrier.

An action plan: while the CMU project has made some important progress and laid the foundations for future work, a shorter and simpler action plan based on a smaller number of clearly-prioritised projects with the biggest potential economic impact would provide a more practical programme for the next five to 10 years. This plan would combine cross-border initiatives (the 'union' part of CMU) and local initiatives to encourage the development of capital markets at a national level (the 'capital markets' side of the equation).

Reinventing the wheel: the ingredients for healthy and effective capital markets are not some form of alchemy and policymakers at an EU and national level should be wary of trying to reinvent the wheel. There are many examples of what works and what doesn't in different sectors across the EU and further afield. The EIFC could act as a forum to identify best practice, what works and why, and encourage the sharing of relevant models and initiatives. It could help conduct feasibility studies for introducing different initiatives in different countries.

Better data: there is a wide range in the quality, comparability and availability of data on capital markets across different sectors and countries in Europe. For example, for something as fundamental as pensions, the existing data is surprisingly patchy and inconsistent (or, in the case of scale-ups and growth companies, virtually non-existent). Building more granular and more comparable datasets on different sectors of capital markets is a vital first step towards developing deeper capital markets.

CONTEXT & POLICY

Regulation, supervision and standards

- Towards centralised supervision: migrate towards the centralised supervision of the largest investment banks, asset managers, and infrastructure providers by the European Securities and Markets Authority along the lines of the Single Supervisory Mechanism under banking union. A properly-resourced ESMA with a clear mandate and revised governance structure working alongside national authorities would accelerate supervisory and regulatory convergence and help remove the biggest cross-border barriers to deeper capital markets.
- From SMEs to scale-ups: Europe doesn't have a problem with start-ups or a shortage of SMEs, but it does have a problem with funding for scale-ups and growth companies. Shifting the focus of EU-wide and national capital markets initiatives from SMEs to scale-ups (building on the EU's 'start-ups and scale-ups' initiative) backed up by a clear designation and comprehensive data gathering, would accelerate growth in this area and pave the way for the development of a pan-European tax, legal and markets regime for growth companies.
- A single set of standards: the same level of information that investors want from issuers could be applied to the industry itself. A single set of standards for accounting, and for measuring and disclosing fees and performance across all sectors of the industry would be a good start. It would force less efficient organisations to raise their game, drive competition, encourage consolidation and efficiency, and increase levels of trust in the industry.
- A level playing field: reduce the disclosure differential between privately-held and public companies by raising standards of disclosure for large private companies to help reduce the perceived relative attractiveness of private capital versus public markets. At the same time, the capital markets industry could be encouraged to collectively help fund and support the ecosystem around smaller companies.

Deeper pools of capital

- A gradual approach: conduct impact assessments and feasibility studies for individual countries to launch autoenrolment workplace pension schemes, with gradual introductions, initially-low but rising contribution levels for employers and employees, and appropriate tax incentives (e.g. employer contributions to funded pension schemes could be offset against corporation tax).
- Broaden the investment scope: review existing regulations to enable pensions funds and insurance companies to invest in a wider variety of assets that would help them to build portfolios based on their investment horizons and risk profiles. Develop a regulatory framework that enables and encourages insurance companies, fund managers and pension funds, to invest in both equity and debt of unlisted growth and scale-up companies.
- Closing the exclusivity gap: the returns from private capital and illiquid assets exceed the returns from public markets by as much as 5% a year, but these markets are effectively off limits to most individuals and smaller pension schemes. Reviewing regulations to enable wider access to private capital and illiquid assets and identifying the right vehicles to enable it would help close this gap and be a significant boost to wealth creation.
- Nudge, nudge: individuals can be nudged towards better pensions provision through the development of simpler
 pensions dashboards, pensions apps on their phones, or by including simple and accessible information on
 people's future pension income in their payslips. Rename pensions as 'retirement savings' and adopt the
 Australian system of helping people understand them in terms of the likely impact on their lifestyle in retirement.
- Incentivising change: governments should publish their pensions liabilities each year calculated in the same way as corporate schemes. The EU could develop a pensions sustainability index linked to fiscal rules: if it falls below a certain threshold, countries should take measures (e.g. auto-enrolment, public pensions pools funded by bond issuance or asset sales etc). Whatever is lost in tax receipts from an increase in pensions contributions could be deducted from EU budget deficit targets.

CONTEXT & POLICY

Market structure, exchanges & equities:

- More consolidation: the EU has too many stock exchanges and market infrastructure providers and not enough effective competition between them. Over the past few decades, attempts at consolidation between the 30+ exchanges in Europe have often been blocked by European and national authorities. Consolidation between exchanges to reduce the number of exchanges to a smaller group of perhaps four or five competing blocs would reduce costs and complexity and ensure closer collaboration between regulators and supervisors.
- More competition: competition between exchanges is episodic and mainly restricted to competing for trading volumes in the largest stocks. A smaller number of competing exchange blocs across Europe with an umbrella exchange operator in each group operating a series of local 'gateway' markets like Nasdaq or Euronext would create more effective competition for listings, trading, clearing and data. At the same time, regulators should address some of the hidden barriers to competition and encourage the maximum possible harmonisation of market rules between and within each exchange bloc. A consolidated tape would not solve competition issues on its own but would help.
- Building ecosystems: the EU and national governments could work more closely with existing networks and accelerators run by exchanges such as the Elite programme (UK), #IPOready (Ireland) or the La French Tech initiative (France) to grow the ecosystems for scale-up companies involving issuers, intermediaries, investors, business angels, technical expertise, venture capital firms and universities. More targeted public co-investment in business angels and growth funds could be a catalyst for growth.
- A single information hub: a single pan-European platform for filing and distributing comparable information on issuers (a sort of 'EuroEdgar' modelled on the US system) would be a big step towards a single capital market. It could also include credit data on SMEs and growth companies, and act as a central portal for managing corporate governance and shareholder voting, reducing significantly the bureaucracy and costs of cross-border investing.
- A single platform: a single pan-European information hub for funds and other financial services such as crowdfunding or insurance would provide much more transparency and comparability. It would shine a spotlight on less efficient providers, encourage more competition and cross-border participation, and reduce fragmentation. The platform could also provide asset managers and other market participants a single point of entry for registration, notification, marketing and tax reporting for all their operations across the EU.

Tax and incentives

- Addressing the debt / equity bias: debt funding for companies attracts tax relief but equity funding is taxed four
 times. The EU can build on its work so far under the Common Consolidated Tax Base to incentivise equity
 funding through growth and investment allowances particularly for growth companies and make the costs of
 raising equity capital tax deductible. It could also investigate the feasibility of limiting the tax deductibility of debt
 finance to a particular level of leverage.
- A longer-term focus: there are many examples of successful tax incentives to encourage longer-term investing in
 equities such as indexation of gains for capital gains tax, taper relief for entrepreneurs and long-term investors, or
 tax-friendly regimes for investing in designated growth companies. Countries should be encouraged to adopt
 variations of these schemes in the context of existing national tax regimes.
- A common approach to taxing pensions: review and encourage the harmonisation of the tax treatment of pensions based on how and whether contributions, returns and benefits are taxed. While the most common model is EET (exempt, exempt, taxed), nearly half of EU countries operate variations from TEE, to TET, TEE, and even EEE, which adds complexity and cost for individuals and intermediaries.
- A commercial imperative: all proposals for reform and new regulation should include an element of commercial imperative: not just a cost benefit analysis, but specific ways to incentivise market participants to adopt them and link their behaviour to them.

METHODOLOGY

Our sample:

We analysed the size and depth of capital markets in the following 24 different sectors of activity in all 28 EU member states:

- > Pools of capital: pensions assets, insurance assets, household retail investments (exc pensions, insurance, cash deposits & unlisted equity)
- > Equity markets: stockmarket, initial public offerings, secondary equity issues, convertible bonds, equity trading volumes
- > Bond markets: corporate 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

Measuring depth:

In each sector and country we measured the value of activity as a percentage of GDP on a three year rolling basis from 2004 to 2017 to iron out the annual volatility in capital markets. To enable a comparison in depth 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 2014 (we use 2014 as our baseline because that is the first year that published our analysis and it enables us to track growth. For example, the value of EU stockmarkets in the three years to 2014 was 67% of combined EU GDP. We rebased this 67% to 100, meaning that in any given period a country with a score of 50 has a stockmarket that is half as deep relative to GDP as the EU average in the three years to 2014, and one with a score of 200 is twice as deep.

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. This reduces the distortion of a few outsize sectors more fairly than not including the metric at all.

Measuring growth potential:

In each sector and country we estimated the growth potential in terms of the number of additional companies that could get funding, how much they could raise, and as a percentage increase on the current level of activity. We divided EU countries into developed or emerging markets as per the MSCI classification and we estimated the growth potential in different sectors in each country based on two scenarios:

> 2027: what might capital markets in the EU look like in 10 years' time?

We estimated the potential growth opportunity for capital markets in each economy over the next 10 years based on a combination of the historical annual growth rate in real GDP over the past 20 years, and the historical annual change in the depth of capital markets relative to GDP over the past 10 to 20 years (depending on data availability).

> What if...?: what could capital markets look like if they closed the gap with the most developed countries in the EU?

For developed economies we measured the growth potential on the basis of what would happen if markets closed the gap in depth with the five countries with the deepest markets in the developed economies group. For emerging economies we measured the growth potential on the basis that markets closed the gap with the best performer in the emerging economies group. For the top five developed economies and the best in class in emerging economies we applied the weighted average growth of each respective group.

There is no perfect way to estimate growth and our approach has obvious limitations. First, past performance is not a guide to the future. A market may have grown by 50% over the past 20 years but that does not necessarily mean it will keep growing at even half that rate in the next decade. Secondly, our approach in the 'what if...' scenario may underestimate the growth potential for countries that are just below the top five or the best in class, and may overstate the growth potential for the most and least developed markets. It is not a growth forecast but a directional indicator of what could be achieved.



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:

New Financial LLP

23 Grafton Street London UK, WIS 4EY www.newfinancial.org

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William Wright
Managing director
william.wright@newfinancial.org
+44 (0) 20 3743 8269

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