There is a shortfall in capacity of more than $1 trillion a year between what European companies raise in the capital markets and what they could potentially raise if capital markets were as developed as in the US.
INTRODUCTION

Making the positive case for capital markets

This report is an attempt to quantify the depth and relative underdevelopment of European capital markets (we define capital markets as the market for issuing, trading and investing in securities). It is a starting point in the debate around a future ‘capital markets union’ that puts some hard numbers on where we are today.

There are many reasons why Europe has less developed capital markets than in the US, and it would be potentially disastrous to try to blindly copy the US model. But comparing the depth of capital markets in Europe with the US gives an indication of the scale of the problem and of the potential opportunity.

The report does not pretend to provide a definitive set of proposals to improve or reform capital markets in Europe. Instead, it raises some of the following questions:

• What is the problem? Why does Europe need bigger and better capital markets?

• Exactly how ‘underdeveloped’ are European markets? On what basis?

• What does this mean in concrete terms for European companies?

• What are some of the advantages of capital markets financing over bank lending?

• What can market participants do to support growth and constructive reform?

• In which areas might policymakers focus their efforts for maximum impact?

For the purposes of this report, we define ‘Europe’ as the EU plus Switzerland, Norway and Iceland. All data on GDP comes from the IMF. All data on bank lending and exchange rates is from the ECB and BIS. For the full methodology and references in this report, please visit www.newfinancial.eu

This report is a work in progress. A lot of the data around capital markets is incomplete and patchy, and we have had to make lots of assumptions and estimates. We would welcome any feedback on our approach and suggestions as to how to improve it.

Acknowledgements:

New Financial would like to thank the many senior individuals from across the capital markets industry who have contributed to this report both directly and indirectly over the past few months. In particular, we would like to thank Dealogic and Preqin for their support in providing data and analytics.

On a personal note, I would like to thank the team at New Financial of Yasmine Chinwala, Laurence Bax, Georgia Mantalara and Julia Kowalski for their hard work and good humour, and to thank everyone at D Group for their support.
SUMMARY

Towards bigger and better capital markets

1. **Europe needs to build bigger and better capital markets** to help break the link between low economic growth and the over-reliance on bank lending at a time when banks are paralysed by deleveraging. Deeper capital markets can also help Europe address longer term structural issues such as infrastructure investment and future pensions liabilities.

2. Despite rapid growth over the past few decades, European capital markets are not yet ready to fill the gap. In the five years to 2013 our research shows there was **a shortfall of more than $1 trillion a year** between what European companies raised in the capital markets and what they could potentially have raised if capital markets in Europe were as developed as in the US. This suggests that an unnecessary amount of funding is sitting on bank balance sheets.

3. On average, across 26 different measures, **European capital markets are only half as big as they would be if they were as deep as in the US**. If Europe managed to close half that gap by 2020, companies could raise more than $2.5 trillion in additional capital. This would help free up bank balance sheets and enable banks to focus their lending on smaller companies which cannot realistically expect to tap the capital markets.

4. The capital markets industry cannot be complacent. We estimate that it generates at least $250bn a year in revenues in Europe – roughly 1.5% of European GDP – and it will need to embrace change, increase productivity and raise its game before policymakers will be comfortable supporting a significant increase in capital markets activity. The industry needs to make a more positive case for the value of what it does and demonstrate concrete progress towards restoring trust.

5. There is no quick fix to creating deeper capital markets or achieving the ultimate aim of a full ‘capital markets union’ in Europe. Our research suggests that policymakers should **focus on ways of encouraging the growth of pools of long-term capital** – perhaps through compulsory contribution pension schemes or state-funded development funds. In addition to focusing on the high profile SME market (which officially is companies with less than €25m in revenues) we think they should **focus on improving access to capital markets funding for medium-sized companies in the “squeezed middle”, particularly in terms of developing a deeper bond market and institutional loan market for mid-sized companies.**
Driving economic growth

Europe needs bigger and better capital markets to help break the vicious circle of low growth and under-investment that comes from the European economy’s over-reliance on funding from banks which have been paralysed by deleveraging.

Banks are struggling to perform their basic function of lending to business. The supply of new lending has fallen sharply: in the eurozone, gross new lending to businesses has dropped by more than 40% to €2.5 trillion since 2008, according to the ECB. New lending is lower today than it was 10 years ago (see chart 1).

The value of outstanding bank lending to non-financial corporates — a measure of the total amount of lending being put to work by companies - has fallen by €600bn in the EU from its peak of €6 trillion in 2008, according to the ECB (see chart 2).

The collapse in lending is compounded by the fact that companies in Europe have relied on bank loans for roughly 80% of their debt funding over the past decade compared with less than 20% in the US, according to the BIS. In the past few years the growth in capital markets has reduced this reliance by a few percentage points to the high 70s, but nowhere near the shift required.

Addressing structural problems

It’s not just about corporates. Better capital markets could also help Europe address longer term structural problems.

Banks are pulling back from infrastructure lending just as Europe needs more infrastructure investment than ever: the European Commission estimates that Europe needs €2tn of investment in telecoms, transport and energy infrastructure by 2020.

And Europe is storing up trouble with future pensions liabilities. We estimate that pensions assets in Europe add up to just over 40% of GDP – or roughly $8tn.

This is around one third the size of the US market and tiny compared with recent estimates from Edhec of unfunded public sector pensions liabilities across Europe of as much as $85tn (or more than five times GDP). Capital markets can help address this gap.
HOW DEEP ARE EUROPEAN CAPITAL MARKETS?

Playing catch up

In the debate around European capital markets, it is often taken as a given that they are relatively small and underdeveloped. But what does that mean in hard numbers?

The short answer is that European capital markets are roughly half as developed as in the US. Across 26 different measures that we analysed, European markets are 53% as deep as they are in the US (see the chart on the right). In just one area – the value of insurance company assets – is Europe more developed than the US.

What do we mean by ‘developed’? We looked at market size and levels of activity between 2008 and 2013 in the US and Europe and adjusted them for GDP to create a measure of relative depth. A five year period helps iron out the volatility in capital markets from one year to the next and it also covers the post-crisis period during which Europe’s reliance on bank lending has been most under pressure.

For example, over that period the average value of stockmarkets in Europe was 69% of GDP, compared with 116% in the US. In relative terms, this means European stockmarkets are 59% as large as they would be if they were as deep as in the US.

Bringing up the rear

There are several areas where the lack of development in Europe is particularly concerning. For example, the value of European pensions assets is little more than one third what it would be if the pensions market were as developed as in the US.

And when it comes to funding corporates, the European high-yield market is less than a third of the size of the US in relative terms and the leveraged loan market is just one fifth the size. This relative lack of development quickly adds up into trillions of dollars in lost investment in the European economy.

### Out of their depth?

The size of European capital markets relative to how big they would be if they were the same percentage of GDP as in the US

<table>
<thead>
<tr>
<th>Pools of capital</th>
<th>53%</th>
<th>149%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insurance assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mutual fund assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pensions assets</td>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Market value</th>
<th>59%</th>
<th>34%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock market</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate bond market</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Securitisation market</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assets under management</th>
<th>60%</th>
<th>29%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private equity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hedge funds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Venture capital</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Debt capital markets</th>
<th>84%</th>
<th>31%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government bonds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment grade bonds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Syndicated loans</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High-yield bonds</td>
<td>31%</td>
<td></td>
</tr>
<tr>
<td>Leveraged loans</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Securitisation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Equity capital markets</th>
<th>71%</th>
<th>59%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Follow-ons</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Convertibles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IPOs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>M&amp;A &amp; private equity</th>
<th>65%</th>
<th>58%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private equity buyouts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All M&amp;A deals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic / regional M&amp;A deals</td>
<td>48%</td>
<td></td>
</tr>
<tr>
<td>Venture capital deals</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Trading</th>
<th>69%</th>
<th>15%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equities trading</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate bond trading</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: these numbers are based on analysis by New Financial of a wide range of sources. The main sources are listed here, but for a full methodology, please visit [www.newfinancial.eu](http://www.newfinancial.eu).

Market value: WFE, FESE, BIS, MarketAxess, AFME, Sifma.
Assets under management: Efama, BCG, PwC, Prequin, HFR.
Debt and equity capital markets: Dealogic.
M&A and private equity: Dealogic, Prequin, EVCA.
Trading: Thomson Reuters, WFE, MarketAxess.
THE ‘LOST INVESTMENT’ IN THE EUROPEAN ECONOMY

The $5 trillion dollar question

This chart compares the size of capital markets in Europe from 2008 to 2013 with how big they would be if they were as deep relative to GDP as in the US. From that it estimates the ‘lost investment’ of capital that might potentially have been raised in Europe if capital markets were more developed.

So what is the cost to the European economy of the underdevelopment of its capital markets? We estimate that in the five years to the end of 2013, European corporates could have raised more than $5 trillion in additional funding if capital markets were as deep as in the US. That’s more than double the $4.2tn they actually raised in the capital markets over the same period.

That $5tn was either not raised at all, or companies had to turn to an already struggling banking sector to borrow it.

Roughly $2.2tn of this shortfall comes from corporate bonds, equities, venture capital and corporate securitisations: the opportunity loss in the high-yield market alone was $775bn.

But by far the biggest gap is leveraged loans (in which sub-investment grade companies raise loans which are usually sold on to institutional investors). In Europe, companies raised $715bn in leveraged loans, just one fifth of the $3.7tn that the market would be worth if it were the same depth as in the US.
**The Depth of Pools of Capital in Europe**

**Paddling in the shallow end**

The size of pools of capital in Europe compared with how big they would be if they were as deep relative to GDP as in the US.

### Pools of capital

<table>
<thead>
<tr>
<th>Pensions assets</th>
<th>Insurance assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>$8tn</td>
<td>$11tn</td>
</tr>
<tr>
<td>$23tn</td>
<td>$8tn</td>
</tr>
</tbody>
</table>

* As much as two thirds of mutual fund assets are double-counted as pensions assets

**Market size**

<table>
<thead>
<tr>
<th>Stockmarket</th>
<th>Corporate bond market*</th>
</tr>
</thead>
<tbody>
<tr>
<td>$15tn</td>
<td>$10.4tn</td>
</tr>
<tr>
<td>$22tn</td>
<td>$2.2tn</td>
</tr>
<tr>
<td>$23tn</td>
<td>$6.6tn</td>
</tr>
</tbody>
</table>

* EU only

If healthy capital markets start with deep pools of capital, then Europe already has one hand tied behind its back.

Combined pensions assets in Europe add up to around $8 trillion according to our analysis of patchy data, or about 43% of European GDP. That’s scarcely one third the size of the pensions market in the US, which has assets of around $21tn or 125% of GDP.

In other words, if European pensions assets were as developed in relative terms as in the US it would translate into more than $15bn of additional capital sloshing around the European economy looking to invest in something.

It’s not all bad news: the European insurance industry has assets of around $11tn or 59% of GDP, significantly larger than the US industry where assets represent only about 42% of GDP.

That means that the combined pool of long-term institutional capital in Europe is about $19tn or just over 100% of GDP, compared with $28tn (167% of GDP) in the US.

The significantly lower demand for financial assets in Europe has an impact on supply. European stockmarkets had a combined market value of just under $15tn at the end of last year, roughly two thirds the value of markets in the US. If European stockmarkets were the same depth as in the US relative to the size of the economy, they would be something like $6tn bigger. That’s an awful lot of IPOs.

The same effect is on display in the corporate bond market, in which the combined value of bonds in the US is more than three times the size as in Europe. And the value of outstanding securitisation assets in the US is five times that in Europe.

If policymakers want to build deeper European capital markets in the long term, they will need to encourage the growth of long-term pools of capital, perhaps through compulsory pensions schemes or the development of sovereign wealth-style funds. It took the UK roughly 30 years to increase pensions assets from 20% of GDP to 80% of GDP. Better get cracking.
THE WIDENING GAP

Scratch beneath the surface
In two areas European capital markets are even more underdeveloped than it looks: continental Europe and smaller companies

Small isn’t beautiful
Size isn’t everything but it helps. Big companies in Europe do not particularly struggle to tap capital markets. And for the vast majority of SMEs (officially, companies with less than €25m in revenues), the capital markets are not a realistic financing option.

But companies in the ‘squeezed middle’ struggle to access capital markets. While capital markets in Europe are about half the size of their potential if they were as deep as in the US, for deals below $250m European markets are just one fifth of the size of the US in relative terms.

Chart 1 compares the size of capital markets in Europe and the US for deals under $250m. The overall leverage loan market in the US is five times the size of the European market relative to GDP, but for deals below $250m it is more than seven times as large (and it’s 10 times bigger for deals below $100m). With IPOs, the overall market in Europe is just over half the size of the US, but for smaller deals it is just one third of the size.

European markets do a worse job than the US in providing access to capital markets for mid-sized companies in the €100m to €500m range. Addressing that could be a more fruitful focus than SMEs (<€25m).

Continental Europe: dragging its feet
The relative depth of capital markets across Europe is not even. On many measures such as the value of the stockmarkets or the levels of IPO activity - capital markets in the UK are as developed if not more so than in the US (although in important areas for financing mid-sized corporates such as venture capital, high-yield and leveraged loans they are much less developed).

If you strip out the UK from our analysis the gap between Europe and the US gets significantly wider and the over-reliance on bank funding becomes even more pressing.

On every measure, Europe excluding the UK has less developed capital markets than Europe as a whole and in some cases the gap is alarming. Pensions assets in Europe excluding the UK are just 30% of GDP or just a quarter as deep as in the US. This suggests that the focus of accelerating capital markets should be in continental Europe.
THE SIZE OF THE OPPORTUNITY

Closing the gap

This chart is an indication of how much more companies in Europe might be able to raise if the capital markets were able to close half the gap in terms of depth with the US by 2020. It also expresses that as a percentage of what companies would raise if activity stays the same relative to the economy as today.

How big is the opportunity?

Potential increase in capital markets activity if European markets closed half the gap on US markets by 2020

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage Gain</th>
<th>Potential Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leveraged loans</td>
<td>124%</td>
<td>$1,450bn</td>
</tr>
<tr>
<td>High-yield bonds</td>
<td>60%</td>
<td>$350bn</td>
</tr>
<tr>
<td>Investment grade bonds</td>
<td>6%</td>
<td>$210bn</td>
</tr>
<tr>
<td>Private equity</td>
<td>34%</td>
<td>$190bn</td>
</tr>
<tr>
<td>Corporate ABS</td>
<td>144%</td>
<td>$160bn</td>
</tr>
<tr>
<td>Follow-ons</td>
<td>12%</td>
<td>$130bn</td>
</tr>
<tr>
<td>Venture capital</td>
<td>161%</td>
<td>$92bn</td>
</tr>
<tr>
<td>IPOs</td>
<td>29%</td>
<td>$70bn</td>
</tr>
<tr>
<td>Convertibles</td>
<td>21%</td>
<td>$40bn</td>
</tr>
</tbody>
</table>

Source: New Financial estimates, Dealogic, Preqin, IMF

Playing catch up

Closing the gap with the US is not going to happen tomorrow. But to get an indication of the scale of the potential opportunity (and it really is only indicative) we looked at how much deeper capital markets would be in Europe by 2020 if they closed half of the gap with the US by then. Coincidentally that is the same period as the Europe 2020 growth programme launched by the European Commission after the financial crisis.

For example, European companies would raise roughly $600bn in the high-yield bond market between 2014 and 2020 at current levels of issuance relative to GDP of 0.4% (and assuming that the European economy grows at 3% a year). If it closes half the gap with the US by 2020 it will have raised more than $950bn, an increase of 60% or $350bn over and above what would otherwise have been raised. That’s $350bn that doesn’t have to come from bank lending.

Using the same approach, we estimate the total opportunity adds up to around $2.5tn in additional money raised in the capital markets by 2020, with roughly $1.5tn of that from the leveraged loan market.

One big difference is that in the US roughly 85% of leveraged loans are bought and held by institutional investors, whereas in Europe most of the loans are still on bank balance sheets.
WHAT ARE THE BENEFITS OF CAPITAL MARKETS?

10 benefits of capital markets

Capital markets are not a panacea to cure all of Europe’s ills. They can be volatile, fickle and binary. They often overshoot on the way up as well as on the way down. They often don’t appear fair; the house always seems to win, and they are dogged by frequent scandals. Amid concerns of overheating, now may not seem like the best time to advocate more capital markets - but if not now, then when?

Here are 10 ways in which healthy capital markets can be beneficial that might address some of the above concerns:

1. They are never going to replace bank lending but they provide a useful supplementary source of finance that helps reduce the volatility and cyclicality of financing (the chart on the left shows that capital markets have doubled their share of total debt financing in the eurozone since 2008), helping to fill the funding gap.

2. By widening the distribution of risk away from banks they can help reduce the build-up of systemic risk in any particular institution.

3. By providing a wider range of sources of financing they can reduce the risk and impact of problems in the banking sector being transmitted to the real economy.

4. By widening participation in the financial system, they can help spread wealth more effectively than keeping money under a mattress.

5. They can help free up bank balance sheets and enable them to focus on lending to smaller companies who cannot realistically expect to access the capital markets. They can help ensure that the only loans on a bank’s balance sheet are the ones that absolutely need to be there.

6. By freeing up bank balance sheets they can help make banks more responsive to changes in monetary policy.

7. Capital markets provide longer-term investors with a wider range of potential assets, and can offer financing over much longer periods than traditional bank lending.

8. The need to compete for capital and be accountable to investors helps improve discipline and performance of companies that issue securities.

9. They can help improve risk management discipline at banks and at the investors who invest in capital markets.

10. They help boost growth: a recent paper studied 45,000 companies over 20 years, and found that companies which issued securities grew faster than those which don’t. And there is a strong association between depth of capital markets and economic growth.

Source: New Financial estimates, BIS, ECB
MAKING A MORE POSITIVE CASE FOR THE INDUSTRY

Capital markets: a licence to print money?

This chart shows the estimated annual revenues of different segments of the capital markets industry in Europe, based on our analysis of often patchy and incomplete data. Overall it adds up to at least $250bn and probably significantly more.

![Chart showing estimated annual revenues of different segments of the capital markets industry in Europe.](chart.png)

Resting on its laurels?

However powerful the case for capital markets in Europe, the industry cannot rest on its laurels. Despite a distinct shift in the political mood in favour of markets in the past few months and ambitious talk of a capital markets union, many policymakers still conflate ‘more capital markets’ with ‘more investment bankers’ and ‘more bonuses’.

It is hard to imagine the same MEPs who voted for the bonus cap last year voting for anything that they think is going to lead to a significant increase in capital markets activity - and subsequently line the pockets of bankers or hedge funds managers.

Some of this suspicion may be justified. The capital markets industry makes a lot of money: it generates at least $250bn in revenues in Europe each year — or about 1.5% of European GDP — according to our research. Those revenues are effectively the ‘cost’ of the capital markets industry that is shouldered by end investors and issuers, and it is not entirely clear that the industry could not provide the same benefits to the European economy at significantly lower cost.

For example, how much of the estimated $90bn in revenues generated by investment banks and brokers in Europe is a necessary input cost to support capital formation and service the rest of the industry, and how much of it is excess rent? The asset management industry makes about $75bn in revenues a year in Europe (or 35 basis points on every dollar of assets under management), but are its clients getting as good a deal as they could be? Do the $30bn combined revenues of the European hedge fund and private equity industry represent value for money, or are they a tax on capital markets?

Shouting at the waves

If you assume that capital markets will grow at 5% a year up to 2020, the industry will generate something like $2.5 trillion in revenues in Europe between now and then. In exchange for their support, policymakers will want to see the industry make an effort to become more productive.

A 5% increase in productivity each year would save roughly $500bn in fees and commissions by 2020 that could be reinvested in capital markets. If the industry doesn’t adopt a more enlightened approach, it may find that other people start forcing it to do so.

Instead of shouting at the waves, the industry will need to embrace change, to make a more positive case for the necessity and value of what it does, and show that it recognises that the main purpose of capital markets is not to enrich the people who work in them.

Against a backdrop of continuing scandal, the industry will have to show that it is taking concrete steps to restore trust with policymakers, the public, and with clients. Coming up with a renewed sense of purpose for the capital markets in Europe would be an excellent start.
10 suggestions for debate

There are lot of reasons why capital markets in Europe are less developed than in the US. In fact, given the differences in language, culture, law, tax and tradition, it is remarkable how much progress has been made towards the creation of a single European capital market over the past 20 years.

There are already lots of suggestions and proposals out there as to how to reform capital markets. We don’t wish to repeat them, but at the risk of adding to an already long list, here are some suggestions to feed the debate:

1. A policy commitment to building a capital markets union is an excellent start but its broad aims, metrics, scope and timing should be spelled out before the idea loses momentum.

2. There is a striking inconsistency in data in some parts of the capital markets, particularly around SMEs and pensions. Agreeing common definitions and common (and more timely) data collection would be an important step towards capital markets union.

3. Increasing the focus on improving access to the capital markets for companies in the ‘squeezed middle’ - instead of focusing too much on how to make capital markets more accessible for SMEs - would free up bank balance sheets to focus on SME lending.

4. There is huge potential to expand institutional investor participation in the loan market in Europe, particularly in leveraged loans. It is not as high-profile as the IPO market or as sexy as crowdfunding, but it would have a much bigger impact.

5. Europe needs to encourage the development of much bigger pools of long-term capital, perhaps through the introduction of compulsory contribution pensions schemes, or state-backed investment funds.

6. Reviewing and where necessary removing artificial restrictions on some of the types of assets that different types of investors can invest in could significantly increase the depth of capital markets.

7. A lot of hard work has already been invested dozens of national initiatives in areas such as SME stockmarkets and alternative bond listing venues. How can these best be connected and leveraged?

8. There will never be a truly single market in Europe. Policy and regulation should accept and reflect that by focusing on minimum threshold standards rather than maximum levels of harmonisation.

9. Reregulation, not deregulation: policymakers should have the courage to review and revise existing regulations where there is empirical evidence that they are not working or could be improved.

10. Policy and regulation should focus on the ‘decomplexification’ of capital markets: removing unnecessary layers of complexity in the industry. The industry should help and not hinder this process.