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FESE

STRENGTHENING EUROPE'S POSITION IN GLOBAL CAPITAL MARKETS

MARSH & McLENNAN COMPANIES

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EXECUTIVE SUMMARY

The European capital market remains fundamentally distinct to the US, and Europe lags behind the US in may regards, for example, the use of equity to finance firms, the prevalence of venture capital, and the relative share of IPOs.

However, through London, Europe's capital market has established a world leading position in derivatives trading, most notably in FX and commodity asset classes.

After a prolonged period of gradual harmonisation across European institutions, laws and regulations, Brexit, and the rise of other nationalist and protectionist movements across the globe signal a move in the opposite direction.

This shift could have dramatic effects on Europe's capital market, which has been at the forefront of globalisation in recent decades. Without sound leadership and political compromise, Europe's capital market could become more fragmented and illiquid, limiting its ability to perform the functions by which capital markets support the real economy and surrendering a competitive advantage to capital markets in other parts of the world.

European policy-makers have taken initial steps to overcome regional barriers and to promote capital markets integration, such as the Capital Markets Union project. But the headwinds from Brexit and the growing enthusiasm for protectionism mean that they must re-double their efforts.

To assist them, this report outlines six principles that should guide the development of Europe's capital markets, and recommends specific policy initiatives that will help to satisfy these principles. If adopted, Europe's capital markets will be more liquid, transparent and efficient, and better able to support the real economy.

PRINCIPLE	RECOMMENDATIONS
1. The European capital market should foster economic growth by supplying investment, financing and risk management services	1a. Improve access to non-traditional financing methods for young companies 1b. Encourage the use of technological innovations in the European capital market 1c. Avoid additional transaction or financing costs to the European capital market as a result of Brexit 1d. Work collaboratively toward an optimal Brexit outcome for the European capital market based on continuity
2. The European capital market should be open to all participants, regardless of their location or national boundaries	2a. Continue to push for harmonisation and review potential barriers to cross-border transactions 2b. Aim to negotiate a Brexit deal that preserves mutual market access between the UK and EU
3. The European capital market should be able to compete effectively for global flows	3a. Ensure capital market regulation remains aligned with global standards, particularly for derivatives 3b. Incorporate adherence to global standards into the Brexit negotiations
4. The European capital market needs a level of transparency that facilitates price discovery and financial stability	4a. Review and address loopholes in MiFID II regulation that might undermine market transparency and effectiveness 4b. Establish pan-European information systems to improve transparency 4c. Aim to ensure EU and UK regulators have reciprocal access to financial data post-Brexit
5. The European capital market needs the greatest possible certainty regarding future changes	5a. Seek to limit uncertainty regarding the Brexit process by providing clarity and transparency on points of agreement as early as possible
6. The European capital market needs an up-to-date and supportive regulatory environment	6a. Conduct regular assessments of the impact of regulation with the aim of fine-tuning

INTRODUCTION

This report recommends policies aimed at improving the performance of Europe's capital market and, thereby, promoting growth in the real economy. It begins by comparing the European capital market with its counterparts in the US and Asia and asking how well it is performing its principal economic functions. Our analysis covers primary markets (funding), secondary markets (trading) and risk management (derivatives and clearing).

We then consider the significant headwinds facing the European capital market – most obviously, Brexit and the rise of nationalist and protectionist sentiment. After decades of increasing integration and liquidity, Europe's capital market faces a potential reversal. It could become more fragmented and, consequently, less efficient and liquid.

Given the importance of capital markets for economic growth, policy-makers should do all they can to avoid this outcome. The report ends by proposing guiding principles for policy-makers and making specific policy recommendations in line with these principles.

We call on policy-makers to counteract the forces threatening Europe's capital market by adopting policies that make it more efficient, transparent and open.

THE CURRENT STATE OF THE EUROPEAN CAPITAL MARKET

We have assessed the European capital market by considering how well it performs its primary functions:

- **Funding.** Allowing firms to raise long-term capital and providing investors with a return on their savings.
- **Secondary trading.** Providing liquidity to investors by allowing them to enter and exit positions as needed.
- **Risk management.** Giving companies and investors access to clearing services and risk management products, such as derivatives.

Insofar as capital markets perform these functions successfully, they contribute to stability and economic growth in their respective regions.

Our assessment reveals mixed results for the European capital market, with areas of strength but also room for improvement, especially when compared to its US or Asian counterparts:

- The European capital market struggles to provide funding for the real economy. European companies are considerably more dependent on bank lending than companies in the US and Asia.
- European secondary markets are not as liquid as US markets, with a greater proportion of trading taking place on dark venues.[1]
- The European capital market provides good access to risk management products and transacts a significant market share of the global FX business. Europe's position in global derivatives and FX, however, is concentrated primarily in the UK.

Exhibit 1: Capital markets key statistics, 2016

		EUROPE	EU27	US	ASIA
Primary market	Equity funding (% of GDP)	73%	56%	147%	98%
	Corp. debt funding (% of GDP)	82%	78%	114%	45%
Secondary markets	Equity turnover velocity	83%	96%	146%	126%
	Equity turnover (% of GDP)	60%	50%	210%	120%
	Corp. debt turnover velocity	25%	22%	80%	n/a
	Corp. debt turnover (% of GDP)	20%	17%	91%	n/a
Derivatives	Notional value traded (x cash securities)	35x	22x	28x	12x
	Notional value traded (x GDP)	78x	43x	98x	23x
	Market share of global FX market	51%	11%	20%	26%
	Market share of global commodity market	25%	2%	46%	29%

Low Medium High

Note: Europe includes EU28 countries as well as Norway and Switzerland

Source: Oliver Wyman analysis

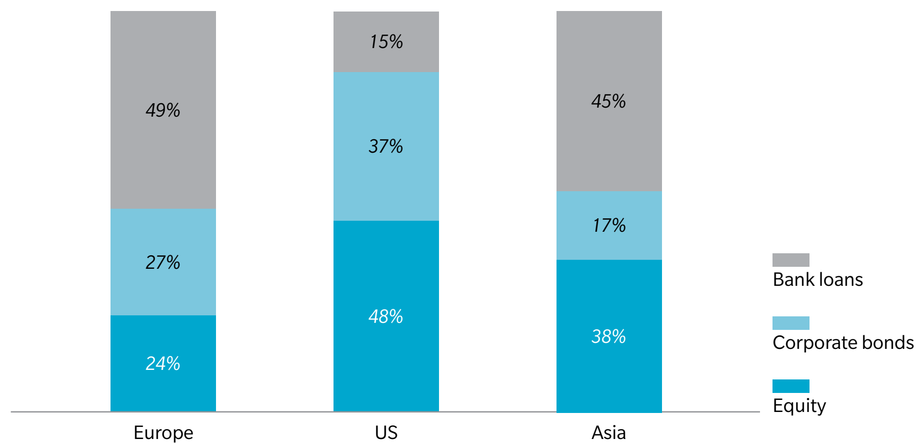
1 "Dark trading" should be considered as including all trading on dark venues (i.e. no pre-trade transparency due to the application of waivers) as well as OTC trading, which includes Broker Crossing Networks (BCNs).

FUNDING

The overall level of corporate funding is comparable across Europe, the US and Asia, at around 300% of GDP. However, the proportion of these funds raised in the capital markets varies significantly.

In Europe, bank loans comprise a greater share of corporate funding than in the US, and slightly larger than in Asia. As indicated in Exhibit 2, despite debt financing (bank lending and bond issuance) exceeding equity across the regions, the equity proportion of total funding is especially low in Europe. Equity funding is only 73% of GDP in Europe, while it is 147% in the US and 98% in Asia.[2]

Exhibit 2: Composition of corporate funding, 2016



US$ TN (% OF GDP)	Europe	US	Asia
Total	54 (307%)	57 (308%)	65 (259%)
Total CM	27 (155%)	48 (261%)	16 (143%)
t/o equity	13 (73%)	27 (147%)	25 (98%)
t/o corp. bonds	14 (82%)	21 (114%)	11 (45%)

Note: CM = Capital Market
Source: WFE, Economic Intelligence Unit

Recent research shows that bank and capital markets based financing can complement each other by increasing the options available to companies seeking capital. However, overreliance on bank lending is commonly believed to impede economic growth and increase levels of systemic risk.[3]

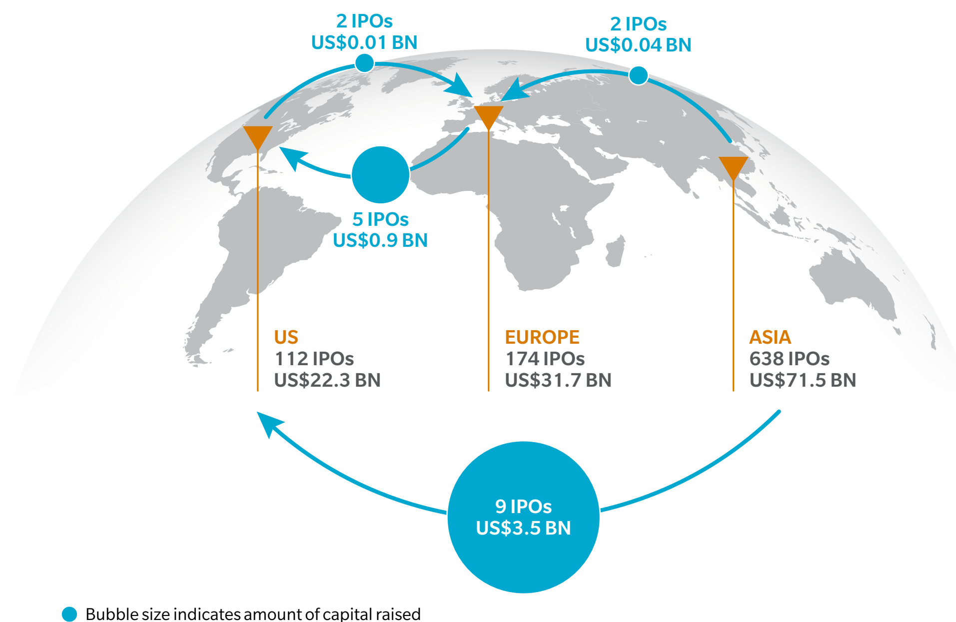
2 Our analysis confirms the findings of previous studies that have compared the maturity of the European capital markets with other regions. See (Valiante, 2016), (Deutsche Bank, 2015)

3 (European Commission, 2015)

Most analyses of this difference in capital markets usage attribute the divergence to the historic role of banks in each region, as well as to cultural norms and their impact on investor preferences, economic structures (e.g. pension systems), legal systems (e.g. investor protection), and tax regimes.

Looking at the volume of IPOs, we find that Asia had the largest share, with 638 IPOs and US$72 BN of capital raised in 2016 (Exhibit 3). The vast majority of IPOs take place in the corporation's home region. In 2016, only 18 corporations listed on an exchange outside their home region. Most of these cross-regional IPOs took place on US exchanges, which attracted a total of about US$4.4 BN in capital through 14 IPOs. European exchanges, by contrast, attracted only four cross-regional IPOs, raising less than US$0.1 BN.

Exhibit 3: Overview of global IPO activity, 2016



Note: Cross-regional flows are only illustrated for Europe, the US and Asia. Asia excludes India
Source: Dealogic, EY Global IPO Trends Q4 2016

Regional variations in IPO costs (underwriting fees paid to investment banks, auditors' and lawyers' fees, exchange fees) do not explain the low rate of foreign company listings in Europe. These costs are similar across major exchanges in Europe and the US. Rather, issuers expect better financial outcomes from listing in the US.

On a positive note, IPOs of small- and medium-sized enterprises (SMEs) in Europe are increasingly well supported by dedicated SME markets set up by exchanges in recent years. These offer an alternative to main listing boards on national stock exchanges and provide SMEs with the opportunity to IPO once they are sufficiently well established to take a larger number of equity investors on board.

These markets are characterised by more relaxed listing requirements and lower costs than the main boards. Several such markets – such as AIM (LSE), Alternext (Euronext), First North (Nasdaq), MAB (BME), New Connect (Warsaw SE), and Scale (Deutsche Börse) – have proven successful in Europe. As of February 2017, 2,245 companies were listed on these markets in Europe, with a total market capitalisation of about €222 BN[4]. Nevertheless, compared to their US counterparts, European SMEs remain reluctant to list and further opportunities remain in this space.

European private placement markets provide another source of financing for SMEs without the need for a credit rating and costly disclosure requirements. The German "Schuldscheine" and the French "Euro-PP" are the most significant private placement markets in Europe, while markets in other European countries remain small. Total issuance on European private placement markets was €32.8 BN in 2015, roughly half of the size of the US market.

However, European private placements have recently gained momentum, growing at the expense of European issuance on US markets.[5] The International Capital Market Association (ICMA) is an industry-led effort to create a pan-European market place. In 2016 it developed its "European Corporate Debt Private Placement Market Guide", which builds on elements of the French and the German regimes.

In the online alternative finance space (e.g. peer-to-peer lending and crowd-funding), 2015 market volumes in Europe (US$5.4 BN) were considerably below volumes in Asia (US$94.6 BN) and the Americas (US$33.6 BN), and it is estimated that the UK alone represents roughly 80% of the European alternative finance market.[6]

SECONDARY TRADING

Secondary markets in Europe, the US and Asia differ in size, concentration, types of trading venue, and in the composition of traders and liquidity providers, to name just a few of their differing characteristics. It is important to understand these differences before analysing liquidity levels across regions.

Market size

The aggregated European equity market is smaller than the US and Asian markets. Measured as a percentage of GDP, the US equity market is approximately twice the size of the European market, reflecting the preference for equity as a funding source in the US (Exhibit 5). It is worth noting, however, that the market size relative to GPD varies greatly across European countries. Austrian equity market capitalisation, for example, is 25% of GDP, while in Sweden and the UK it is approximately 115% of GDP.

4 This includes EU28 and Norway

5 (Standard & Poor's, 2016)

6 (Cambridge Centre for Alternative Finance, 2016)

Europe's sovereign and corporate bond markets amount to 160% of GDP, a little over half way between the Asian market (100% of GDP) and the US market (200% of GDP).

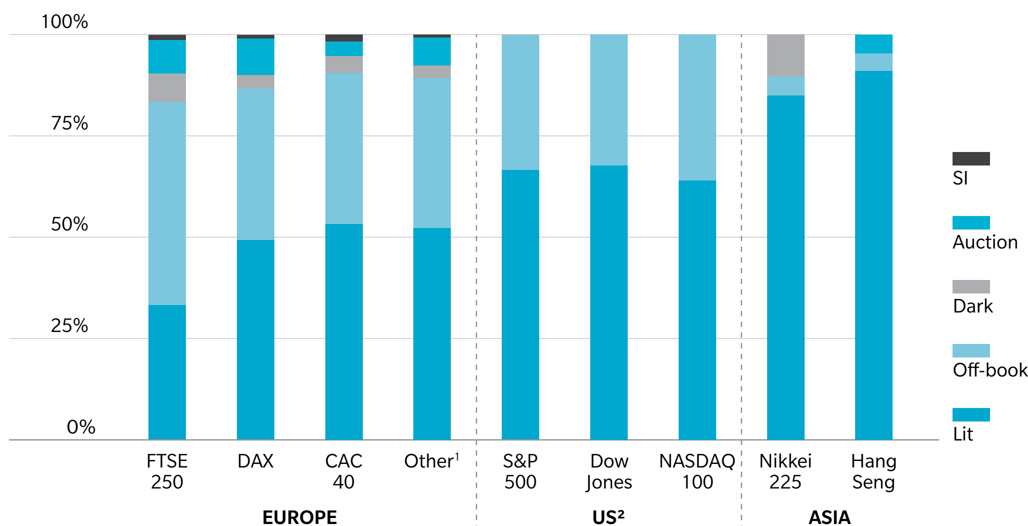
Liquidity concentration

The advent of multilateral trading facilities (MTFs) and Broker Crossing Networks (BCNs) has fragmented European markets, with liquidity diffused across a larger number of alternative trading venues. The Fidessa Fragmentation Index provides a measure of how different stocks are fragmenting across primary markets and alternative venues by stating the average number of venues a market participant must visit to execute an order. The Fragmentation Index for Europe is 11.3 and 7.9 for the Eurozone. For comparable US markets, it is only 5.5.

Trading venue transparency

The proportion of trading in major equity indices going through "lit venues" is much lower in Europe than in the US and, remarkably, also lower than in Asia (Exhibit 4), reflecting the greater fragmentation of the European venue landscape.

Exhibit 4: Trading value for major equity indices by region, average 2016



1: Other is an aggregate of the AEX, BEL 20, IBEX, ISEQ, and PSI20

2: In the US dark pool trade are not segregated from off-book trades

Note: "Lit" trades are those executed on an order book. "Off-book" trades are executed over the counter and reported to a reporting venue. "Dark" trades are executed on an un-lit venue where orders are not always visible. "SI" indicates trades executed on a Systematic Internaliser

Source: Fidessa Fragmentation Index

Composition of traders and liquidity providers

Participants in the European capital market differ markedly from their counterparts in the US and Asia. For example, high-frequency trading (HFT) has developed more rapidly in the US than in Europe. In 2005, HFT already accounted for about 20% of equity trading volumes in the US, while it had hardly begun in Europe. After peaking in the US in 2009 with approximately 60% of total equity turnover by volume, levels have stabilised at around 50% in recent years. In Europe HFT levels reached approximately 40% of equity turnover in 2011 and stabilised at around 25%.[7] This is somewhat surprising. A more fragmented market might be expected to support higher levels of HFT, given the greater opportunities for rapid arbitrage.

Liquidity

European equity and bond markets are comparatively illiquid. While equity turnover velocity[8] in the US and Asia is around 150% and 130%, respectively, it is 90% in Europe (Exhibit 5). In the corporate bond markets, European liquidity is similar to Asian, but well below the US.[9]

Liquidity in individual European equity markets varies, ranging from around 35% in Austria to around 140% in Italy. Although these liquidity measures consider only lit venues, and a large portion of European equity trading takes place on dark venues, this measurement skew does not fully account for the low levels of observed liquidity in Europe.

In summary, analysis of secondary markets paints a similar picture to the one we have seen for primary markets. European secondary markets are smaller than US markets, less liquid and less transparent.

RISK MANAGEMENT

Derivatives can be used for leveraged speculation on price movements. But their primary economic function is to help companies and investors manage their risks.

Prior to the financial crisis, a large portion of derivatives transactions were over-the-counter (OTC): that is, contracts made directly between non-exchange counterparties. Post-crisis, regulations have been designed to reduce the market opacity created by OTC derivatives by driving transactions onto exchanges, cleared through central counterparties.

FX and interest rate derivatives account for most derivatives trading in all regions, both on exchanges and over-the-counter (OTC). Aggregated European derivatives markets amount to approx. US$1,400 TN in notional value traded in 2016 (see Exhibit 6). The aggregated derivatives market of the EU27 countries is far smaller on account of London's dominant position in the European market.

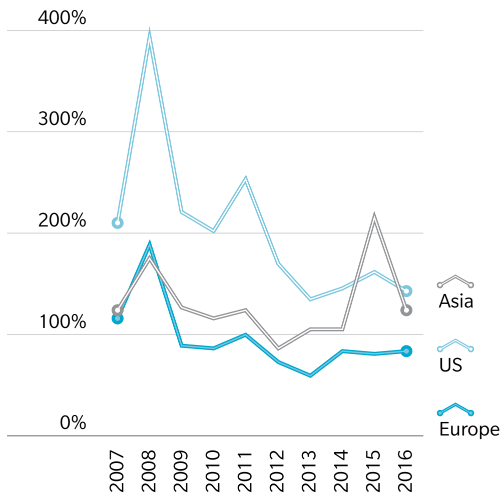
7 (Kauffmann, Hu, & and Ma, 2015)

8 "Stocks traded, turnover ratio of domestic shares (%)", as defined by the World Bank Development Indicators

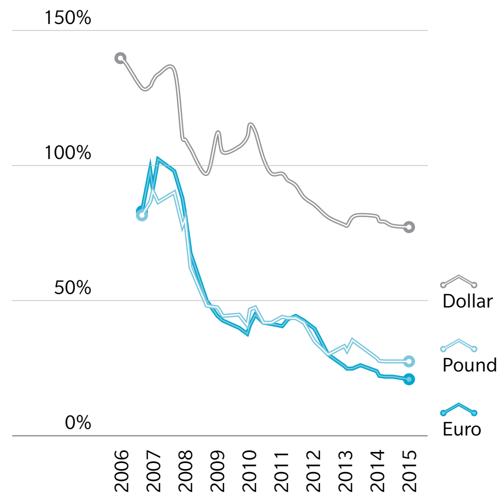
9 PWC (2015), "Global financial markets liquidity study"

Exhibit 5: Equity and corporate bond liquidity

EQUITY TURNOVER VELOCITY



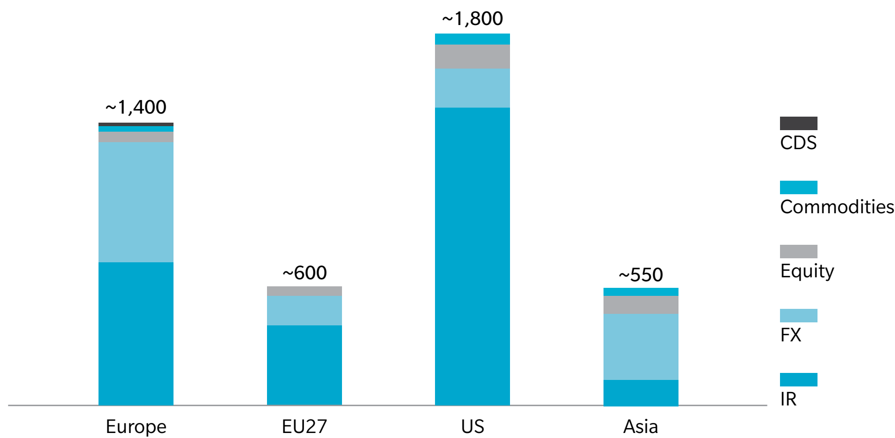
CORPORATE BOND TURNOVER VELOCITY



Source: WFE, World Bank Development Indicators (lhs); Citi Research, National Central Banks and Treasuries, TRACE, TRAX, bestexecution.net (rhs)

Exhibit 6: Derivatives market (ETD and OTC) size by region, 2016

NOTIONAL VALUE TRADED IN $TN



PENETRATION RATES BY REGION, 2016

Total derivative rates by region, 2016				
/GDP	78x	43x	98x	23x
/total securities stock	35x	22x	28x	12x

Note: Excludes exchange-traded single stock options due to incompleteness in data. EU27 values are approximated due to a lack of granularity for ETD FX and IR data and OTC equity, commodity and CDS data. Total securities stock includes equities market capitalisation plus the current outstanding amount of government and corporate bonds

Source: WFE; BIS; Oliver Wyman analysis; WFE/IOMA (2011), "Derivatives Market Survey"; Ehlers & Eren (2016), "The changing shape of interest rate derivatives markets"; McCauley & Wooldridge (2016), "Exchanges struggle to attract derivatives trading from OTC markets"

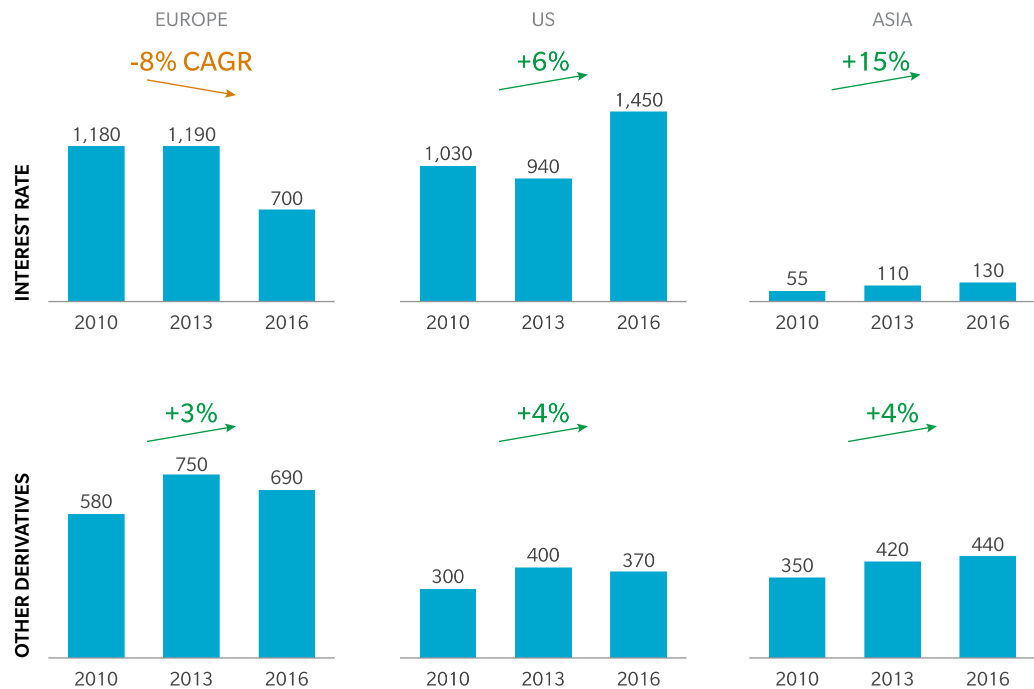
The European derivatives market is smaller than the US market both in absolute terms and relative to GDP. While its notional traded volume amounts to 78x GDP, the US market is 98x GDP. Asian derivatives markets remain less developed at 23x GDP. The ratio of derivative trading volumes to outstandings of the underlying equity and debt is highest in Europe, which points to the relatively small size of European cash security markets highlighted in the previous section.

In 2013 the aggregated European derivatives market was larger than the US market (Exhibit 7). A significant decline in interest rate derivative volumes in Europe from 2013 to 2016, caused by an exceptionally low interest rate environment, means this is no longer true.

Our analysis shows the European capital market to be well positioned to provide access to risk management products. However, Europe's position in derivatives depends on London's continued status as a global financial centre.

Exhibit 7: Evolution of derivatives market size by region, 2010–2016

NOTIONAL VALUE TRADED IN TN$



Note: Numbers exclude exchange-traded single-stock options due to incompleteness in data

Source: WFE; BIS; Oliver Wyman analysis; WFE/IOMA (2011), "Derivatives Market Survey"; Ehlers & Eren (2016), "The changing shape of interest rate derivatives markets"; McCauley & Wooldridge (2016), "Exchanges struggle to attract derivatives trading from OTC markets"

REGULATORY ENVIRONMENT

Europe and the US have often faced similar challenges when regulating financial markets. While similar approaches have been taken in many cases, divergent approaches have both reflected and contributed to the development of their respective capital markets.

In 1986 the UK took dramatic steps to liberalise its financial markets. This "Big Bang" was a collection of measures including the abolition of fixed commission charges, the shift from open outcry trading to electronic trading, and changes to the broker landscape. It marked a shift toward the types of capital markets we recognise today, and these changes were echoed in the US and Europe.

Today, MiFID I defines the regulatory landscape for equities' trading in Europe. Its aim was to increase investor choice and competition between trading venues. The outcome has been a proliferation of alternative trading venues, liquidity fragmentation and increased "dark trading" (i.e. OTC BCNs[10] and platforms operating under pre-trade transparency waivers).

The US has also seen increased competition in trading venues, although with a less dramatic shift toward dark trading. US regulations have instead given rise to new low latency trading and execution algorithms, which are consequently more prevalent in the US than in Europe.

The global financial crisis led to global consensus about the need for regulatory reform. The 2009 G20 Pittsburgh Summit proposed a number of measures to increase resiliency, transparency and investor protection.

Europe and the US have followed the same broad G20 objectives, with the Dodd Frank Act in the US and MiFID II/MiFIR and EMIR reforms in the EU. Europe intends MiFID II to be fully applied from January 2018. Despite the progress made, there are still concerns that any further reduction of market transparency could affect price formation and hurt the fair and objective valuation of European securities trading. That said, the regulated European regulatory regime has demonstrated resilience in the face of post-crisis volatility and sovereign debt crises. In fact, Europe now has higher levels of bank capitalisation and deeper "default waterfall" prevention measures than the US.

European policy makers have moved to implement new rules via Regulations rather than Directives, and they have made significant changes to the European Supervisory Authorities. Both moves are aimed at avoiding regulatory fragmentation and providing financial stability in Europe.

10 BCN – broker crossing networks

HEADWINDS AND TAILWINDS FOR FURTHER DEVELOPMENT

CONVERGENCE IN THE EUROPEAN CAPITAL MARKET

It is generally accepted that fragmentation and opacity are sources of inefficiency in the European capital market. To reduce fragmentation, the EU and its member states have followed a path of deeper integration and harmonisation of its financial markets over the past decades.

As part of the EU's 1993 Single Market provisions, "passporting" rights allow financial services firms licenced in any EU country to offer their products and services in other member states. This "passporting" occurs on both a cross-border basis and via branches, without any additional regulatory authorisations.

Via the European Economic Area (EEA) and bilateral agreements leading to regulatory equivalence, EU Single Market provisions have also been extended to non-EU countries such as Norway and, to some extent, Switzerland.

The UK, and especially the City of London, have actively shaped the structure of the harmonised European capital market and benefitted from this framework, as financial services providers have been attracted to London to serve other European markets.[11]

In September 2015, the EU Commission initiated the Capital Markets Union project with the objective of improving access to (non-bank) financing in Europe and stimulating economic growth. The European Commission has developed an action plan including initiatives to make cross-border transactions easier and to improve SME access to capital market funding. Though many critics claim that Brexit has made the CMU project largely irrelevant, we believe it is more important than ever, and the European Commission has repeatedly stated that it will continue to work on CMU integration.

11 (IMF, 2016)

Status of the Capital Markets Union (CMU) project

The six priority areas of the CMU action plan are:

1. Financing for innovation, start-ups and non-listed companies
2. Making it easier for companies to raise capital on public markets
3. Investing for long-term in infrastructure and sustainable investment
4. Fostering retail and institutional investment
5. Leveraging banking capacity to support the wider economy
6. Facilitating cross-border investing

For each of these priority areas, the European Commission has proposed a set of legislative or market-led initiatives that will jointly deliver the CMU. In the autumn of 2016 the European Commission declared that certain CMU areas are to be accelerated, such as supporting venture capital and equity investments.

We expect 2017 to be an important year for the CMU project. With the mid-term review to be complete by mid-2017, the European Commission will wish to show that the project as a whole is progressing and continues even with the UK leaving the European Union.

EMERGING HEADWINDS

Despite the progress made on integration and harmonisation, challenges to the development of the European capital market have recently emerged:

Increase in protectionist attitudes

The rise of populist parties in many European Member States and the election of Donald Trump in the US mark a significant shift in attitudes, away from globalisation and towards protectionism. In Europe, this represents another hurdle for greater supra-national harmonisation. Most of these movements and parties push for greater national sovereignty and emphasise national interest, while viewing globalisation and cross-border movements of capital and labour as threats. Even if populist parties in Europe do not win power, their ideas are likely to be assimilated to some degree by more established parties seeking to maintain popularity.

Anti-EU sentiment has been at the heart of populist parties' rhetoric. The EU now faces a credibility problem, with only a third of its citizens trusting it, compared to half a decade ago.[12] This makes many of the required reforms to the European capital market politically difficult. And it is likely to dampen the appetite of global investors for European assets. The upcoming elections in Germany and Italy will represent important milestones for Europe's way forward in this regard.

12 European Commission: Eurobarometer; http://ec.europa.eu/commfrontoffice/publicopinion

If these sentiments were translated into capital markets, we might expect damaging results, such as reduced product diversity and higher execution and financing costs, which would slow economic growth.

Brexit

London plays an important role in the global capital markets and in increasing the efficiency of the European capital market. The UK has historically been an advocate of reform and efficiency in European financial services, and a champion of free market ideals. Brexit puts both the EU and London's role as a European and international financial centre at risk, as well as posing challenges to current structures for market access. The terms of the Brexit deal have not yet been finalised, and there is scope for a range of outcomes with varying impacts on the European capital market. In the event of a "hard Brexit" in which no deal is reached regarding access provisions (a low access scenario), EU firms would be unable to access UK markets, and UK-based financial firms would be unable to serve EU customers.

A loss of passporting rights will impact not only banks and asset managers but also market infrastructure providers such as Central Counterparties (CCPs). We view this scenario as highly damaging to the health of the European capital market, leading to greater fragmentation, increased transaction costs, lower margin efficiency and less product choice.

A "soft Brexit" or high access scenario would be less damaging as the ability to service customers across borders could be largely preserved. However, the European capital market will still suffer from the loss of the UK's financial services expertise when shaping regulation. At the time of writing, a soft Brexit has been all but ruled out by the UK government, though elements of it may be discussed as part of the negotiations regarding financial services, and we acknowledge the uncertainty at this very early stage of negotiations.

A key aspect of the UK's future relationship with the EU is the supervisory structures that might arise, since they will materially affect the efficiency of the European capital market. Future supervisory structures might allow some amount of joint regulation of financial services firms, keeping the two regimes closely aligned.

Uncertainty regarding the outcome is already forcing firms to plan for a "worst case scenario", taking up time and resources which could be better deployed elsewhere. This will continue as long as uncertainty regarding the deal remains. In addition, Brexit means there will forever be the risk of regulatory divergence between the UK and the EU, weakening the European capital market as a whole.

Exhibit 8: Spectrum of regulatory outcomes from Brexit[13]

Increased competition from other financial markets

Competition between global capital markets looks set to increase further, particularly in derivatives, as asset classes mature and become fully globalised. This means the European capital market will face much stronger competition from the US and Asia.

In the US, the new administration is expected to reduce regulatory burdens for financial services providers, although there is uncertainty as to the exact parameters of the reform, particularly with respect to any repeal of parts of the Dodd-Frank Act. Most of the changes to the Dodd-Frank Act proposed by the Republicans will require Democratic opposition in Senate to be overcome. Any movement will probably be focused on easy-to-adjust capital and leverage ratios, potentially putting US financial firms in a more favourable position than their European peers.[14]

We also expect the Asian financial hubs (Singapore, Hong Kong) to grow in importance as these capital markets mature and domestic demand for financial services continues to increase. Greater sophistication in these financial centres will lead to less reliance on financial services and products imported from global financial centres such as London.

13 Note: Outline of future relationship here is an outcome based summary of the relationship and key aspects, rather than a comprehensive detailing of all legal and regulatory agreements. The UK will become a third country when it moves outside the coverage of EU Treaties, which confer single market access rights, "passporting", and regulatory "equivalence"

14 (Oliver Wyman, 2017)

EMERGING TAILWINDS

Although recent political events are mainly detrimental to the development of the European capital market, we also see some tailwinds:

Technological disruption

Disruptive technologies and new market entrants are challenging existing business models across a wide range of industries. In financial markets, new technologies have created ultra-low latency trading options and sophisticated algorithms to manage orders. New ways of allocating capital (such as equity crowd-financing) have been established. And further advances, such as distributed-ledgers, artificial intelligence and cloud technology promise yet greater efficiency gains.

Industry regulators are struggling to reconcile the benefits of disruptive technologies with the level of disruption they cause. The sharing economy is a case in point. Regulators recognise the benefits to consumers but express concerns around the erosion of workers' rights, sometimes introducing licencing regimes aimed at protecting traditional jobs. European financial services regulation should ensure that new technology is applied prudently, but without eliminating the efficiency gains on offer.

Unlocking potential of retail investors

As highlighted by the European Commission, retail investors in Europe have significant savings in bank accounts but are less directly involved in capital markets than they once were.[15] The proportion of European households that directly own shares has fallen from 28% in 1975 to 10% since 2007, and the proportion of retail investors among all shareholders is less than half the level it was in the 1970s.

Continued support for the EU Capital Markets Union project

The Brexit referendum has had a tremendous effect on the Capital Markets Union (CMU) project. However, the European Commission has repeatedly stated that it will put even more effort into implementing the CMU following Brexit. We believe that the CMU project is a significant opportunity to strengthen the European capital market and could be the nucleus for further, more ambitious initiatives when the action plan is reviewed this year.

15 http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52015DC0468&from=EN

PRINCIPLES AND RECOMMENDATIONS FOR A STRONGER EUROPEAN CAPITAL MARKET

As noted above, the European capital market has both strengths and weaknesses, and faces a number of headwinds. We urge policy makers to support the development of the European capital market so that it serves the real economy effectively and can compete in a global context.

To this end, we set out six guiding principles for the development of the European capital market, which provide the foundation for more detailed recommendations.

GOALS

1 The European capital market should foster economic growth by supplying investment, financing and risk management services

2 The European capital market should be open to all participants, regardless of their location or national boundaries

3 The European capital market should be able to compete effectively for global flows

ENABLING CONDITIONS

4 The European capital market needs a level of transparency that facilitates price discovery and financial stability

5 The European capital market needs the greatest possible certainty regarding future changes

6 The European capital market needs an up-to-date and supportive regulatory environment

1 THE EUROPEAN CAPITAL MARKET SHOULD FOSTER ECONOMIC GROWTH BY SUPPLYING INVESTMENT, FINANCING AND RISK MANAGEMENT SERVICES

The ultimate purpose of any capital market must be to serve and strengthen the real economy. Policy-makers should consider the implications of their actions for the ability of capital markets to provide sufficient capital, liquidity, and risk management products and services to the real economy.

Transforming this principle into tangible policies is vital for two groups of companies: early stage companies, which drive innovation and thus future growth in Europe, and more mature SMEs, which are the backbone of the European economy, providing 68% of jobs in the non-financial sector. Both rely on access to equity based financing and a diversified funding mix.[16] These companies benefit immensely from developed capital markets and the added investment they facilitate.

Efficient derivatives markets will also foster economic growth in Europe by providing cost-effective mechanisms for sharing risks and diversifying portfolios. With the recent regulatory push for a reduction of systematic risks, derivatives markets have become more transparent and stable.

Regulatory reforms or harmonisation of national laws must be carefully vetted against this core principle of fostering economic growth. We have four specific recommendations for policy makers, consistent with this principle:

1a	Improve access to non-traditional financing methods for young companies
1b	Encourage the use of technological innovations in the European capital market
1c	Avoid additional transaction or financing costs to the European capital market as a result of Brexit
1d	Work collaboratively toward an optimal Brexit outcome for the European capital market based on continuity

1a. Improve access to non-traditional financing methods for young companies. As traditional financing remains limited, more can be done to improve access to non-traditional financing for early and expansion stage companies as outlined in the CMU Action Plan. Exchanges already assist companies looking to raise capital in the Pre-IPO stage.[17] These companies are future IPO candidates and depend on funding for further growth.

16 (European Commission, 2015)

17 For example: Budapest Stock Exchange: 'Club of Quotables'; Deutsche Boerse: 'Venture Network'; Enternext: 'TechShare'; Irish Stock Exchange: '#IPO Ready'; Warsaw Stock Exchange: 'Capital for Growth'.

1b. Encourage the use of technological innovations in the European capital market. Policy-makers should create a regulatory environment that enables market participants to adopt technological advances quickly, thereby helping them provide new or existing services more efficiently.

Technology has already disrupted several industries, from transportation to logistics. Similar disruption has begun in European financial services, but there remains much scope for change and the pace will accelerate as the larger financial institutions embrace new technologies.

Regulation may need to be modified or introduced to ensure new technology does not undermine market stability or consumer protection. For example, blockchain technology requires clarification of the legal finality of settlement. However, policy-makers must ensure that European companies do not face unnecessary regulatory hurdles when adopting new technology. This would reduce consumer welfare and put European firms at a competitive disadvantage with foreign firms that face lower hurdles.

1c. Avoid additional transaction or financing costs to the European capital market as a result of Brexit. Brexit represents a major headwind to the European capital market. Any market fragmentation or limitation on cross-border transactions is likely to increase costs for end users, damaging economic growth and the competitiveness of the European capital market.

We recommend that any implications for transaction and financing costs be explicitly estimated and taken into account during Brexit negotiations. Any settlement that entails a material increase in these costs should be deemed unacceptable by both UK and EU negotiators.

1d. Work collaboratively toward an optimal Brexit outcome for the European capital market based on continuity. Brexit has aroused strong feelings, and negotiators may be tempted to take an adversarial approach to settling on terms. This would be a mistake. An optimal outcome for Europe's capital market and, hence, for the real economy is more likely to be achieved by negotiators adopting a collaborative approach. The goal should not be to beat the other side but to arrive the settlement most beneficial to the capital markets and the populations of the EU and UK.

2 THE EUROPEAN CAPITAL MARKET SHOULD BE OPEN TO ALL PARTICIPANTS, REGARDLESS OF THEIR LOCATION OR NATIONAL BOUNDARIES

The wider the reach of the European capital market, the greater the scale and diversification benefits. Both issuers and investors benefit from lower costs and increased choice. To continue extending market access, it is important to uphold the practice of granting mutual market access provided only that each jurisdiction's respective regulatory and supervisory arrangements are deemed "equivalent".

Alas, recent geopolitical developments, most notably Brexit, threaten to reverse previous harmonisation efforts and the opening of global capital markets. We have two recommendations for policy-makers aiming to preserve the "mutual access" principle:

2a	Continue to push for harmonisation and review potential barriers to cross-border transactions
2b	Aim to negotiate a Brexit deal that preserves mutual market access between the UK and EU

2a. Continue to push for harmonisation and review potential barriers to cross-border transactions. Europe's capital market will be best served if policy-makers continue to identify areas where further harmonisation can remove unnecessary barriers to cross-border investments within Europe. We have identified several:

- **Financing start-ups:** Harmonising the regulatory framework for equity crowd-investing could help to establish another source of capital for early-stage companies. Although the contribution of crowdfunding platforms to total equity financing is still negligible, volumes are growing rapidly.[18] Several European countries have established national regulations on crowd-investing but there is no pan-European framework and activity on crowd-financing platforms remains largely national.[19] Pan-European standards would promote cross-border activity and should be considered by policy-makers.
- **The early expansion phase:** The European venture capital market remains far smaller than the US market, in part because it is fragmented across member states. We believe that European policy-makers should develop a comprehensive plan to strengthen Europe's venture capital market. This will include reviewing regulations (EuVECA, EuSEF) and tax incentives, as well as improving the supply and demand for venture capital. An initial catalyst for expansion of the market could be to establish cross-border fund-of-funds structures, following the example of European Commission's partnership with the European Investment Fund (EIF).
- **Raising capital on public markets:** Policy-makers should aim to promote an equity culture in Europe. Initiatives could include the financial education of investors and companies as users of capital markets, reviewing disclosure requirements, and ensuring pricing transparency for IPO costs. EU data and research can also be enhanced by standardising and improving data collection. This will help companies and investors understand the comparative costs and benefits of services provided by capital market participants.

18 (OECD, 2016)
19 (European Commission, 2016)

- **Supporting SMEs seeking finance:** Consideration should be given to creating an asset-class definition of small quoted companies. This would allow policy-makers to exempt small companies from certain regulations designed for the larger, global issuers. Similarly, investors could be incentivised to invest in such companies. However, it is not clear whether a single definition would work for all EU countries, and some flexibility with an upper limit might need to be given to each Member State. As a starting point, a new category of "Emerging Growth Companies" could be adopted, with companies below this threshold being exempt from many EU disclosure requirements (see specific proposals below).[20]
- **Tax:** Because Member States have national sovereignty over their tax systems, both principles and rates of taxation diverge significantly across Europe.[21] For example, withholding tax levels, relief procedures and the tax treatment of payments to pension or life insurance products differ among European countries. National sovereignty also means that tax regimes may be one of the most difficult areas to harmonise within Europe. However, setting guidelines or minimum standards and reforming the procedural legislations around re-claiming withholding tax could be reasonable starting points for a broader review.
- **Insolvency regimes:** Divergence in national insolvency regimes represents another hurdle for integrating individual European capital markets, because it introduces an element of unpredictability into cross-border investments. Insolvency proceedings across Member States currently range from a few months to four years.[22] Studies have identified differences among national insolvency regimes in European Member States as a major roadblock for more efficient capital markets.[23] A set of minimum standards could help to overcome the current divergence in bankruptcy and insolvency regimes. (Note: the European Commission has proposed a set of European rules on business insolvency as part of the Capital Markets Union action plan. The legislation will need to be passed by the European Council and European Parliament. We encourage European policy-makers to continue down this path.)
- **Accounting rules:** Companies should not be obliged to do double accounting – the national sets for fiscal accounting and IFRS for financial accounting. The extra expense puts European firms at a competitive disadvantage vis-à-vis their international peers and creates difficulties for investors when analysing European companies.

2b. Aim to negotiate a Brexit deal that preserves mutual market access between the UK and EU. As mentioned above, post-Brexit fragmentation of Europe's capital market could be seriously detrimental to the European economy. Wherever possible, negotiators should aim to ensure mutual access rights between the EU and UK markets, for both clients, financial services firms and market infrastructure providers.

The UK has made a positive contribution to the current structure of the European capital market, often extolling the virtues of the single market. The question of EU-UK regulatory cooperation should certainly be addressed when agreeing the terms for mutual market access. A collaborative approach to the developing financial regulation would benefit the EU, the UK and global capital markets.

20 The US Jobs Act defined such companies as those listed but with under $1 BN revenues or newer companies within three years of their listing

21 (PwC, 2015)

22 (European Commission, 2016)

23 (AFME, 2016)

3 THE EUROPEAN CAPITAL MARKET SHOULD BE ABLE TO COMPETE EFFECTIVELY FOR GLOBAL FLOWS

Brexit will put Europe's ability to attract foreign investments to a test. Most foreign capital inflows to Europe are channelled through the UK, and the EU27 needs to make itself an attractive destination for such funds in future. Policy-makers must consider the impact on attracting foreign investments when regulating Europe's capital markets.

We have two specific recommendations:

3a	Ensure capital market regulation remains aligned with global standards, particularly for derivatives
3b	Incorporate adherence to global standards into Brexit negotiations

3a. Ensure capital market regulation remains aligned with global standards, particularly for derivatives. For the most globalised capital markets, particularly derivatives, international coherence is important for avoiding regulatory arbitrage and encouraging global capital flows that support Economic growth in Europe. To achieve this, we recommend the following:

- Consider refinements to relevant EU legislation[24] to ensure consistency with international standards following appropriate and ongoing evaluation and impact assessments
- Explore the potential for more comprehensive international standards. This is already happening for CCPs, and extending it to other elements of capital markets could reduce fragmentation and regulatory arbitrage.

3b. Incorporate adherence to global standards into Brexit negotiations. The outcome of the Brexit negotiations is highly uncertain, as shown in Exhibit 8. In a low access, hard Brexit scenario, significant disruption would ensue. Unfortunately, this scenario remains a possibility and negotiators on both sides must take this into account.

Market access agreements should be granted when jurisdictions deem their respective regulatory and supervisory arrangements to be equivalent. While the current EU regulatory framework includes equivalence provisions in specific areas, we believe that adherence to relevant global standards could play an accompanying role in determining equivalence.

24 EMIR, MiFID/R, Benchmarks, Market Abuse Regulation and CCP recovery and resolution

4 THE EUROPEAN CAPITAL MARKET NEEDS A LEVEL OF TRANSPARENCY THAT FACILITATES PRICE DISCOVERY AND FINANCIAL STABILITY

Well-functioning capital markets help investors to determine the right price for a security or other asset. Information about the order book (pre-trade transparency) and about prices and volumes of completed transaction (post-trade transparency) improve the quality of this "price discovery" and reduce investment risk for market participants.

Since the end of the financial crisis, there has been a strong regulatory push for increased transparency in the European cash and derivatives markets, for example, through MiFID II, MiFIR and EMIR. In the derivatives markets, regulators have introduced mandatory reporting to improve post-trade transparency.

We agree that a high level of transparency is crucial for retaining and attracting new investors to the European capital market. However, transparency requirements need to be balanced between strengthening the market and promoting liquidity. Policy-makers should apply consistent pan-European transparency standards that are calibrated to account for different asset classes and types of trading venues.

The transparency reforms of MiFID II must be implemented in line with both the letter and the spirit of the law. This requires awareness of the potential for unintended negative consequences for transparency, particularly with respect to the SI regime and the Exchange-Traded Derivatives (ETD) markets.

Three recommendations for policy-makers:

4a	Review and address loopholes in MiFID II regulation that might undermine market transparency and effectiveness
4b	Establish pan-European information systems to improve transparency
4c	Aim to ensure EU and UK regulators have reciprocal access to financial data post-Brexit

4a. Review and address MiFID II provisions that might undermine market transparency and effectiveness

(i) Address potential trading loopholes in MiFID II equity market structure. As implementation of MIFID II draws near, the key issue in equities is the likely evolution of broker crossing networks (BCNs), hitherto organised on an OTC basis. Under MiFID II, today's BCN activity should be re-organised either as MTFs for multilateral trading or Systematic Internalisers (SIs) for purely bilateral trading. This requires a clear differentiation between bilateral and multilateral trading activity to safeguard the price formation process on transparent regulated venues and to ensure a level playing field.

However, there are concerns about the potential for the SI regime to replicate current OTC structures of BCNs, in the form of a network of interconnected SIs. We welcome the recent Level 3 clarification from ESMA on this topic and encourage the EU institutions to consider any further legislative changes that may be required.

(ii) Position limits regime for commodity derivatives under MiFID II. The position limit regime in Europe will apply to all commodity contracts and not only the most heavily traded price benchmark contracts. It will also apply to all financial participants regardless of whether they are warehousing risk for the underlying users or establishing their own risk positions. This means that the ability of financial participants to make use of the hedging exemption is more restricted in the EU than in the US. Even when financial market participants are acting on behalf of non-financial end users, their capacity to offer risk management to their real economy clients will be strictly limited. This threatens to undermine the liquidity and resilience of commodity markets in Europe. It should be addressed as soon as possible to prevent European end users seeking more flexible risk management instruments outside Europe.

(iii) Lack of coherence in the treatment of energy derivatives. There are currently difficulties with the application of the EMIR clearing and MiFIR trading obligations for energy derivatives that are classified under MiFID Annex C6. The decision by some regulators that certain trading venues are not considered MTFs means that the current C6 MiFID financial instrument definition does not apply to the products traded on these venues. Hence, all contracts concluded on non-MTFs constitute neither Exchange Traded Derivates (ETDs) nor OTC derivatives in relation to EMIR. The introduction of EMIR has thus caused a significant shift of liquidity away from "traditional MTFs" to non-MTFs, where the intended rules for clearing and trading can be avoided. Regulators must address this shift from on-exchange trading to non-regulated venues. Given that, from 2017 onwards, gas and power derivatives that are traded on an Organised Trading Facility (OTF) and "that must be physically settled" do not fall under C6, even more trading will move outside the reach of financial regulation. This lack of coherence must be addressed.

(iv) Potential loopholes for transparency requirements for equity derivatives. The forthcoming MiFIR trading obligation for OTC derivatives, complementing EMIR's clearing obligations that are already in force, should increase the safety and transparency of OTC derivatives trading. However, the decision to not yet implement the clearing obligation for OTC equity derivatives means there is a potential loophole in the interplay between the derivatives and clearing rules that threatens to drive exchange-traded derivative (ETD) volumes to OTC venues. While all equity derivative instruments traded on a Regulated Market will be subject to an obligation to clear, look-alike contracts traded OTC (i.e. those contracts that mimic the economic value of the ETDs but are traded OTC as defined in EMIR) would be subject only to a requirement to clear if ESMA were to subsequently mandate the products for clearing. This creates a potential loophole for this class of derivatives, given that, by extension, they would also not be subject to the trading obligation in MiFIR. This is at odds with the objectives set out by the G20, and would further reduce the transparency of the European capital market. We see it as counter-intuitive that the implementation of

EMIR and the MiFID review should result in less transparency for instruments that are already available to trade on transparent and multilateral markets.

4b. Establish pan-European information systems to improve transparency. European policy-makers should promote pan-European information systems that improve investor education and transparency, extending what is already planned in the creation of a European prospectus register. A single pan-European database of listed companies' and issuers' financials should also be established. This could be set up to resemble the US system EDGAR, through which foreign and domestic companies are required to provide their SEC filings. Such platforms would provide investors with easy-to-access and comparable filings available in several languages, supplemented by information required under national law. A pan-European repository along these lines would support a unified European capital market.

4c. Aim to ensure EU and UK regulators have reciprocal access to financial data post-Brexit. Regardless of the eventual result of the Brexit negotiations, cross-border transactions will still take place and both the UK and the EU will benefit from the open sharing of financial data. Any Brexit deal should include an agreement to openly share data on financial markets, and the parties should commit to collaborating where necessary, for example, on trade reporting and market stress tests. Avoiding the duplication of regulatory requirements and allowing reciprocal access to data will increase EU27's competitiveness.

5 THE EUROPEAN CAPITAL MARKET NEEDS THE GREATEST POSSIBLE CERTAINTY REGARDING FUTURE CHANGES

Uncertainty tends to undermine liquidity in capital markets and reduces their effectiveness in serving the real economy. Increased volatility discourages investors from engaging in new ventures. And by increasing the cost of funding for both listed and non-listed companies, uncertainty causes some investments to be postponed or cancelled. Policy makers should always aim to minimise any uncertainty created by their actions.

The Brexit vote has greatly increased market uncertainty. At present many market participants are forced to plan for their worst-case scenario in relation to Brexit. This harms the European capital market and real economy by making firms overly cautious and encouraging them to spend money on making contingency arrangements that may prove unnecessary.

To mitigate this, we recommend negotiators provide clarity about negotiation outcomes as early as possible. An early indication regarding equivalence will be vital for financial services firms making plans for the transition period, reducing the burden of planning for multiple scenarios, including the worst case.

6 THE EUROPEAN CAPITAL MARKET NEEDS AN UP-TO-DATE AND SUPPORTIVE REGULATORY ENVIRONMENT

Regulation and supervision must be sufficiently robust to provide systemic stability and consumer protection. But they should not be so onerous as to stifle competition and innovation or create inefficiency. This is a difficult balancing act.

The fact that capital markets constantly change makes it even more difficult. Capital markets often evolve faster than the speed at which regulation can be adjusted, leading to negative, unintended consequences. Indeed, markets often change in response to previous regulations, and policy-makes find themselves "chasing their own tails".

Perfection may be unattainable. But achieving the best possible results requires policy-makers to regularly review actual effects of regulations, comparing them with the intended effects.

To ensure that regulation continues to support the stable and efficient functioning of the capital market, it should be regularly reviewed, considering its intended and unintended effects and any resulting loop holes. With the bulk of post-crisis regulations having recently come into force, special attention should be paid to their inter-connections and how well they are supporting the development of a European capital market.

CONCLUSION

The European capital market shows significant room for development across most of its functions. Greater market depth and the further diversification of funding, trading, and risk management opportunities would benefit the real economy of Europe.

We see challenges ahead for the cohesion of global capital markets as protectionist agendas threaten to increase fragmentation and raise barriers. We therefore encourage European policymakers to counteract this trend by taking explicit account of the international dimension when producing regulation, promoting consistency with other parts of the world. Strong international regulation can help Europe's capital market remain an integral part of the global economy and allow it to attract the inward investment needed for competitiveness and growth.

European policy-makers must take swift and decisive actions to strengthen Europe's capital market. We urge European leaders to reject protectionism and isolationism and, instead, to create an environment for their capital markets that is mutually beneficial for Europe and the rest of the world.

WORKS CITED

AFME. (2016). *Potential economic gains from reforming insolvency law in Europe.* Retrieved from https://www.afme.eu/globalassets/downloads/publications/afme-insolvency-reform-report-2016-english.pdf

BBVA. (2016). *Blockchain in financial services: Regulatory landscape and future challenges for its commercial application.* Retrieved from https://www.bbvaresearch.com/wp-content/uploads/2016/12/WP_16-20.pdf

Cambridge Centre for Alternative Finance. (2016). *'Sustaining Momentum' - European Alternative Finance Industry Report.* Retrieved from https://assets.kpmg.com/content/dam/kpmg/xx/pdf/2016/09/sustaining-momentum.pdf

Deutsche Bank. (2015). *Capital Markets Union: An ambitious goal, but few quick wins.* Retrieved from https://www.dbresearch.com/PROD/DBR_INTERNET_EN-PROD/PROD0000000000371611/Capital_Markets_Union%3A_An_ambitious_goal,_but_few_.pdf

Ehlers & Eren. (2016). *The changing shape of interest rate derivatives markets.* Retrieved from http://www.bis.org/publ/qtrpdf/r_qt1612f.htm

ESMA. (2016). *ESMA identifies areas for improvement in EU CCP supervision.* Retrieved from https://www.esma.europa.eu/press-news/esma-news/esma-identifies-areas-improvement-in-eu-ccp-supervision

Euroclear and Oliver Wyman. (2016). *Blockchain in Capital Markets – the prize and the journey.* Retrieved from http://www.oliverwyman.com/content/dam/oliver-wyman/global/en/2016/feb/BlockChain-In-Capital-Markets.pdf

European Commission. (2014). *Implementing enhanced cooperation in the area of financial transaction tax (FTT).* Retrieved from http://ec.europa.eu/taxation_customs/sites/taxation/files/resources/documents/taxation/other_taxes/financial_sector/ftt_under_ec_en.pdf

European Commission. (2015). Retrieved from http://ec.europa.eu/finance/capital-markets-union/docs/building-cmu-economic-analysis_en.pdf

European Commission. (2015). *Annual Report on European SMEs.* Retrieved from http://ec.europa.eu/DocsRoom/documents/21251/attachments/1/translations/en/renditions/native

European Commission. (2016). *Crowdfunding in the EU Capital Markets Union.* Retrieved from https://ec.europa.eu/info/system/files/crowdfunding-report-03052016_en.pdf

European Commission. (2016). *Proposal for a directive on Insolvency, Restructuring and Second Chance - Fact Sheet.* Retrieved from http://europa.eu/rapid/press-release_MEMO-16-3803_en.pdf

EY. (2016). *EY Global IPO Trends 2016 Q4.* Retrieved from http://www.ey.com/Publication/vwLUAssets/ey-global-ipo-trends-report-4q16/$FILE/ey-global-ipo-trends-report-4q16.pdf

IMF. (2016). Retrieved from https://www.imf.org/external/pubs/ft/scr/2016/cr16169.pdf

Kauffmann, R. J., Hu, Y., & and Ma, D. (2015). Will High-Frequency Trading Practices Transform the Financial Markets in the Asia Pacific Region? *Financial Innovation. 1, 1-27.*

London Stock Exchange. (2017). *AIM Factsheet February 2017.* Retrieved from http://www.londonstockexchange.com/statistics/historic/aim/aim-statistics-archive-2017/feb-17.pdf

McCauley & Wooldridge. (2016). *Exchanges struggle to attract derivatives trading from OTC markets.* Retrieved from http://www.bis.org/publ/qtrpdf/r_qt1609x.htm

OECD. (2016). *Financing SMEs and Entrepreneurs 2016: An OECD Scoreboard.* Retrieved from http://www.oecd.org/cfe/smes/financing-smes-and-entrepreneurs-23065265.htm

Oliver Wyman. (2017). *Implications of the Trump Administration for Financial Regulation.* Retrieved from http://www.oliverwyman.com/content/dam/oliver-wyman/v2/publications/2017/jan/Oliver%20Wyman%20-%20Implications%20of%20the%20Trump%20Administration.pdf

PwC. (2015). *Capital Markets Union: Integration of Capital Markets in the European Union.* Retrieved from https://www.pwc.com/gx/en/banking-capital-markets/pdf/cmu-report-sept-2015.pdf

Standard & Poor's. (2016). *European Alternative Lending Markets Take An Ever-Bigger Slice Of The Cake.* Retrieved from http://com.agefi.fr/PDF/EuropeanAlternativeLendingMarkets.pdf

Valiante. (2016). *Europe's Untapped Capital Market: Rethinking integration after the great financial crisis, CEPS Paperback.* London: Rowman & Littlefield International.

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