

The Bank of England's Response to the European Commission Green Paper: *Building a Capital Markets Union* 

May 2015

#### INTRODUCTION

The Bank of England strongly supports the Capital Markets Union (CMU) initiative. The Bank's comments are offered in the spirit of ensuring that CMU is as effective as possible – by capturing a clear set of economic benefits across the EU as a whole, while seeking to preserve and strengthen economic stability. Our response considers a wide range of policy proposals that we believe will meet these goals. On issues that fall within the Bank's core competences, we offer specific policy proposals. Elsewhere, we outline in general terms considerations we believe to be important, leaving other relevant authorities to pursue more detailed proposals.

CMU will be at its most effective where it has clear economic objectives, namely to support economic growth and stability. A natural starting point to evaluate CMU is to articulate the key mechanisms and channels through which more diversified and integrated capital markets in Europe may achieve these aims. Figure 1, adapted from a recent Bank of England paper, offers a stylised view of these mechanisms and channels. Also highlighted are selected impediments, which CMU may be viewed as serving to overcome.

Objective / Implication PRIMARY OBJECTIVE OTHER IMPLICATIONS Support economic growth and stability **Financial Stability** Matching savers and borrowers Improved private-sector risk sharing Improved access by Better matching of More flows of investment **Financial** Channels borrowers to funding Diversificatio investors to financial risk Integration across borders STRUCTURE MARKET ACCESS **'HOME BIAS'** 1 Loan origination biased toward banks 4 Companies lack confidence in markets 9 Lack of harmonisation 2 Fragmented markets and infrastructure 5 Information asymmetries 10 Lack of transparency 3 Savings concentrated in banking system 6 Uneconomical costs of issuance 7 Distortions from tax or regulations 8 Impairments of securitisation markets

Figure 1: Impediments to achieving CMU

Source: Bank of England.

<sup>&</sup>lt;sup>1</sup> See 'A European Capital Markets Union: implications for growth and stability', Bank of England (2015).

# CMU should improve the matching of savers and borrowers and private-sector risk sharing ...

One mechanism through which to achieve the aims of CMU is to improve the matching of savers and borrowers. This contributes to so-called 'allocative efficiency' – ensuring savings are invested in the most productive uses – and thereby primarily supports economic growth. Another mechanism is to improve risk sharing amongst the ultimate savers in the economy, namely households. This contributes to reduced volatility of income and consumption, and thereby primarily supports economic stability.

#### ... and thereby increase financial diversification and deepen financial integration ...

Financial diversification opens up credit channels to ensure that potential borrowers with productive opportunities have access to the funding they need. Financial integration, meanwhile, focuses on the degree to which risks are spread across economies, through cross-border flows of capital. It is through increased financial diversification and deeper financial integration that the dual benefits of CMU – better matching of savers and borrowers and improved cross-border private-sector risk sharing – will ultimately come about.

#### ... while ensuring economic stability is not put at risk ...

An economic stability objective is also necessary for CMU because of the significant costs, in terms of lost output, associated with economic instability. This was dramatically illustrated by the financial crisis. Post-crisis reforms have made the core of the financial system safer and helped level the playing field between bank and non-bank forms of finance. Indeed, there is already evidence of some global activity (and with it, concentrations of risk) moving away from banking and towards capital markets – for example, global assets under management rose by around 50% between 2008 and 2013.

But against this background, the potential for new risks to stability to emerge has yet to be fully understood and, if necessary, managed by international authorities. This does not mean to suggest that there is necessarily a trade-off between stability and capital market development. Instead, it suggests that CMU could have a particular focus on certain areas, such as ensuring equity finance – where the stability risks have historically been small – is not disadvantaged relative to debt finance.

#### ... delivering genuine benefits to the whole of the EU.

Many EU financial centres are well placed to build capital markets under CMU. London, as one of the world's largest financial centres, is an asset to be leveraged and its comparative advantage should be allowed to play a role. However, market-based finance is widespread across the EU. For example, while France has the second most developed mutual fund industry in the world; the largest pension fund industry (relative to the size of the economy) is located in the Netherlands.

Meeting the objectives of CMU will confer benefits across the whole of the EU. The structure of all EU Member States' financial systems should become more resilient and firms should benefit from improved access to markets, both at home and across the EU. The

benefits stemming from a reduction in home bias and bigger flows of savings and investment across borders will be particularly large for those countries with less developed capital markets. This will be a critical element in ensuring that CMU has the widespread support necessary to deliver its ambitious aims.

### To be successful, policy measures should focus on overcoming existing impediments

In practice, there are material impediments to achieving the degree of financial diversification and integration needed to deliver the potential benefits of CMU. These impediments, set out in **Figure 1**, can be categorised in three groups. Proposals to create a CMU should address impediments in one or more of these groups.

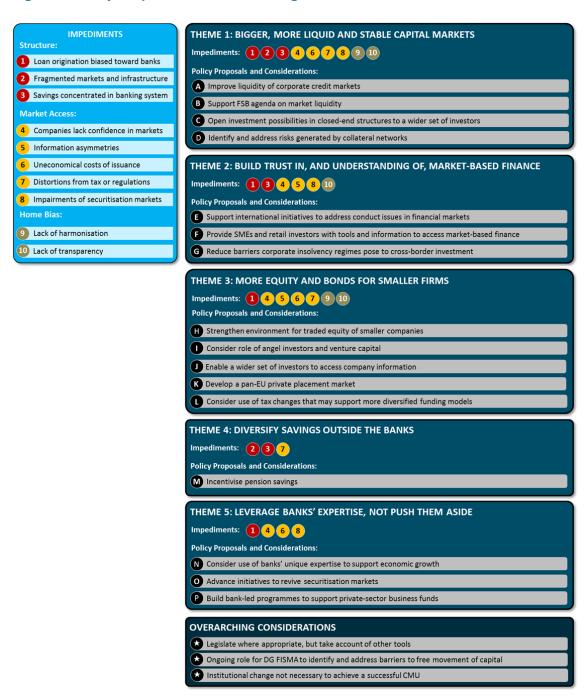
- 'Structure' impediments are those created by fundamental characteristics of the financial system. These include the fact that banks have historically dominated lending in the EU, a lack of market depth and liquidity and fragmentation of markets. As part of this, it is important to recognise that banks are integral to the operation of any financial system.
- 'Market access' impediments relate to factors that prevent some potential borrowers
  from accessing market-based financing. This could because they lack confidence in the
  markets, are too small to bear the costs of issuance, or the costs to investors of
  obtaining adequate information to assess their risk are too high.
- 'Home bias' impediments summarise the extent to which investors tend to overweight
  domestic assets versus foreign assets in their investment portfolios. This is thought to
  be influenced not only by regulatory, legal and cultural barriers, but also by higher costs
  of cross-border transactions and difficulties in disseminating information across borders.

#### POLICY PROPOSALS AND OVERARCHING CONSIDERATIONS

Our response to the European Commission's Green Paper identifies a set of proposals and considerations to help overcome the key impediments identified above. As impediments are removed, new investors and savers should enter the market. In turn, this should encourage the market to build an 'ecosystem' that supports market-based finance and offers new services. A virtuous circle of market-led development should ensue.

The proposals are grouped together under five themes, set out in **Figure 2**. Each theme contains a range of initiatives, some of which are intended as short-term priorities for development, while others will take longer to implement. The initiatives are described in more detail in the background paper that accompanies this summary.

Figure 2: Policy Proposals and Overarching Considerations



Source: Bank of England.

### THEME 1: BIGGER, MORE LIQUID AND STABLE CAPITAL MARKETS

This theme aims to address impediments across all three groups, particularly through reducing market fragmentation, encouraging greater market depth and improving the resilience of market liquidity. The three issues are related, as more integrated and liquid markets should attract more participants, thereby creating a positive re-enforcing dynamic.

- A. Improve liquidity of corporate credit markets, by: i) establishing agreed principles around standardisation of corporate debt; ii) facilitating the development of 'all-to-all' trading platforms; and iii) ensuring that MiFID II technical standards take account of concerns around the impact of transparency requirements on market liquidity.
- **B.** Support FSB agenda on market liquidity, by: i) encouraging the appropriate EU authorities to back the FSB agenda on market liquidity.
- C. Open investment possibilities in closed-end fund structures to a wider set of investors, by: i) examining whether European Long Term Investment Funds (ELTIFs) could be opened to a broader set of investors; ii) assessing whether ELTIFs should be authorised for investment in a wider set of asset classes; iii) supporting the European Commission's consideration of a tailored treatment for infrastructure investment under Solvency II; and iv) establishing a predictable pipeline of EU infrastructure projects, disseminated via an EU-wide platform, drawing on existing initiatives.
- **D. Identify and address risks generated by collateral networks**, by: i) working together to identify risks generated by collateral networks and to recommend market standards to help market participants.

### THEME 2: BUILD TRUST IN, AND UNDERSTANDING OF, MARKET-BASED FINANCE

This theme speaks primarily to 'market access' impediments, with implications also for 'structure' and 'home bias'. If CMU is to succeed in generating scale in capital markets, it will need to attract new investors and borrowers. But to be willing to participate, they must be able to understand and trust the marketplace. Understanding and trust have both been undermined by the financial crisis and need to be enhanced, suggesting a requirement for measures to promote a cultural shift towards the use of market-based finance. Such issues are especially acute for small-and-medium-sized enterprises (SMEs) whose small size may be a barrier to acquiring professional guidance.

- E. Support international initiatives to address conduct issues in financial markets, including those initiated by: i) the Financial Stability Board (FSB); and ii) the UK's Fair and Effective Markets Review (FEMR).
- F. Provide SMEs and retail investors with tools and information to access market-based finance, by: i) establishing business support networks; and ii) ensuring that UCITS funds are simple, transparent and comparable.

**G.** Reduce barriers corporate insolvency regimes pose to cross-border investment, by: i) examining options towards greater consistency of insolvency regimes.

#### THEME 3: MORE EQUITY AND BONDS FOR SMALLER FIRMS

This theme primarily helps to address 'market access' impediments. SMEs can struggle to access capital markets because their lack of scale makes it too expensive. Improving their access to both equity and bonds would help smaller firms to grow. Equity is a particularly important source of diversified finance because it reduces individual firms' indebtedness and improves financial stability, but it may be disadvantaged relative to debt from the perspective of a firm's overall cost of financing. Another theme that emerges is the need to make it more cost effective for investors to assess the credit quality of smaller firms.

- **H.** Strengthen environment for traded equity of smaller companies, by: i) agreeing on a more proportionate Prospectus Directive while maintaining investor protection; and ii) establishing a strong and trusted brand for venture exchanges through spreading best practice in governance arrangements.
- I. Consider role of angel investors and venture capital.
- J. Enable a wider set of investors to access company information, by: i) improving the availability of credit information on SMEs.
- **K.** Develop a pan-EU private placement market, by: i) supporting industry efforts to establish best practice and templates; and ii) setting up a pan-EU transaction database.
- L. Consider use of tax changes that may support more diversified funding models.

#### THEME 4: DIVERSIFY SAVINGS OUTSIDE THE BANKS

This theme also primarily helps to address 'structure' impediments, by enabling a level playing field between banks and market-based vehicles in attracting household savings. The EU's saving ratio is higher than that of the US, but these savings are concentrated in the banking system – helping to support banking sector assets in excess of 300% of GDP, compared to 70% of GDP for the US. This creates a strong dependence on banks to support economic growth, through their role in intermediating (and bearing credit risk) between savers and real economy borrowers. A major ambition of CMU should be to reduce any barriers that exist to the development of savings pools outside the banking system, most naturally created by individuals preparing financially for retirement.

M. Incentivise pension savings, by: i) invigorating on-going efforts in EU Member States to improve financial literacy; ii) exploring behavioural measures such as auto enrolment and matching contributions; iii) improving transparency around fee structures and charges, to encourage fund competition and consolidation; iv) encouraging the development of more flexible retirement savings products; and v) considering whether to develop tax transparent funds as a means to encourage cross-border pooling of institutional funds.

# THEME 5: LEVERAGE BANKS' EXPERTISE, NOT PUSH THEM ASIDE

This theme helps to address 'market access' impediments while recognising the integral role of banks to the financial system. While an intermediate objective of CMU is to create a wider set of options for firms to finance themselves, resilient market-based finance need not be viewed simply as a substitute for bank-based finance. On the contrary, much market-based finance relies on some key roles currently undertaken by the banking system, which will be difficult to replace in a cost effective manner, at least in the near term. For CMU to be successful, it will be necessary to leverage the expertise of the banking sector, particularly its role in originating loans and bringing investors and borrowers to the market.

- N. Consider use of banks' unique expertise to support economic growth
- O. Advance initiatives to revive securitisation markets, by: i) implementing BCBS/IOSCO and EBA proposals on securitisation; and ii) supporting further work to identify and address impediments to short-term securitisation activity.
- **P.** Build bank-led programmes to support private-sector business funds, by: i) encouraging industry to set up consortia engaged in equity funding for SMEs.

### **OVERARCHING CONSIDERATIONS**

A further set of over-arching considerations cut across all impediments, including those that inhibit cross-border investment. The Bank of England supports the European Commission's intention to pursue legislative solutions only where necessary. Furthermore, DG FISMA can ensure momentum over a sustained period to develop market-based finance, including by improving understanding of capital markets. To do this it should take advantage of outside expertise, and follow a focused work programme to tackle the most significant remaining barriers. Furthermore, in order to achieve free movement of capital in the EU, CMU should be focused on addressing the impediments set out above, and not on institutional change that will do little to serve this objective and which could well pose risks to financial stability.

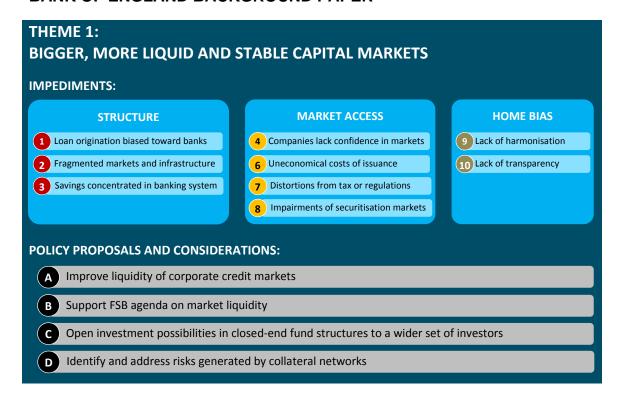
- Legislate where appropriate, but take account of other tools
- Ongoing role for DG FISMA to identify and address barriers to free movement of capital
- Institutional change not necessary to achieve a successful CMU

Annex I of the background paper contains a summary of the policy proposals and overarching considerations, and their mapping to the European Commission's Consultation Questions.

### Contact:

Richard Spooner, International Directorate: richard.spooner@bankofengland.co.uk

### **BANK OF ENGLAND BACKGROUND PAPER**



# A. Improve liquidity of corporate credit markets:

- i. Establish agreed principles around standardisation of corporate debt;
- ii. Facilitate the development of 'all-to-all' trading platforms; and
- iii. Ensure that MiFID II technical standards take account of concerns around the impact of transparency requirements on secondary market liquidity.

#### Liquidity and scale

An important characteristic of any market in tradable securities is the degree of liquidity and its resilience. From an investor perspective, it is important to be able to trade with ease and at reasonable cost, with even long-term or 'buy and hold' investors valuing the ability to recalibrate their investment portfolios if needed. Equally, markets that are stable and liquid should engender greater trust in issuers, who need to be confident that they will be able to access financing as required. Studies further suggest that liquid secondary markets should support primary issuance and lower financing costs, by reducing uncertainty around liquidity for newly-issued securities and lowering the risk premia associated with illiquidity.<sup>2</sup> But for any such benefits to be realised, it is vital that market liquidity risk is priced accurately. This suggests that assets should be structured as simply as possible, in standard and transparent structures for which the risks can be understood. It also means that market liquidity should not be illusory – either supported in good times by market microstructures that are inherently unstable or benefitting from (the perception of) official sector support.

Crucially, market liquidity needs to be grounded in the inherent characteristics of the instrument traded, like not only standardisation and transparency but also the resilience of

<sup>&</sup>lt;sup>2</sup> See 'Developing financial markets', Bank of England (2006).

the investor base. Only then will market liquidity contribute to broader financial stability. Markets that are genuinely liquid can absorb price moves or flows without resulting in dislocations and spillovers that could otherwise undermine the ability of financial markets and financial institutions to provide key financial services, such as credit provision to companies. From this perspective, it is essential that market participants can price liquidity properly, and that instruments which are inherently illiquid during times of stress are recognised as such, and are priced and managed accordingly. This is particularly important in the context of market-based finance, which aims to diversify the range of financing options available to the real economy on a continuous basis.

Other things equal, liquidity will tend to be more resilient for more standardised instruments trading in bigger markets. In the EU, the scope to generate bigger, more liquid and stable capital markets may be particularly large for the corporate bond and securitisation markets, as opposed to the equity markets. One impediment, for example, that may discourage some investors from corporate credit markets are the different corporate insolvency regimes across EU Member States. These contrast with the unified Chapter 11 bankruptcy regime in the United States, which acts to simplify corporate debt restructuring.<sup>3</sup> Relative to GDP, the EU corporate bond and securitisation markets are only a third and a fifth of the size of their US counterparts respectively.<sup>4</sup> The proposals presented below aim to increase both the scale and liquidity of European capital markets through measures aimed at developing standardisation and best practice, improving the provision of liquidity services and increasing transparency.

#### Standardisation and best practice

At any point in time, while companies may have at most only a handful of equity securities outstanding, they may have hundreds of different bonds. This disparate nature of corporate bonds may act to dilute the liquidity of any one issue. For example, a study by the Association for Financial Markets in Europe (AFME) found that, in the twelve months to June 2011, only around a third of corporate bonds sampled traded more than 20 times per month, compared to more than ninety percent of government bonds.<sup>5</sup> Furthermore, studies have shown that smaller bonds trade less frequently than larger ones. Any dilution from the large number of corporate bond issues might be less if more standardisation in their key features were introduced, to allow greater comparability between issues. This could cover areas such as consistent terminology, documentation, settlement and trading protocols.

A degree of standardisation can support more unity across corporate credit markets and can be applied to different aspects of market practice, information and structuring of securities. For example, by creating more consistency in terminology and documentation, due diligence on the behalf of investors across different issues should be made easier. Settlement and trading protocols, meanwhile, should further allow consolidation of trading venues, where fragmentation of market trading activity tends to impair market liquidity.

<sup>&</sup>lt;sup>3</sup> See '<u>Unlocking Funding for European Investment and Growth – An Industry Survey of Obstacles in the European Funding Markets and Potential Solutions'</u>, AFME and Oliver Wyman (2013).

<sup>&</sup>lt;sup>4</sup> See '<u>A European Capital Markets Union: implications for growth and stability</u>', Bank of England (2015).

<sup>&</sup>lt;sup>5</sup> See 'An analysis of fixed income trading activity in the context of MiFID II', AFME (2012).

These should be industry-led initiatives, with the aim of creating a critical mass in trading and issuance flow, and thereby attracting a larger, more stable, investor base. In this, lessons may be learned from how the market for credit derivatives was standardised in an initiative overseen by the International Swaps and Derivatives Association (ISDA). This involved rolling over a legacy book of trades (existing trades on old contract features) alongside a collective industry agreement to trade on new contract features.

The European Commission should also consider the role that common protocols can play in facilitating more unified secondary securities markets and seek to address any risks from interconnectivity across trading venues and from the potential for liquidity to disappear during episodes of market stress.

There are mixed views as to the benefits of some additional aspects of standardisation. In particular, corporate treasurers are concerned about the standardisation of sizes and maturities, as it may reduce their flexibility to match financing to business cash flow needs or to carry out other tailored aspects of their financing. If standardisation were to reduce the costs to investors, this should be reflected in lower financing costs. However, if investors do not charge (or are not perceived to charge) for the flexibility in bespoke issues, there may be limited impetus for corporate treasurers to adopt a standardised approach to their issuance.

It could be that there may be particular aspects of standardisation that are more suited to the largest issuers and issues. As such, the European Commission should undertake careful consultation with respect to any initiatives around standardisation to ensure they meet the needs of investors and issuers and do not create barriers to smaller issuers in particular. Importantly, an objective of standardisation initiatives should be to achieve financial stability benefits through greater substitutability (fungibility) of securities – encouraging diversity in both investor participation and forms of trading, thereby adding to the resilience of market liquidity.

### i. Establish agreed principles around standardisation of corporate debt

The European Commission, with ESMA, should work with industry bodies and other relevant stakeholders to establish agreed principles around standardisation that could be used by issuers, arrangers, trading venues and other key stakeholders. These could cover issues such as consistent terminology, documentation, settlement and trading protocols. This may involve establishing an industry-led working group of these stakeholders, with relevant public authorities acting in an observer role. Such a group may have a medium-term mandate, but it should be possible to establish the membership and mandate for a working group in 2015. Such a group could also consider the merits and risks from greater standardisation of the contractual features of the underlying securities themselves, since greater fungibility between securities could encourage greater diversity in forms of trading and wider participation across investors. This might have the effect of concentrating liquidity in a smaller number of benchmark issues, as seen in the equity and government bond markets. Issues may also be aligned along dates used for derivative agreements, to improve hedging ability.

### Liquidity services

Banks have shown evidence of more limited capacity to engage in market making since the financial crisis, suggesting that new services to bring together liquidity seekers and liquidity

providers should be considered – for example, migration to 'all-to-all' trading platforms. By allowing all potential holders (end investors and intermediaries) to transact on an open platform, liquidity may be improved by better matching of buyers and sellers and providing a more comprehensive set of information to all market participants, in contrast to the current OTC model. But the successful development of 'all-to-all' trading platforms may also require key investors, such as asset managers, being willing to move away from relying on two-way quotes from market makers, and to indicate the prices at which they will trade to the rest of the market. In other words, any evolving microstructure needs to ensure that market liquidity is genuinely resilient. While market forces and reaction to regulatory reform may act to drive this transition, this would constitute a significant change to the way in which market participants transact in the corporate credit markets.

Electronic trading could mitigate conduct and conflict of interest issues, by making it easier to monitor markets and behaviour. However, less liquid markets may be more open to abuse as electronic venues can create a false perception of liquidity. An example of this is where prices appear to exist, but disappear when an attempt is made to transact on them – resulting in price slippage or even trade failure. Some market practices such as 'flashing prices' and 'market scalping' may further pose a risk to electronic venues. There has also been evidence of competition among some market participants to invest in technology with the aim of gaining marginal advantages from speed of execution. This potentially creates an unfair market environment on electronic venues, with questionable benefits to the broader market from trading occurring at ever-faster speeds.

More generally, while electronic trading platforms may foster market liquidity in benign times, they may magnify illiquidity during stress, if activity by participants on these platforms is suspended. As such there may be risks from a transition to electronic 'all-to-all' trading platforms and further measures may be needed to ensure such a transition leads to deeper and more resilient liquidity to support corporate funding markets.

### ii. Facilitate the development of 'all-to-all' trading platforms

The European Commission, with ESMA, should review the benefits, risks and impediments to the development of 'all-to-all' trading platforms, to set out policies that would ensure such platforms can improve market liquidity. This should involve focused discussion with market participants about the obstacles to completion of existing projects, and be a near-term objective to avoid fragile or overly opaque structures being developed.

#### <u>Transparency</u>

Finally, an important component of market efficiency is transparency. This supports risk assessment capability and allows investors to benchmark different securities. MiFID II made significant changes to the pre- and post-trade transparency regime for EU financial markets, notably by extending existing requirements to cover equity-like and non-equity instruments traded on any trading venue, including multilateral trading facilities (MTFs) and a new category of organised trading facilities (OTFs). ESMA is currently preparing the technical standards that will implement these transparency requirements.

<sup>6</sup> See '<u>Response by the Market Practitioner Panel to the Fair and Effective Markets Review</u>', Bank of England (2015)

<sup>&</sup>lt;sup>7</sup> See 'Response by the Market Practitioner Panel to the Fair and Effective Markets Review', Bank of England (2015).

In this, there is a need to strike a balance between greater transparency and making it more difficult or costly for participants in corporate credit markets to trade in size, or hedge their positions on completion of a transaction. Indeed, investors are in part attracted to so-called 'dark pools' (largely in equity markets) due to the anonymous matching of orders, which minimises 'information leakage' and price impact when executing large orders.<sup>8</sup>

MiFID II also requires ESMA to set technical standards around provision of a feed of post-trade data covering all EU trading venues, known as a 'consolidated tape'. This would enhance market participants' ability to achieve best execution by comparing 'buy' and 'sell' prices with deals executed on other venues. While MiFID II does not mandate a pan-EU 'consolidated tape', due consideration should be given as to whether this step should be taken if, when the legislation is reviewed, market participants have not introduced such a service within the EU.

# iii. Ensure that MiFID II technical standards take account of concerns around the impact of transparency requirements on secondary market liquidity

ESMA must take account of concerns around calibrations impacting determinants of market liquidity when drafting MiFID II technical standards relating to transparency requirements for different asset classes. This includes ensuring that the definition of 'liquid' instruments to which transparency requirements apply is appropriate, meaning that the instruments should trade frequently in size, as these requirements may be detrimental to the liquidity of less liquid instruments. In addition, there is a need to monitor carefully the application of technical standards after they come into effect, with a view to adjusting them if necessary. Furthermore, when reviewing MiFID II, the Commission should consider whether a pan-EU 'consolidated tape' should be mandated.

#### B. Support FSB agenda on market liquidity

#### Encourage the appropriate EU authorities to back the FSB agenda on market liquidity

As part of a global work programme to address risks from market-based finance, the Financial Stability Board (FSB) is prioritising work to understand and address vulnerabilities related to capital markets and asset management activities. This stems from concerns that risk-taking in financial markets has become disconnected from real economy developments, with the potential for disorderly adjustments in financial markets. The FSB aims to ensure that any financial stability risks arising from the strong growth in assets under management since 2008 are properly understood and managed.<sup>9</sup>

In particular, an increasing role of bond finance in credit creation, especially for emerging markets, may mean that any disorderly portfolio reallocations could generate a pronounced tightening in real economy credit conditions. The FSB plans to examine the channels by which such risks may propagate through the financial system, and options to address them. The FSB will also consider the longer-term development of market-based finance and

<sup>&</sup>lt;sup>8</sup> See '<u>Dark pools and platforms vie to fix credit markets</u>' by Kris Devasabai (2015).

<sup>&</sup>lt;sup>9</sup> Between 2008 and 2013, global assets under management rose by around 50%.

whether additional policy tools should be applied to asset management activities to mitigate systemic risks.<sup>10</sup>

Complementing the FSB work-streams, the ESRB is currently investigating market liquidity concerns. This includes setting out the conceptual drivers of market liquidity, how these differ across financial markets and possible policy options to mitigate the associated risks. This work provides an opportunity for the EU to provide leadership on market liquidity issues, while complementing findings from the FSB work-streams, and is well timed to support any emerging proposals on CMU.

A specific concern relates to the daily redemption typically offered in open-ended UCITS funds. Depending upon the underlying liquidity of the securities held, this may pose risks to the financial system if, for example, a period of stressed redemptions were to prompt forced selling by some funds, which could spillover to financial markets more widely. Consideration could therefore be given to ensuring that open-ended funds – such as UCITS – are resilient to stressed redemptions from investors. This could include assessing the appropriateness of their buffers of genuinely liquid assets, like cash and short-dated government bonds, to ensure that liquidity risk is safely managed.

### i. Encourage the appropriate EU authorities to back the FSB agenda on market liquidity

This is critical given the global nature of the issue, and the need for a coordinated response. It entails reacting as appropriate to the FSB's findings with respect to the risks from market liquidity in the near term, to improve the resilience of liquidity for EU financial markets. This will be key to ensuring market-based finance can play a role in supporting growth and stability.

# C. Open investment possibilities in closed-end fund structures to a wider set of investors:

- i. Examine whether European Long-Term Investment Funds (ELTIFs) could be opened to a broader set of investors;
- ii. Assess whether ELTIFs should be authorised for investment in a wider set of asset classes;
- iii. Support the European Commission's consideration of a tailored treatment for infrastructure investment under Solvency II
- iv. Establish a predictable pipeline of EU infrastructure projects, disseminated via an EU-wide platform, drawing on existing initiatives.

Alongside measures noted above to improve the resilience of market liquidity, steps to ensure that investors are aware of and properly price liquidity risk could be considered. This could reduce the potential demand for market liquidity, such as that resulting from groups of investors selling assets in a correlated fashion, during times of stress.

In this regard, CMU might usefully examine investment by retail and institutional investors in closed-end fund structures. In these structures, there is generally no redemption offered for investors and hence no liquidity transformation is performed by the fund. Regardless of the trading volume or market price fluctuations in the underlying asset holdings, closed-end fund managers are not required to sell securities in a declining market to meet redemptions. Conversely, in a bull market, closed-end fund managers do not see large inflows of investor

<sup>&</sup>lt;sup>10</sup> See the FSB Chair's Letter to G20 on Financial Reforms – Progress on the Work Plan for the Antalya Summit, 9 April 2015.

funds that they must invest at rising prices.<sup>11</sup> These are both features of open-ended fund structures that have gained attention in recent years.

In the United Kingdom, the closed-end fund 'investment trust' model has operated for 150 years (pre-dating the development of open-ended fund structures) and is a product that is used by both institutional and retail investors. To ensure sufficient protection for less sophisticated retail investors, trusts are required to be listed on a 'recognised stock exchange'. Liquidity for investors is facilitated through the ability to sell their fund holding on the exchange, and any liquidity risk associated with the fund's assets is thereby internalised through the price investors can achieve upon sale.

While such funds may be actively involved in more liquid asset markets, such as large-cap equities, their closed-end structure further allows for investment in less liquid, longer-term asset classes. Recent examples have included: infrastructure; energy; airplane leasing; commodities; and reinsurance. In the EU, such asset classes may generally be more reliant on bank financing, as the open-ended nature of the majority of mutual funds (such as UCITS) is not amenable to less liquid or more complex investments. A pan-EU closed-end fund structure could therefore help to improve the diversity of funding available to these asset classes. European Long-Term Investment Funds (ELTIFs) could potentially serve as such a structure. Investors, meanwhile, should fully understand the liquidity risk of openended structures, how closed-end structures can mitigate these risks, and the broader range of investment opportunities they can support.

#### i. Examine whether ELTIFs could be opened to a broader set of investors

The ELTIF Regulation sets high minimum investment requirements that are likely to restrict the investor base to institutional and high net worth investors and prevent broader retail participation. Given ELTIFs can invest in complex or illiquid assets, retail participation may not always be appropriate. But UK investment trusts have shown that meeting listing requirements of a recognised exchange can offer sufficient investor protection for retail investors, as well as providing liquidity in the fund units. We would therefore support the European Commission examining relaxing the minimum investment requirements, in order to enable retail marketing of ELTIFs listed on a recognised exchange. Such consideration would be usefully enhanced by monitoring institutional retail investor uptake of ELTIFs across EU Member States and collecting early feedback.

In addition, ELTIFs may be prevented from realising pan-European investment opportunities by national requirements, concerning national banking predominance, insolvency laws or tax regimes. For example, an ELTIF engaging in loan activity in one EU Member State may not be able to originate loans or act as the lender of record in another EU Member State where such activities are restricted to institutions with banking licences. Some national insolvency proceedings may also involve preferential treatment for bank creditors. In addition, funds may be at an informational disadvantage to banks due to restrictions on access to the comprehensive data needed to make informed risk-based decisions on loan investments.<sup>12</sup>

# ii. Assess whether ELTIFs should be authorised for investment in a wider set of asset classes

<sup>12</sup> See 'The European Capital Markets Union: An Investor Perspective', p. 15, BlackRock (February 2015).

<sup>&</sup>lt;sup>11</sup> See '<u>Understanding the Advantages of Closed-End Funds</u>', CEFA (2006).

When reviewing the ELTIF Regulation, the European Commission should consider whether ELTIFs should be given the same rights in national regimes as bank-based lenders, so encouraging a more diversified funding base for EU companies and infrastructure projects.

#### Channelling funds to support infrastructure projects

The establishment of the ELTIFs framework is a welcome development. However, the environment for institutional investors to invest in less liquid and long-term asset classes, such as infrastructure, should be further strengthened. Pension funds, insurers and also sovereign wealth funds have shown substantial interest in investing directly in infrastructure projects. This is because infrastructure is considered to offer returns that are uncorrelated with other key asset classes, steady cash flows, potentially a hedge against inflation risk and, in the case of defined benefit pension schemes, a good match to long-term pension liabilities.

In practice, however, the share of pension funds that invests directly in infrastructure is very limited.<sup>13</sup> Moreover, much activity involves existing infrastructure, yielding a stable cash flow, rather than the financing of new projects. Given the substantial investment needs in the EU over the coming years, it is paramount that impediments to investments in long-term infrastructure – and particularly in new projects – are removed.

Insurers can also play a valuable role in diversifying sources of finance and reducing the reliance on bank funding. For longer-term investment opportunities, such as infrastructure, the nature of some insurance liabilities, and the relative absence of liquidity risk from these liabilities, means certain types of infrastructure may be well suited to insurers' investment portfolios. As such, we consider that the criteria in Solvency II for infrastructure investment should be revisited to ensure that the appropriate incentives are created and that any unwarranted barriers to insurers' participation in infrastructure investment are removed. These criteria should obviously reflect the specific nature of insurance business and must be prudentially sound, whilst also seeking, where possible, alignment with the treatment of infrastructure assets in banking.

In practice, there may be difficulties in defining what asset classes constitute 'infrastructure', and a risk of arbitrage and legal form taking precedence over the economic substance of the asset if an infrastructure asset class is identified. In consequence, we consider that the criteria for qualifying infrastructure investment should be clear, transparent and focused on the economic and risk fundamentals of infrastructure, rather than simply specifying a 'closed list' of qualifying assets, sectors or issuers. Any criteria must incentivise insurers to invest in infrastructure only where they have liabilities that are well matched to the nature and risks of the investment. The importance of firms observing the prudent person principle as set out in Solvency II must also be reinforced, and the flexibility for supervisory oversight and judgement preserved.

15

<sup>&</sup>lt;sup>13</sup> However, pension funds have invested strongly in infrastructure indirectly through equity and bonds issued by utilities etc. In the UK it has been estimated that pension funds hold around a third of their non-gilt fixed income in infrastructure. See '<u>UK Infrastructure: The challenges for investors and policymakers</u>', Llewellyn Consulting and Pension Insurance Corporation (2013).

# iii. Support the European Commission's consideration of a tailored treatment for infrastructure investment under Solvency II

From a practical point of view, a prerequisite to developing a capital market for infrastructure investment is to establish a predictable pipeline of infrastructure projects. Institutional investors – either investing directly or pooled through ELTIFs or other infrastructure funds – need such a pipeline to justify the substantial costs involved in establishing and maintaining the required skills and know-how. This would also be consistent with G20 work currently underway.<sup>14</sup> A related initiative is the European Commission's 'Investment Plan for Europe', which is focused on SME and infrastructure projects.

# iv. Establish a predictable pipeline of EU infrastructure projects, disseminated via an EU-wide platform, drawing on existing initiatives

EU Member States should ensure that they develop and publish national infrastructure plans, working with industry to help define the pipeline of projects by sector, country and region. The European Commission should play a role in collating and publishing these plans to increase their availability and visibility to investors. In this respect, existing platforms such as the European Commission's list of energy projects of common interest could be modified.

#### D. Identify and address risks generated by collateral networks:

i. Work together to identify risks generated by collateral networks and recommend market standards to help market participants.

In the new regulatory framework, cross-border flows of collateral are key to financial stability. This is because, as more counterparties are required to provide collateral, more collateral is needed, and will need to be provided more frequently. Ensuring that the right collateral gets efficiently to the right place at the right time is essential to supporting integrated wholesale financial markets within the EU.

For this to happen, instructions between various participants along a transaction chain have to be effected through book-entry transfers, utilising a network of accounts between custodians and Central Securities Depositories (CSDs). CSDs not only hold the securities when they are issued, but also hold the securities for CCPs and their clearing members, and their systems effect the transfers that liquidate securities collateral. There has always been a reliance on CSDs, but that reliance has been reinforced by the increasing focus on collateral.

There is also longstanding fragmentation built into these collateral networks, largely due to the way in which the systems have developed. For example, securities are usually issued in the domestic CSD of the issuer – a particular feature in the EU. However, it is worth noting that the Central Securities Depositories Regulation (CSDR) should significantly address any vulnerabilities associated with CSDs. Meanwhile, the provision of custody services is further characterised by a marked degree of concentration. Over 60% of global assets under custody are concentrated in just three institutions, in the region of \$63 trillion. Moreover, of

<sup>&</sup>lt;sup>14</sup> See 'G20 Finance Ministers and Central Bank Governors Meeting Communiqué' (17 April 2015).

the largest ten custodians globally, six are also universal banks, meaning that they are exposed to many other commercial risks.

A general concern is that the network between custodians and CSDs may only be as strong as its weakest link. This could manifest itself in a number of ways. For example, a large mobilisation of collateral, which could arise in response to a sudden initial margin call, could pose a particular risk as this would test the capacity of the network to manage the resulting flows of collateral demanded by the CCPs. Another example would be the failure of a large custodian or CSD to maintain accurate accounts so that, in the event of insolvency, it would be difficult to identify client assets to return them quickly. A serious outage in a CSD or custodian, meanwhile, would result in large quantities of collateral becoming unavailable. These examples carry consequences for both financial and monetary stability.

The key risks that need to be addressed in the collateral networks between CSDs, custodians, and their users are mainly operational. The root cause is fragmentation and systems designed for the pre-crisis period. These risks will be most pronounced while market participants adapt to the new regulatory framework, which will take several years. While regulation is an option for addressing these risks, it would take time to develop and would need to be extremely technical and systems focused. A better way of addressing this may be for regulators and market participants to work together to identify shared risks and recommend market standards to help market participants and providers adapt to the new regulatory framework as quickly as possible. An expert group, based on the Giovannini Group would be an ideal vehicle for this.

i. Work together to identify risks generated by collateral networks and recommend market standards to help market participants

# THEME 2: BUILD TRUST IN, AND UNDERSTANDING OF, MARKET-BASED FINANCE **IMPEDIMENTS: STRUCTURE HOME BIAS MARKET ACCESS** 1 Loan origination biased toward banks 4 Companies lack confidence in markets 10 Lack of transparency 3 Savings concentrated in banking system 5 Information asymmetries 8 Impairments of securitisation markets POLICY PROPOSALS AND CONSIDERATIONS: Support international initiatives to address conduct issues in financial markets Provide SMEs and retail investors with tools and information to access market-based finance Reduce barriers corporate insolvency regimes pose to cross-border investment

# E. Support international initiatives to address conduct issues in financial markets, including those initiated by:

- i. The Financial Stability Board (FSB); and
- ii. The UK's Fair and Effective Markets Review (FEMR).

Trust is a necessary foundation of any market-based financial system, as both issuers and investors need to feel confident in the integrity of the system in order to participate in it fully and effectively. The reforms put in place since 2008 have been essential to build resilience and stability into the core of the financial system. But despite this huge effort, the past few years have seen a number of misconduct cases, demonstrating that market participants are not always operating to the appropriate standards. Taking conduct issues into consideration is a necessary part of building a CMU that issuers and investors can trust and benefit from.

#### i. The Financial Stability Board (FSB)

The relevant EU authorities should ensure that they are fully involved in the FSB's work on conduct issues. Markets are global, and global solutions are likely to be necessary. The EU has a leadership role to play in ensuring that global markets operate in fair and effective manner. This includes examining whether ongoing reforms to risk governance and compensation are changing incentives sufficiently to reduce misconduct or whether additional measures are needed. It also requires assessing what additional steps are needed to improve global standards of conduct in the fixed income, currency and commodities markets. Where appropriate, the relevant EU authorities should consider implementation at the EU level.

In similar spirit, at the domestic level, the Bank of England, HM Treasury and the Financial Conduct Authority initiated the Fair and Effective Markets Review (FEMR) in June 2014. This had the objective of seeking respondents' views on the fairness and effectiveness of Fixed Income, Currency and Commodity (FICC) markets, and on ways in which, where necessary, their fairness and effectiveness might be improved. The results of that consultation are due to be released in June 2015.

10

<sup>&</sup>lt;sup>15</sup> See the Fair and Effective Markets Review <u>Consultation document</u> (October 2014).

#### ii. The UK's Fair and Effective Markets Review (FEMR)

The Bank of England looks forward to working with the European Commission to build the key themes of the UK's Fair and Effective Markets Review into CMU. An important component of the review is the belief that developing a constructive collaboration between relevant authorities and market participants can help enhance existing guidance, reduce uncertainties over interpretation of rules, identify weaknesses in market structure and agree on ways in which compliance with standards might be more effectively encouraged or enforced.

### F. Provide SMEs and retail investors with tools and information to access market-based finance:

- i. Establish business support networks; and
- ii. Ensure that UCITS funds are simple, transparent and comparable.

It is well understood that most SMEs turn to their banks for financing. The most recent ECB Survey on the access to finance of enterprises in the euro area showed that over 60% of SMEs had either used bank loans in the past or were considering them in the future. For the smallest firms, this may be entirely appropriate given the comparative advantage banks have developed through their well-established networks and different types of service they provide to clients – ranging from credit lines to investment advice. But some firms may be limiting their ability to grow, because they do not know the options available to them or how to access them. Changing this will require a change in business culture.

#### i. Establish business support networks

EU Member States should ensure that their business support bodies give guidance on how to access market-based finance. In respect of accessing market-based finance across borders, consideration could be given to establishing an EU-wide 'How to' service, similar in nature to the existing SOLVIT scheme<sup>17</sup> (which offers advice and solutions to individuals or businesses facing obstacles in living, working or doing business in another EU Member State) and to the US Small Business Administration.

Equally, retail investors may not be aware of the investment opportunities available to them. The UCITS regime has been a success since the framework was agreed in 1985, operating with a passport across Member States, with nearly €8 trillion of assets. It has become a gold standard for institutional and retail investors to the extent that UCITS funds are widely used by investors outside the EU. Nevertheless, as noted under Theme 1, concerns have been raised about the growth of some investment strategies undertaken in open-ended mutual funds both in Europe and the US, notably where funds invest either in less liquid instruments (which may make meeting redemptions challenging) or through more complex strategies such as those more typically employed by hedge funds. <sup>18</sup>

It is crucial to ensure that the UCITS brand remains trusted. This can be achieved in a similar fashion to the way in which trust and understanding is being rebuilt in the European securitisation market, through ensuring that the UCITS product is simple, transparent and comparable. More complex instruments may be suitable for investment in ELTIFs and in

<sup>&</sup>lt;sup>16</sup> See 'Survey on the access to finance of enterprises in the euro area, April 2014 – September 2014', ECB (2014).

<sup>&</sup>lt;sup>17</sup> See SOLVIT - Solutions to problems with your EU rights.

<sup>&</sup>lt;sup>18</sup> For example, see the Bank of England's '<u>Financial Stability Report'</u> from June 2014.

alternative investment funds, whereby firms can benefit from a passport across EU member states.

# ii. Ensure that UCITS funds are simple, transparent and comparable

The European Commission should analyse the interaction between the UCITS regime and the AIFMD and ELTIF rules, in order to understand the extent to which these new frameworks are leading to a 'simplification' of UCITS funds' strategies. Subsequent to this, the European Commission should consider carrying out a review of the scope of eligible assets in which UCITS can invest.

# G. Reduce barriers corporate insolvency regimes pose to cross-border investment: i) Examine options towards greater consistency of insolvency regimes.

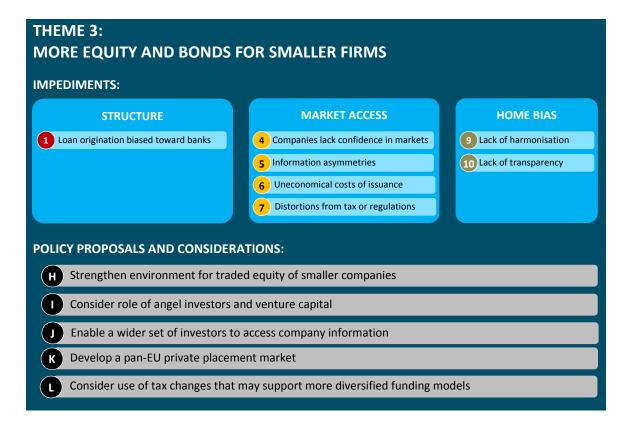
In the area of corporate insolvency law, there has only been limited harmonisation between EU Member States. As a result, there are 28 distinct corporate insolvency regimes, which differ significantly in aspects such as the priority granted to different classes of creditors and the nature and speed of the process for settlement of claims. It is claimed by a large number of market participants and investors that the diversity of regimes across the EU impacts confidence in cross-border investment due to the additional due diligence that is required in order to assess the 'loss given default' of an investment. Furthermore, the characteristics of the regimes themselves, and their implementation – including the speed of proceedings – impact upon the attractiveness to investors of businesses within different regimes. This is reflected in actual outcomes, with the World Bank's 2015 'Doing Business' Report showing that countries with stronger insolvency frameworks tend to be associated with higher levels of credit provided to the private sector.<sup>19</sup>

From a 'first principles' approach, harmonisation between EU Member States to remove the friction that differing corporate insolvency regimes pose to cross-border investment in the EU could be the best solution. As noted above (and assuming the harmonised framework is perceived as strong) this could also increase domestic credit provision. However, this is unlikely to be feasible, given the differences between EU Member States' regimes. As an alternative, steps should be taken to reduce these differences. Options could include establishing a so-called '29<sup>th</sup> regime', which would sit alongside EU Member States' own regimes into which businesses could opt. However, while this regime could offer certain features that investors would find more attractive, it could be considered an additional layer of complexity by investors and issuers alike. Another option would be setting minimum requirements or common principles in order to strengthen weaker regimes and thereby improve the business environment in individual EU Member States.

### i. Examine options towards greater consistency of insolvency regimes

The European Commission should examine options to reduce the barriers that insolvency regimes pose to cross-border investment in the EU, including consideration of the merits of a '29<sup>th</sup> regime' and development of minimum requirements or common principles to reduce differences by strengthening the weaker regimes.

<sup>&</sup>lt;sup>19</sup> See here for the 'Resolving Insolvency' case study in the 'Doing Business 2015: Going Beyond Efficiency' report (2014).



#### H. Strengthen environment for traded equity of smaller companies:

- Agree on a more proportionate Prospectus Directive while maintaining investor protection;
   and
- ii. Establish a strong and trusted brand for venture exchanges through spreading best practice in governance requirements.

As noted previously, EU SMEs rely overwhelmingly on banks for their financing needs, with use of outside equity or debt securities being far more limited. However, despite recent signs that credit conditions are easing in the euro area, reflecting lower funding costs and reduced pressure to deleverage, bank lending remains depressed.<sup>20</sup> While it is difficult to disentangle supply and demand factors, an alternative financing channel for SMEs may have helped address at least some of the shortfall during the crisis, as it did for larger EU companies.

On a cross-border basis, increased access by SMEs to a range of financing options – particularly in the form of equity and bond issuance – would also be beneficial for economic and financial stability. The evidence suggests that equities (and to a lesser extent corporate bonds) are less likely to be subject to capital flight during times of stress than bank loans. Furthermore, in vulnerable euro-area countries during the 2010-11 period, corporate bond yields were less tied to sovereign bond yields than bank funding costs, suggesting that had European corporate bond markets been more developed, credit conditions might have tightened less.<sup>21</sup>

<sup>21</sup> See 'A European Capital Markets Union: implications for growth and stability', Bank of England (2015).

<sup>&</sup>lt;sup>20</sup> See '<u>The euro area bank lending survey</u>' 2015 Q1, ECB.

Even in normal times, bank lending may not be sufficient to support financing for SMEs – especially those with the potential to grow quickly – as banks may be less willing to lend to relatively highly leveraged firms. Equally, banks may tend not to lend to small and newly-established firms because these firms have limited tangible assets to pledge as collateral and there is uncertainty about their cash flows and growth prospects. To support economic growth, CMU should include measures that seek to address some of the more fundamental barriers around the supply and demand of equity and corporate bonds to smaller businesses, as well as ensuring a level playing field for equity and debt issuance. In doing so, however, it is important to recognise that tradable instruments are likely to be suitable only for the larger SMEs.

#### **Prospectus Directive**

A key impediment to the use of equity and corporate debt by medium-sized firms is uneconomical costs of issuance. The European Commission has already announced a consultation on the review of the Prospectus Directive, which sets the rules concerning the information that must be made available when companies' securities are offered to the public or admitted to trading. Producing a prospectus can be a time-consuming, complex and costly process. UK figures dating from 2010 suggest that, for an offer raising funds of £5 million, preparing a prospectus could cost between £350,000 and £600,000.<sup>22</sup> These high fixed costs are likely to act as a substantial barrier to smaller companies successfully accessing the market.

#### i. Agree on a more proportionate Prospectus Directive while maintaining investor protection

The Bank of England welcomes the review of the Prospectus Directive as a valuable opportunity to further the goals of CMU. The review should help ensure that issuance requirements are tailored to firm size, and that information requirements facilitate rather than hinder companies' access to capital markets, while maintaining high standards of investor protection. The review should also examine the process through which prospectuses are approved by competent authorities. The UK Financial Conduct Authority (FCA) will respond formally to the European Commission's consultation on this issue.

#### Venture exchanges

MiFID II created the core regulatory framework for a new category of market, known as SME growth markets. This framework is intended to facilitate SMEs' access to equity capital, through encouraging the further development of specialised markets that cater for their needs. However, SME growth markets are not a completely new concept. Since 1995, over £90 billion has been raised on the London Stock Exchange's AIM, of which £40 billion has been through IPOs and £50 billion through secondary offerings.<sup>23</sup>

The predominant challenges encountered by such markets are around ensuring investor protection and adequate liquidity. The governance arrangements in place at individual exchanges play a key role in addressing these challenges, including through measures such

22

<sup>&</sup>lt;sup>22</sup> See 'Consultation on early implementation of amendments to the Prospectus Directive', HM Treasury (2011).

<sup>&</sup>lt;sup>23</sup> See 'AIM Factsheet – March 2015'.

as online platforms connecting companies with potential investors, clear disclosure to investors, rigorous vetting of listing applicants and surveillance of trading, and use of nominated advisors to sponsor and facilitate firms' listing. There is no single model to guarantee success in this area, and experience has shown that it is not possible to simply export exchange rulebooks from one EU Member State to another. However, development of exchanges focused on SME growth markets – while balancing investor protection – is an important step.

# ii. Establish a strong and trusted brand for venture exchanges through spreading best practice in governance requirements

The European Commission and ESMA should examine how best practice in the governance arrangements of SME growth markets could be identified and shared, to help create a strong and trusted brand. This may be achieved through creating an industry group of EU venture exchanges, SMEs and investors.

#### I. Consider role of angel investors and venture capital.

Focussing on the youngest and smallest SMEs, EU markets for risk capital – equity financing of companies with high growth potential during their formative stages – are not well developed. As noted above, such companies can represent a relatively high risk from a credit perspective, making bank financing a less likely option. In consequence, business angels are important investors, bringing both financing and leadership, and can complement funds provided by 'family and friends'.

The next stage – which typically entails product development and initial marketing and production – requires start-up and early-stage venture capital, as financing requirements become too large for 'family and friends' or business angels. Venture capital provides not only funding but also non-capital value such as monitoring and advice. This is a critical stage; only once sales are established can companies start to generate the internal funds to support their growth. Moreover, well-respected business angels or quality early-stage venture capital makes it easier to source further funds.

Some of the main impediments to the development of private equity and venture capital as an alternative source of financing for small, young firms in the EU are the absence of an equity investment culture, lack of scale and lack of exit opportunities. These impediments are interrelated and may take a long time to overcome.

Absence of an equity investment culture is in part due to small companies being unaware of the full range of external financing options. For example, according to the latest SME Journey survey only around a half of SMEs surveyed were aware of venture capitalists as potential sources of external finance.<sup>24</sup> This figure dropped to a third for business angels. Some entrepreneurs may also be reluctant give up part of their ownership, even though a lack of finance and advice on business planning may be constraining their firms' growth prospects. This suggests that an improvement in financial literacy is important not only for savers but also for small firms. Firms would benefit from learning about various external

<sup>&</sup>lt;sup>24</sup> See 'Small Business Finance Markets 2014', British Business Bank (2014).

financing options and about specific steps as to how to promote themselves, such as help in writing a business plan.

On the lack of scale, it tends to be difficult for EU venture capital funds to reach sufficient size to spread their portfolio risk. This is particularly relevant for early-stage investing which tends to be of smaller scale, while the costs associated with due diligence and deal negotiations are relatively fixed. Venture capital funds may thus prefer larger and later-stage deals. With an improvement in financial literacy and a stronger flow of attractive potential companies, EU venture capital funds could reach sufficient scale.

A lack of exit opportunities is the other major impediment to the development of deeper venture capital markets, where the most common exit options are IPOs and trade sales. Increased access to venture exchanges should help venture capitalists have confidence in potential exit routes from their investments. Deeper venture capital markets will, in turn, both attract business angels at an earlier stage and support public equity markets at the later stage of a company's life, ensuring access to finance as they grow.

# J. Enable a wider set of investors to access company information:

#### i. Improve the availability of credit information on SMEs

Impediments exist to the availability of credit and financial information on firms for non-bank investors. In general, investors will be more reluctant to finance companies when they do not have sufficient quantitative and qualitative information available to them to make informed investment decisions. For an initiative in this area to be successful at the EU level, there are two criteria. First, data should inform investors' assessment of the quality of a potential borrower with definitions consistent across regimes. Second, information should be readily available to a range of investors – and not just banks – thereby reducing barriers to entry and expansion, and enhancing competition.

A possible solution involves making information on companies publicly available through a centralised system. In the United States, for example, there is a requirement that all companies, domestic and foreign, file registration statements, periodic reports and other forms through the EDGAR system, which is operated by the Securities and Exchange Commission (SEC). This information is publicly available without charge. Meanwhile, a number of EU Member States such as France, Germany, Italy, Spain and Portugal (though not the United Kingdom), operate publicly-accessible comprehensive business registers. However, a barrier to operating such a system at the EU level would be the absence of fully harmonised EU accounting standards and the diversity of languages in which filings would be submitted.

In May 2014, the Bank of England published a discussion paper considering how improving the availability UK credit data might deliver benefits for the provision of credit through both direct channels, such as bank lending, and indirect channels, including securitisation.<sup>26</sup> While the Discussion Paper explicitly considered the option of developing a central credit register (CCR) in the United Kingdom, the majority of respondents highlighted the need to

<sup>&</sup>lt;sup>25</sup> For more information see <a href="http://www.sec.gov/edgar.shtml">http://www.sec.gov/edgar.shtml</a>.

<sup>&</sup>lt;sup>26</sup> See the Bank of England's May 2014 Discussion Paper 'Should the availability of UK credit data be improved?' and the summary of feedback received (November 2014).

recognise that the United Kingdom already had a well-developed credit reporting infrastructure, operated by a number of private sector Credit Reference Agencies (CRA, also known as Credit Bureaux). The Bank of England therefore concluded that the best way to improve the availability of UK credit data would be by broadening access to existing credit reporting systems, rather than establishing a CCR. These conclusions are relevant to any EU initiative in this area, with the diverse range of institutional architectures and legal arrangements across EU Member States suggesting that a common solution across the EU may not be appropriate.

In this area, and as noted above, it is critical that available data inform the quality of a potential borrower. However, credit and financial data, such as debt repayment performance and annual accounts, are by their nature backward looking. When banks assess a lending opportunity they also use forward looking information, such as profitability forecasts and background information on the individuals behind the firm or business plans, particularly for smaller companies. Such information is more challenging to capture and make available to investors, and is an area where UK CRAs – which collect information from a broader range of public and proprietary sources – are relatively advanced.<sup>27</sup>

Privately run credit bureaux collect information on a voluntary basis, while CCRs run by central banks or regulators collect data on a mandatory base from regulated firms. Existing data protection laws in a number of EU Member States could impede the availability of such information to investors, with more sensitive data typically associated with more restrictive access requirements. Furthermore, CCRs aim primarily at making information available to central banks, regulators and reporting entities; thus public data availability may be limited. In addition, individual borrower loan data are usually the intellectual property of the financial institution that originated the loans and – unless their expected benefit is higher than the incurred costs of reporting – firms may have a commercial interest in not disclosing detailed information. The barriers to making data available are, therefore, considerable. In the United Kingdom, changes to domestic legislation were required to be highly tailored to reflect existing institutional and legal arrangements, suggesting that forming a common approach at the EU level would prove challenging. This suggests that a non-legislative approach would be more appropriate.

In any case, consistent definitions across regimes are important as they enable cross-border use of credit data, provide a consistent framework for investors and agencies to compare investment options and assess creditworthiness, and enable the market more generally to price relevant instruments and understand the risks in their pricing models. The introduction of an EU-wide minimum standard in respect to credit information would be a good way to improve the availability of such data across Europe.

# i. Improve the availability of credit data on SMEs

The Bank of England welcomes the European Commission's intention to start work on improving the availability of credit information on SMEs, through non-legislative measures. This will enable investors to more easily perform due diligence and invest across the EU. For common minimum

<sup>&</sup>lt;sup>27</sup> See the Bank of England's May 2014 Discussion Paper 'Should the availability of UK credit data be improved?' for more on UK credit reference agencies. And 'Getting Credit rank' data (World Bank Group *Doing Business* project) for the ranking of the United Kingdom versus other countries in relation to credit information.

standards of credit information to have an impact, EU Member States will need to ensure that the information can be made available to a diverse range of potential lenders. However, it is important that any EU policy on the issue recognises the varied methods of information provision, variety of providers (both publicly-owned and private) and different legal systems across Member States. We believe the best balance between these two aims would be achieved through a non-legislative approach, through which individual EU Member States could decide whether common minimum standards are best met through the establishment of a public credit register or through greater use of private credit bureaux.

# K. Develop a pan-EU private placement market

- i) Support industry efforts to establish best practice and templates; and
- ii) Set up a pan-EU transaction database

In the United States, there is a well-functioning and developed private placement market, which is often tapped by medium-sized EU firms. There are two main barriers to the development of a pan-European private placement market. These are a lack of standardised processes and documentation and a lack of information on the creditworthiness of issuers. This makes due diligence and credit risk assessment costly, preventing smaller investors from participating in the private placement market. The lack of standardised information on potential transactions also makes cross-border transactions more challenging, and so lowers market liquidity.

#### i. Support industry efforts to establish best practice and templates

The Bank of England welcomes ongoing industry efforts to support the development of a pan-European private placement (PEPP) market, through establishing a standard set of documents and processes. These include the framework set out in The Pan-European Corporate Private Placement Market Guide.

With respect to the lack of information on the creditworthiness of issuers, industry may wish to consider establishing a pan-EU private placement transactions database. Such a database could contain information on transactions (date, amount, covenants) and issuers (similar to information in SME credit registers and business registers). This information would allow better credit risk assessment and modelling, and benchmarking of new transactions against existing issues. Where used by regulated institutions, supervisory oversight will be needed to make sure data are used appropriately.

#### ii. Set up a pan-EU transaction database

Industry should consider whether the establishment of a pan-EU private placement transaction database might bring benefits in terms of making it easier to carry out due diligence and credit risk assessment. Participants in the European private placement markets must be financially and legally sophisticated to be able to carry out due diligence and credit risk assessment. Often only the largest insurers and investors have sufficient scale to have a specialised team devoted to due diligence for private placements. A private placement transaction database could lower these costs, enabling smaller investors to participate in the market. In addition, given the information would be presented

in a standardised and easily accessible manner, it might also encourage cross-border investment, supporting market depth.

### L. Consider use of tax changes that may support more diversified funding models

Tax treatments are an important consideration in the decisions of both borrowers and investors. A common feature of many EU Member States' corporate tax systems is the so-called 'debt bias'. This refers to the fact that corporate income tax (CIT) systems tend to favour debt over equity financing, with a large majority of EU Member States allowing deduction of interest payments from profits before they are subject to CIT, while there is no similar treatment for equity returns.<sup>28</sup> This can create a bias towards debt financing, and may therefore lead to excessive corporate leverage. Reducing or removing debt bias could encourage more equity-financed investments, which would be beneficial from both economic and financial stability perspectives.

The debt bias – measured by the gap between effective marginal tax rates (EMTR) on debtand equity-financed new corporate investment – varies significantly between countries. It is particularly high in France and Germany but this is also true of the United States. The advantage of tax deductibility increases with the statutory tax rate. Given the relatively high CIT in the United States, it is not unexpected that the US debt bias is one of the highest. But this has not prevented the US from having the largest quoted stock market in the world (in absolute terms), suggesting that the existence of a debt bias does not prevent the development of deep and liquid equity markets.

The academic literature lists several rationales for debt bias (such as legal, administrative or economic considerations) but these rationales can be challenged.<sup>29</sup> Over recent years, some countries have started to address the debt bias, for the most part by restricting the level of deductible interest. However, this does not eliminate tax bias completely and makes tax systems more complex. Full removal of interest rate deductibility is known as the Comprehensive Business Income Tax (CBIT). There are two main disadvantages to this: first, a CBIT would raise the cost of capital on investments financed by debt; and second, it would be problematic in relation to existing debt. This has not yet been used in any jurisdiction.

Another option is to introduce an allowance for corporate equity (ACE), which allows firms to deduct a notional return on equity from their taxable income. This system has been advocated by the Mirrlees review for the United Kingdom and also by the Dutch Government,<sup>30</sup> and is already in place in Belgium and Italy. In Belgium, ACE has lowered indebtedness for companies and improved Belgium's attractiveness for inward investment.<sup>31</sup> On the downside, ACE reduces the tax base and thus government revenues. It has been calculated that the direct estimated revenue cost is equivalent to around 15% of CIT

<sup>&</sup>lt;sup>28</sup> See '<u>Tax reforms in EU Member States: 2014 Report</u>', European Commission (2014).

<sup>&</sup>lt;sup>29</sup> See <u>De Mooij (2011)</u>, and de Mooij's presentation 'Conceptual analysis of the problem' delivered at a recent European Commission conference entitled "Corporate debt bias" (23-24 February 2015).

<sup>&</sup>lt;sup>30</sup> See <u>De Mooij (2011)</u> and '<u>Tax by Design'</u> (2011), the final report from the Mirrlees Review.

<sup>&</sup>lt;sup>31</sup> See 'Addressing the Debt Bias: A Comparison between the Belgian and the Italian ACE Systems' (2014).

revenues, or 0.5% of GDP.<sup>32</sup> This may be unattractive at a time when a number of EU Member States continue to undergo fiscal consolidation.

De Mooij (2011) concludes that despite the direct fiscal costs, the introduction of ACE is the most promising reform. These fiscal costs could be lower over the long term, should ACE induce favourable behavioural responses, leading to higher investment and growth. But evidence from Belgium is not conclusive.

The European Commission's Report on the European Semester in 2012 recommended that EU Member States address the imbalance in the tax treatment of debt and equity.<sup>33</sup> Since then, as noted above, a number of EU Member States have started to address the problem of debt bias, mainly focussing on restricting the level of deductible interest.<sup>34</sup> Given the fiscal implications and the requirement that legislative initiatives in this area are agreed by unanimity, this remains an area for EU Member States to consider within their own jurisdictions. Also, as illustrated by the US example, equalising the tax treatment of equity and debt is not necessarily a pre-condition for well-functioning equity markets. However, taken in combination with other policy initiatives, it could be part of creating an environment in which equity finance formed a more balanced part of corporates' financing mix.

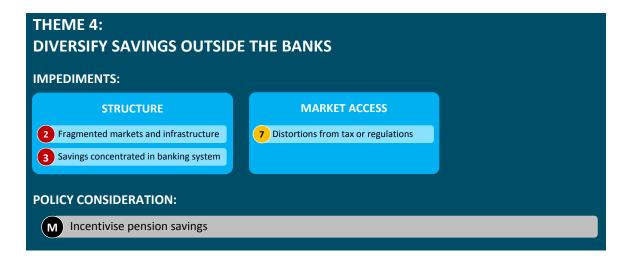
Another tax issue that bears consideration relates to the withholding tax differential between listed and non-listed securities. For example, in the United Kingdom, in contrast to interest on bank loans, debt listed on a stock exchange and quoted Eurobonds, non-listed securities generally attract a withholding tax. As a result, overseas lenders receive post-tax interest (withholding tax is collected at source from the interest payer), significantly reducing the return on their non-listed transactions and thus disincentivising cross-border investment into the United Kingdom. More generally, when there is a suitable tax treaty between the country of the borrower and the foreign lender's jurisdiction there may be a withholding tax exemption. Still, the claims process can be complicated and time-consuming.

Some EU Member States have already taken initiatives to reduce this differential. Examples where withholding tax exemptions have already been implemented include Italian minibonds and UK private placements. This should encourage cross-border investment and help develop deeper and more liquid markets in these products. Ideally, any withholding tax relief should be applied at source – at the time of payment of the securities income, rather than by refund. Alternatively, and in cases where exemptions already apply – such as in the case of double-tax treaties – EU Member States should ensure that the refund process is fast and simple. The European Commission adopted a recommendation to this effect in 2009.

<sup>&</sup>lt;sup>32</sup> See <u>De Mooij (2011)</u>.

<sup>&</sup>lt;sup>33</sup> See <u>Fatica et al (2012)</u> and '<u>Growth-Friendly Tax Policies in Member States and Better Tax Coordination in the EU</u>', European Commission (2012).

<sup>&</sup>lt;sup>34</sup> See 'Tax reforms in EU Member States: 2014 Report', European Commission (2014).



#### M. Incentivise pension savings:

- i. Invigorate on-going efforts in EU Member States to improve financial literacy;
- ii. Explore behavioural measures such as auto enrolment and matching contributions;
- iii. Improve transparency around fee structures and charges to encourage fund competition and consolidation;
- iv. Encourage the development of more flexible retirement savings products; and
- v. Consider whether to develop tax transparent funds as a means to encourage cross-border pooling of institutional funds.

Europeans maintain higher saving ratios than their US counterparts. However, relative to the United States, a larger proportion of savings are channelled through banks, helping to support a European banking system with assets in excess of 300% of GDP, compared to 70% of GDP for the United States. In part, this is due to advantages conferred on banks relative to non-bank forms of financing, including: coverage by public deposit insurance schemes; access to central bank finance; and an ability to issue tax-beneficial savings products. As has been noted previously, this creates a marked reliance on banks as vehicles for saving and lending, meaning that when they are damaged the broader economy suffers. A major feature of CMU should therefore be the development of risk-defined savings pools outside the banking system, particularly in relation to residents preparing financially for retirement. Despite major reform initiatives in most EU Member States over the past decade, future pension provision will remain mainly on a pay-as-you-go, and hence unfunded, basis. However, as the European Commission concluded in its 2012 White Paper on pensions, 35 ensuring adequate and fiscally sustainable pensions will, *inter alia*, require the development of complementary private retirement schemes.

#### Financial literacy

It has been argued that a lack of financial literacy may act as a barrier to saving, and that lack of financial skills can mean that people do not plan ahead, or understand how financial products can help meet savings goals.<sup>36</sup> It follows that individuals are only likely to save more in pensions if they understand that their current behaviours are likely to lead to

<sup>&</sup>lt;sup>35</sup> See 'An Agenda for Adequate, Safe and Sustainable Pensions', European Commission (2012).

<sup>&</sup>lt;sup>36</sup> See 'Financial Education, Savings and Investments', OECD (2012).

disappointing retirement incomes. While several EU Member States<sup>37</sup> have started to provide annual statements for state pension entitlements, no such statement exists covering all sources of retirement income.<sup>38</sup> It would therefore be valuable to consider how this deficiency could be addressed.

# i. Invigorate on-going efforts in EU Member States to improve financial literacy

EU Member States should step up efforts to improving financial literacy, capability and awareness. A possible consideration could be ensuring that individuals are kept regularly informed of what to expect in terms of projected retirement incomes based on all sources of income, including state, occupational and individual pensions.

### Behavioural measures

Private pension schemes can be of either mandatory or voluntary. Where pension schemes are voluntary, individuals may be deterred by the necessity of locking away their savings for decades. In the past, policymakers have attempted to counteract this by using tax incentives. But it has been argued that this is inefficient and not effective when introduced in isolation, meaning that avenues for encouraging additional pension savings should be explored.<sup>39</sup> In some countries with voluntary occupational or individual pensions, interest in behavioural measures has increased over the past decade, including the introduction of auto enrolment in work-based pension schemes. This has been seen in the United States, New Zealand and more recently the United Kingdom.

There is emerging evidence that such behavioural measures could be effective in changing savings plan outcomes, often at a much lower cost than financial incentives. Measures can include automatic enrolment, simplification, planning aids, reminders, and commitment features. Matching contributions, as a budget-neutral alternative to tax incentives, should also be considered, with the contribution coming from employers in the case of work-based pensions, or from the state in the case of individual saving accounts. Unlike tax relief, which is generally offered on the marginal income tax rate, this would not benefit disproportionally those on higher incomes and could especially encourage those on lower to middle incomes to save more for retirement. 41,42

### ii. Explore behavioural measures such as auto enrolment and matching contributions

EU Member States could consider whether behaviour measures, such as auto enrolment and matching contributions would be appropriate within their pension systems.

<sup>38</sup> See Antolín and Harrison (2012) and 'Improving pension information and communication: OECD survey and lessons learnt' (2013).

41 See 'Keep on nudging - Making the most of auto-enrolment' (2011) and Madrian (2012).

<sup>&</sup>lt;sup>37</sup> Including the United Kingdom and Sweden

<sup>&</sup>lt;sup>39</sup> See 'Privately-managed funded pension provision and their contribution to adequate and sustainable pensions' (2008) and OECD's project on fiscal incentives and retirement savings.

<sup>&</sup>lt;sup>40</sup> See Madrian (2012), Hardcastle (2012) and Chetty et al (2013).

<sup>&</sup>lt;sup>42</sup> For example, the German Riester pension, introduced in 2002, is a voluntary defined contribution private pension with limited contribution matching and appears to have been successful in generating additional pension savings. See <u>Börsch-Supan et al (2012)</u>.

#### Transparency of fee structures and charges

Improved transparency of fee structures and charges could also incentivise retirement savings. In a competitive market, greater transparency could be used as one product differentiator, and could lead to a reduction in fee structures and charges, thereby raising returns and attracting more savers. Pension funds' operating expenses vary substantially across EU countries, ranging from 0.1% of total investments in Denmark to 1.3% in Spain.<sup>43</sup> While differences in the size of the pension fund industry, or the nature of the pension system (voluntary versus mandatory arrangements) will explain some of that variation, 44 transparency is also likely to play a role, suggesting there is ample scope to reduce operating expenses in many countries. But for market forces to work, customers would need to be in a position to reallocate their savings to more competitive providers. In some countries this might require capping transfer or exit charges.

# iii. Improve transparency around fee structures and charges, to encourage fund competition and consolidation

The European Commission, along with EU member states and their regulators, should undertake a study into the role that greater transparency could play in in ensuring a competitive EU pensions market.

#### Flexibility

An outstanding question is to what degree households currently hold bank deposits as precautionary balances, making them more reluctant to commit their savings for retirement. To answer this guestion we need to understand better what motivates individuals and what constraints they face when making saving decisions. If it turns out that a lack of access to pension savings during the accumulation phase acts a major impediment to savings, then a measure worth exploring could be to introduce some flexibility into pension savings. Such flexibility would have to be of a very limited nature though, both in terms of access and amounts involved. Access would need to be limited (for example to a few pre-defined major life events) to allow pension funds to manage their liquidity risk and hence maintain financial stability. The share of pension savings that could be withdrawn early would also have to be limited to ensure that individuals ultimately accumulate sufficient funds to achieve adequate pension incomes. The degree of flexibility offered - if any - would depend on the structure and social policy roles of EU Member States' pension systems.

#### iv. Encourage the development of more flexible retirement savings products

EU Member States could consider whether making pension savings available prior to retirement, subject to certain very limited criteria, would be appropriate within their pension systems.

Taken together, we believe that these measures – addressing financial literacy, behavioural measures, transparency and flexibility - are likely to be more effective in addressing the underlying retirement saving challenges facing different EU Member States (and hence

<sup>&</sup>lt;sup>43</sup> Operating costs include marketing the plan to potential participants, collecting contributions, sending contributions to investment fund managers, keeping records of accounts, sending reports to participants, investing the assets, converting account balances to annuities, and paying annuities. See OECD (2013).

<sup>44</sup> See Ionescu, L and Robles E-A (2014).

support CMU) than introducing a standardised pension product across the EU. While the latter could help to reduce – at the margin – impediments to the free movement of labour across the EU, it is unlikely that an EU standardised pension product would be attractive to the majority of savers and would consequently provide little benefit to CMU. In addition, pension providers may be deterred from providing a standardised pension product by the number of different tax, employment and legal regimes the product would be subject to in different EU Member States.

#### Pooling institutional money

Encouraging additional pension savings needs to be further complemented by efforts to channel capital to its most productive uses. Pension funds and insurance companies have a natural appetite for investing in long-term investment assets, but many are too small to take advantage of the existing opportunities. This not only creates distortions between smaller and larger institutional investors – the former lacking the latter's scale to commit significant funds to investing in long-term assets – it also implies that not all available resources are necessarily channelled to such uses. Research has suggested that, in the Netherlands, consolidation – especially among smaller and medium-sized pension funds – would increase cost efficiency.<sup>45</sup> It could be implied that similar benefits would be achieved in other EU Member States.

Downward pressure on fees and charges may lead to pension funds seeking to consolidate. Comparing pension fund performance around the world, larger pension funds generally perform better than smaller ones, mainly as a result of lower costs. In practice, however, there may be impediments to consolidation – for example, the tax status of pension funds investing in other types of funds.

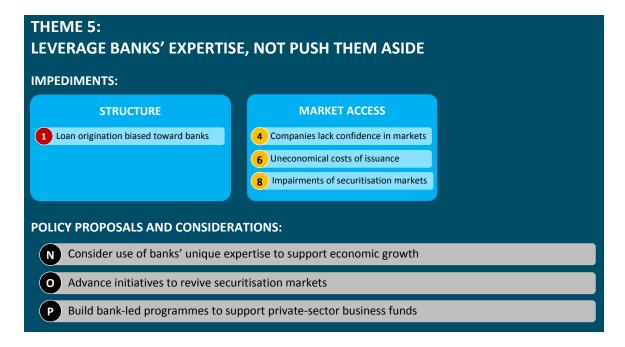
In a number of EU Member States (such as Luxembourg, the Netherlands and the United Kingdom) tax transparent funds (TTF) have been created. A particular feature of TTFs (in contrast to other types of funds) is that pension funds investing in them benefit from the same tax treatment offered to pension funds, including in the application of withholding tax. This means that the decision for a pension fund to invest directly or indirectly through a TTF can be based on factors other than tax treatments. Other EU Member States may wish to consider whether TTFs would be appropriate in their jurisdiction.

v. Consider whether to develop tax transparent funds as a means to encourage pooling of institutional money

<sup>&</sup>lt;sup>45</sup> See <u>Bikker (2013)</u>.

<sup>46</sup> See Heale (2014)

<sup>&</sup>lt;sup>47</sup> On a related issue, the Swiss Social Security Agency has found that the intrinsic complexity and diversity of the country's funded pension pillar explains much of the pillar's costs. The only way to reduce these costs would be to simplify the pillar. See <u>Hornung et al (2011)</u> – only available in German.



#### N. Consider use of banks' unique expertise to support economic growth

As noted in the European Commission's Green Paper, the financing of European businesses remains heavily reliant on the banking system, and one intermediate objective of CMU will be to foster a shift toward resilient forms of market-based finance. But market-based finance should not be viewed simply as a substitute for bank-based finance. Indeed, market-based finance relies on some key roles that the banking system currently undertakes that will be difficult to substitute, at least in the near term. As a result there is a distinction to be made between banks as the ultimate providers of credit, and the role banks play either as originators and distributors of credit, or as (participating) agents in capital markets. For CMU to be successful, it will be necessary to leverage the expertise of the banking sector in order to support market-based finance through these roles. The European Commission should ensure that the role of banks is considered as policy initiatives are developed.

# Banks as originators of credit

Banks typically have an advantage over other financial intermediaries in the origination of credit due to their developed loan origination infrastructure and the proprietary information derived from their legacy of broad banking activity. As such, at least in the medium term, it is unlikely that banks will be significantly replaced as the main originators of credit to certain parts of the economy. These include infrastructure and other project finance, where there are economies of scale in more specialised forms of credit assessment, and SME lending, where local relationships and the provision of a broader suite of banking services are important. This is of particular importance in the EU, where SMEs form a significant proportion of the corporate sector.

As noted previously, improving the availability of credit data should help to enhance competition within the banking sector, and between banks and alternative finance providers. For example, it would allow smaller and new banks to model more accurately their risk weights for capital purposes, rather than rely on standardised risk weights due to a lack of

historical lending data. In this respect, the United Kingdom is in the process of introducing laws to require major banks to share SME customer information with other lenders through credit reference agencies, and to ensure that credit reference agencies give access to this information on an equal basis to challenger banks and alternative finance providers. Nevertheless, for smaller firms in particular, it is unlikely that non-banks will replace banks in the provision of credit given the broad distribution networks required and the high costs of replicating banks' loan origination structures, particularly given the generally small size or revolving nature of SME lending.

Still, new arrangements ought to be explored, not least because banks' own willingness to undertake this credit provision may have reduced in recent years. For example, a recent EY survey found banks intend to reduce their exposures to some sectors including transport, financial services, construction and commercial real estate.<sup>48</sup>

In order to ensure sectors more reliant on bank funding are not starved of necessary credit, initiatives could be developed that draw on banks' ability to originate loans, while attracting funding and risk capital from other investors who are better able to bear the risks on such lending. Indeed, where bank lending represents a higher risk, such as some SME lending, having more risk capital from outside the banking sector to support this and a greater pooling across investors should reduce constraints on such lending and improve its stability. This will entail banks using the 'originate-to-distribute' model of lending. Flaws in this model were highlighted by the role of US subprime securitisation in the crisis. These were due to agency problems between the originators of loans and investors in securities backed by those loans, which led to adverse selection and moral hazard. However, recent work to revive the securitisation markets suggests that if these agency problems are addressed, techniques to distribute credit risk on lending from banks can provide significant benefits in easing real economy financing. This is through drawing in more funding and risk-bearing capital from outside the banking sector and freeing up bank balance sheets to originate loans.

Several studies show that where investor and bank interests are aligned, such as through banks retaining a share of the risk (through risk retention rules), then moral hazard issues can be addressed. Stricter underwriting standards on loans originated, and representations and warranties on securities issued, are also valuable. Furthermore, as noted earlier, broader access to better data will be important to ensure non-bank investors can undertake appropriate risk assessment on bank-originated lending. More generally, where banks act as agents (rather than risk-taking principals) this should reduce prudential concerns about their risk taking, and can reduce banks' capital requirements while maintaining their commercial relationships and ability to generate revenues from transaction fees.

There is large scope to share risks on originated loans. The total outstanding bank lending to corporates in the EU was €5.4 trillion in 2013 (down from €6.0 trillion in 2008) while the assets of major long-term institutional investors (such as pension funds and insurers) amounted to €19 trillion.<sup>49</sup> Indeed, some switching from bank funding to market-based finance has been evident in recent years as those large companies with access to capital markets have increasingly issued corporate bonds. By way of illustration, outstanding corporate debt securities in the EU have risen from €1.1 trillion in 2008 to €1.7 trillion in

<sup>&</sup>lt;sup>48</sup> See 'European Banking Barometer – 2015, Reflecting a challenged industry' (2015).

<sup>&</sup>lt;sup>49</sup> See 'New Financial: Driving Growth, Making the case for bigger and better capital markets in Europe', October 2014

2013. Facilitating the distribution of risks from bank loan origination offers a way to draw more on non-bank sources of funding and share risks across a broader set of investors, and can also free up bank balance sheets for a wider range of lending opportunities.

One significant issue in such distribution is *ex ante* clarity on the capital treatment when risks are transferred from banks. The European Banking Authority (EBA) has developed a consistent EU approach on how capital relief is applied, through the publication in 2014 of Guidelines on Significant Risk Transfer. These guidelines set out the requirements for originator institutions when engaging in securitisation transactions for capital relief, requirements for competent authorities to assess transactions that claim 'Significant Risk Transfer', including assessing whether credit risk has effectively been transferred to third parties in accordance with the Capital Requirements Regulation. Separately to the EBA's work to establish criteria for simple, standardised and transparent (STT) securitisation (see following section), the European Commission may wish to consider whether supplementary measures may be warranted to ensure appropriate alignment of incentives for all securitisations, especially those providing capital relief to banks, through:

- Revisions to the regime currently applicable for risk retention requirements ('skin in the game');
- Ensuring appropriate requirements on originator underwriting standards;
- Requirements for originators in their servicing and monitoring role to provide other parties with sufficient information to undertake and maintain risk assessment;
- Requirements for clarity on the originator approach/policy toward distressed credits, forbearance, etc;
- Revised requirements for investors to undertake due diligence and ongoing credit assessment in relation to their exposures.

#### Banks as agents in capital markets

Through their financial market intermediation activity, banks also support the capital market functioning essential for market-based finance. In particular, they are the key providers of services for primary issuance activity (and secondary market activity that supports the ability to issue and trade on financial markets). In this context, an increasingly pertinent issue is that, as increased pressure on banks' balance sheets has impacted their capacity to facilitate secondary market activities, particularly in the post-crisis years, market making for some financial markets has become more limited, potentially leading to more fragile liquidity. As banks adjust their business models in this area, perhaps acting more as agents than principals in facilitating client orders, it will be important to ensure such changes to their participation in financial markets do not introduce new risks to the resilience of market liquidity. This issue is covered in more detail under Theme 1.

# O. Advance initiatives to revive securitisation markets:

- i. Implement BCBS/IOSCO and EBA proposals on securitisation; and
- ii. Support further work to identify and address impediments to short-term securitisation activity.

In 2014, the Basel Committee on Banking Supervision (BCBS) and the International Organization of Securities Commissions (IOSCO) established a joint task force to review developments in securitisation markets. This Task Force on Securitisation Markets (TFSM)

was tasked with identifying the factors that may be hindering the development of sustainable securitisation markets, and developing criteria to identify and assist in the financial industry's development of simple, transparent and comparable (STC) securitisation structures. Similarly, at the request of the European Commission, the EBA has also consulted on criteria for identifying simple, standards and transparent (SST) securitisations, which could receive a differentiated regulatory treatment.

Household mortgages and consumer loans are particularly amenable to packaging in securitisations that meet such criteria. As such, the use of these criteria could facilitate securitisation of these loans, and would improve the availability of mortgage and consumer finance directly. In addition, where significant risk transfer from originating banks is achieved from the securitisation, it may allow banks to reallocate balance sheet capacity to extend credit to other forms of funding. This may include areas such as smaller business lending, in which banks maintain a comparative advantage.

#### i. Implement BCBS/IOSCO and EBA proposals on securitisation

The Bank of England welcomes the European Commission's consultation on creating an EU framework for simple, transparent and standardised securitisation. The Bank of England has submitted a joint response to the consultation with the ECB.<sup>50</sup> It is important that the proposals from the TFSM and the EBA are taken forward so as to revive securitisation activity, but without the dangerous practices evident in the lead up to the financial crisis.

The main focus of policy initiatives thus far have been on term securitisations. However, short-term securitisations, such as Conduits of Asset Backed Commercial Paper, are also a key part of securitisation markets and can provide an important source of funding to the real economy. In particular, this can include supporting working capital for small businesses through conduits that securitise trade receivables and equipment leases, and consumer credit supported through securitisation of short term auto loans, credit card receivables and consumer loans.

**ii. Support further work to identify and address impediments to short-term securitisation activity**The European Commission, alongside other international authorities, could usefully support further work to identify and address impediments to short-term securitisation activity and develop simple, transparent and standardised criteria for short-term securitisation.

# P. Build bank-led programmes to support private-sector business funds:

i. Encourage industry to set up consortia engaged in equity financing SMEs

The provision of equity finance has not been a traditional role for banks, and the nature of a risky, perpetual asset means that large scale bank investment would be inconsistent with banks' liability structures. Nevertheless, banks may be able to play an important role in supporting the origination of equity finance, particularly for those companies below the thresholds for a junior stock market listing, a trade sale or private equity interest (which, for example, usually require revenue of more than €10 million), but are larger than companies

<sup>50</sup> See the <u>Joint response from the Bank of England and the ECB to the European Commission's consultation on 'An EU framework for simple, transparent and standardised securitisation'</u> (2015).

typically funded by friends, family and personal lending, business angels or venture capital. This involves leveraging banks' networks of relationships with companies of all sizes, allowing them to identify credible equity investment opportunities.

The UK's Business Growth Fund (BGF) is a good example of how the banking system collectively has been able to extend equity finance. The fund provides long-term equity investment in amounts of between £2 million and £10 million. Investment in the fund is treated as a risk-weighted asset (rather than requiring a deduction from capital), subject to the scale and diversity of the portfolio. Scale in the portfolio has driven down costs. In 2013, the fund invested £1.47 billion through a total of 652 deals. <sup>51</sup> Bank commitments represent a very small fraction of their overall balance sheets, so the risk of asset versus liability mismatch is minimal. As the fund matures, this could also attract non-bank investors.

Similarly, in March, Denmark's three largest pension funds and largest bank announced that they would establish a new fund to invest in domestic SMEs by offering subordinated loan capital. The fund will be open to other banks and pension funds to co-invest. Drawing in EU-wide non-bank sources of funding to such initiatives (whether national or EU-wide) could help direct more equity funding to smaller businesses by leveraging off the banking sector's unique access to this part of the corporate sector.

### i. Encourage industry to set up consortia engaged in equity financing SMEs

Initially, these would most likely be national or even regional in nature, due to the established banking networks at this level. However, once established, they could attract cross-border investment from other institutional investors such as pension schemes, insurers and investment funds. Any scheme that is rolled out across Europe will need to recognise the strong national or regional bias of SMEs and the vehicle will need to tailor its distribution network and investment processes to suit the local environment.

<sup>&</sup>lt;sup>51</sup> See BGF 2013/2014.

### **OVERARCHING CONSIDERATIONS**

- Legislate where appropriate, but take account of other tools
- ★ Ongoing role for DG FISMA to identify and address barriers to free movement of capital
- ★ Institutional change not necessary to achieve a successful CMU

#### **3**. Legislate where appropriate, but take account of other tools

The European Commission notes in its Green Paper that it 'will support market-driven solutions when they are likely to be effective, and regulatory changes only where they are necessary'. The Bank of England supports this approach. The EU's single market in financial services is based on openness supported by common rules, consistently applied. From a financial stability perspective, it is essential that the EU has in place strong prudential rules that have the force of law. Since the financial crisis, these have included agreement on capital requirements for banks through CRDIV, the Bank Recovery and Resolution Directive (BRRD) and Solvency II.

However, there are some areas in which legislation might not be appropriate, including where differences between EU Member States rules do not pose a financial stability risk or where they do not pose a substantial barrier to the operation of the single market. In such cases, common standards and other non-legislative options may be more appropriate as tools to achieve the aims of CMU, without imposing a burden that could hinder development of those markets that they are intended to help. This is also in line with the European Commission's 'Better Regulation' agenda.

### ②. An ongoing role for DG FISMA to identify and address barriers to the free movement of capital

CMU should be an ongoing initiative, not limited to the mandate of this European Commission. As capital markets develop, including at national level, new barriers to free movement of capital across the EU may arise. For this reason, DG FISMA should put more mechanisms in place to identify continually barriers that may arise, and develop appropriate solutions. Supported by a small secretariat in DG FISMA, this group would bring together the full spectrum of market participants, from small retail investors to large companies, and reflect the broad ecosystem of intermediaries. Building on the work already undertaken in the context of the European Commission's consultation, an initial phase of work could involve all participants in identifying areas that need to be examined further, before subgroups of participants (including regulators as appropriate) study particular issues in more detail.

The European Commission should ensure that identifying barriers and solutions – including non-legislative solutions – to the free movement of capital in the EU is part of DG FISMA's mission. A means to achieve this could be through the establishment of a consultative group, chaired by a senior and respected figure, to identify challenges and generate solutions.

#### 3. Institutional change is not necessary to achieve a successful CMU

We believe that the powers of the ESAs to ensure consistent supervision are sufficient, and that no new measures are required. Rather, the established arrangements should be used to contribute to the development of CMU in two potential areas. First, by identifying and addressing any remaining gaps in the regulatory framework governing capital market infrastructure. Work on resolution of financial market infrastructures is key here. Second, by the ESAs advancing their existing mandate for supervisory convergence, by ensuring compliance with the agreed rule book and comparability of supervisory practices. This should lead to consistency of supervisory outcomes and ensure consistent investor protection across Europe.

CMU has been linked by some with calls for greater centralisation of supervisory responsibilities, most notably with respect to post-trade financial market infrastructure, such as CCPs. We do not believe that change is necessary in this area to deliver a successful CMU, and could indeed present material risks to financial stability. This could in turn undermine the confidence in market-based financing that CMU is seeking to deliver.

A key principle of the single market is that where common rules are applied and enforced, the EU Member State in which businesses, including financial market infrastructures, are established and regulated does not matter. Robust and resilient financial market infrastructures, which are subject to strict regulatory standards and supervision, underpin capital markets and are critical to financial stability. Recognising this, the EU's common rules in the area of regulation and supervision of financial market infrastructures have only recently been reformed, for example through the European Market Infrastructure Regulation (EMIR) and the Central Securities Depositories Regulation (CSDR).

These set new, and more stringent, common rules for the regulation and supervision of EU financial market infrastructures, in line with international standards, and are based on the principle of home state supervision supported by college arrangements with the relevant authorities, including ESMA to promote supervisory convergence. This system works well and, importantly, aligns supervisory responsibility with member state accountability to ensure financial stability through the provision of a fiscal backstop should one be needed under extreme circumstances.

Replacing this established arrangement, which provides multiple layers of reassurance and accountability, by a single EU supervisor has the potential to present significant risks to financial stability. Importantly, it breaks the link between supervisory responsibility and fiscal accountability. Many financial market infrastructures operate on a global scale and are widely used by non-EU firms. They serve international as well as EU markets. Around 40% of the initial margin held by UK CCPs is posted by clearing members established outside the European Economic Area (EEA).<sup>52</sup> It is not at all clear that there will be the political will or desire within the EU to provide a central backstop to such financial market infrastructures. Change would also break the link we have maintained in the United Kingdom between financial market infrastructure supervision and the supervision and resolution of the major domestic clearing members, who are the largest users of UK financial market infrastructures.

<sup>&</sup>lt;sup>52</sup> See 'The Bank of England's supervision of financial market infrastructures – Annual Report' (March 2015), p.7.

# ANNEX I: SUMMARY OF POLICY PROPOSALS AND CONSIDERATIONS, AND MAPPING TO CONSULTATION QUESTIONS

THEMES	Policy Proposals and Considerations	Consultation question
Тнеме 1:	A. Improve liquidity of corporate credit markets:	
BIGGER, MORE	i. Establish agreed principles around standardisation of	i. <b>6</b>
LIQUID AND	corporate debt;	ii. <b>6</b>
STABLE CAPITAL MARKETS	ii. Facilitate development of 'all-to-all' trading platforms; and	II. <b>O</b>
WIARRETS	iii. Ensure that MiFID II technical standards take account	iii. 6
	of concerns around impact of transparency on	<i></i> <b>C</b>
	secondary market liquidity.	
	B. Support FSB agenda on market liquidity:	
	i. Encourage the appropriate EU authorities to back the	i. <b>23</b>
	FSB agenda on market liquidity	
	C. Open investment possibilities in closed-end fund	
	structures to a wider set of investors: i. Examine whether European Long-Term Investment	i. <b>3</b>
	Funds (ELTIFs) could be opened to a broader set of	1. <b>3</b>
	investors;	
	ii. Assess whether ELTIFs should be authorised for	ii. <b>3</b>
	investment in a wider set of asset classes;	
	iii. Support the European Commission's consideration of	iii. <b>12</b>
	a tailored treatment for infrastructure investment in	
	Solvency II; and	
	iv. Establish a predictable pipeline of EU infrastructure projects, disseminated via an EU-wide platform,	iv. <b>10</b>
	drawing on existing initiatives.	
	D. Identify and address risks generated by collateral	
	networks:	
	i. Work together to identify risks generated by collateral	i. <b>27</b>
	networks and recommend market standards to help	
_	market participants	
THEME 2:	E. Support international initiatives to address conduct issues	
BUILD TRUST IN,	in financial markets, including those initiated by: i. The Financial Stability Board (FSB); and	i. <b>21</b>
UNDERSTANDING	ii. The UK Fair and Effective Markets Review (FEMR).	ii. <b>21</b>
OF, MARKET-	F. Provide SMEs and retail investors with tools and	II. Z I
BASED FINANCE	information to access market-based finance:	
	i. Establish business support networks; and	i. <b>8</b>
	ii. Ensure that UCITS funds are simple, transparent and	ii. <b>17</b>
	comparable.	
	G. Reduce barriers corporate insolvency regimes pose to	
	cross-border investment: i. Examine options towards greater consistency of	i. <b>29</b>
	i. Examine options towards greater consistency of insolvency regimes	1. 29
Тнеме 3:	H. Strengthen environment for traded equity of smaller	
MORE EQUITY	companies:	
AND BONDS FOR	i. Agree on a more proportionate Prospectus Directive	i. <b>8</b>
SMALLER FIRMS	while maintaining investor protection; and	
	ii. Establish a strong and trusted brand for venture	ii. <b>8</b>
	exchanges through spreading best practice in	
	governance requirements	15
	I. Consider role of angel investors and venture capital  J. Enable a wider set of investors to access company	10
	information:	
	i. Improve availability of credit information on SMEs	i. <b>2</b>
	K. Develop a pan-EU private placement market:	-
	i. Support industry efforts to establish best practice	i. <b>4</b>
	and templates; and	
	ii. Set up a pan-EU transaction database	ii. <b>4</b>
	L. Consider use of tax changes that may support more	30
	diversified funding models	

THEME 4:	M. Incentivise pension savings:	
DIVERSIFY	i. Invigorate on-going efforts in EU Member States to	i. <b>13</b>
SAVINGS	improve financial literacy;	
OUTSIDE THE	ii. Explore behavioural measures such as auto	ii. <b>13</b>
BANKS	enrolment and matching contributions;	
	iii. Improve transparency around fee structures and	iii. <b>13</b>
	charges to encourage fund competition and	
	consolidation;	
	iv. Encourage the development of more flexible	iv. <b>13</b>
	retirement savings products; and	
	v. Consider whether to develop tax transparent funds as	v. <b>13</b>
	a means to encourage pooling of institutional funds.	
Тнеме 5:	N. Consider use of banks' unique expertise to support	16
LEVERAGE	economic growth	
BANKS'	O. Advance initiatives to revive securitisation markets:	
EXPERTISE, NOT	<ol> <li>Implement BCBS/IOSCO and EBA proposals on</li> </ol>	i. <b>5</b>
PUSH THEM	securitisation; and	
ASIDE	ii. Support further work to identify and address	ii. <b>5</b>
	impediments to short-term securitisation activity	
	P. Build bank-led programmes to support private-sector	
	business funds:	
	i. Encourage industry to set up consortia engaged in	i. <b>5</b>
	equity financing SMEs	
OVERARCHING	C Legislate where appropriate, but take account of other tools	32
CONSIDERATIONS	Ongoing role for DG FISMA to identify and address barriers	32
	to free movement of capital	
	Institutional change not necessary to achieve a successful	25
	CMU	

#### **REFERENCES**

Anderson, N, Brooke, M, Hume, M and Kürtösiová, M (2015), 'A European Capital Markets Union: implications for growth and stability', Bank of England Financial Stability Paper No. 33, available at <a href="http://www.bankofengland.co.uk/research/Documents/fspapers/fs\_paper33.pdf">http://www.bankofengland.co.uk/research/Documents/fspapers/fs\_paper33.pdf</a>.

AFME (2012), 'An analysis of fixed income trading activity in the context of MiFID II', available at: www.afme.eu/WorkArea/DownloadAsset.aspx?id=6821.

AFME and Oliver Wyman (2013), 'Unlocking Funding for European Investment and Growth – An Industry Survey of Obstacles in the European Funding Markets and Potential Solutions', available at: <a href="http://www.afme.eu/unlocking-funding-for-european-investment-and-growth/">http://www.afme.eu/unlocking-funding-for-european-investment-and-growth/</a>.

Antolín, P and Harrison D (2012), 'Annual DC Pension Statements and the Communications Challenge', OECD Working Papers on Finance, Insurance and Private Pensions, No. 19, OECD Publishing, available at: <a href="http://www.oecd-ilibrary.org/annual-dc-pension-statements-and-the-communications-challenge-5k97gkd06kth.pdf">http://www.oecd-ilibrary.org/annual-dc-pension-statements-and-the-communications-challenge-5k97gkd06kth.pdf</a>.

Bank of England (2014), 'Should the availability of UK credit data be improved?', Discussion Paper, May, available at:

http://www.bankofengland.co.uk/publications/Documents/news/2014/dp300514.pdf.

Bank of England (2014), 'Summary of feedback received on the Bank of England's May 2014 Discussion Paper on UK credit data', November, available at: <a href="http://www.bankofengland.co.uk/financialstability/Documents/securitisation/responses281114.pdf">http://www.bankofengland.co.uk/financialstability/Documents/securitisation/responses281114.pdf</a>.

Bank of England (2014), 'Financial Stability Report', June, available at: http://www.bankofengland.co.uk/publications/Documents/fsr/2014/fsrfull1406.pdf.

Bank of England, HM Treasury and Financial Conduct Authority (2014), 'How fair and effective are the fixed income, foreign exchange and commodities markets?', Fair and Effective Markets Review, Consultation document, October, available at:

http://www.bankofengland.co.uk/markets/Documents/femr/consultation271014.pdf.

Bank of England (2015), 'Response by the Market Practitioner Panel to the Fair and Effective Markets Review', available at http://www.bankofengland.co.uk/markets/Documents/femr/mpp.pdf.

Bank of England (2015), 'The Bank of England's supervision of financial market infrastructures — Annual Report', available at:

http://www.bankofengland.co.uk/publications/Documents/fmi/annualreport2015.pdf

Bank of England and the ECB (2015), 'Joint response from the Bank of England and the European Central Bank to the Consultation Document of the European Commission: "An EU framework for simple, transparent and standardised securitisation", available at:

http://www.bankofengland.co.uk/financialstability/Documents/securitisation/ecbboeresponse.pdf.

Bikker, J (2013), 'Is there an optimal pension fund size? A scale-economy analysis of administrative and investment costs', DNB Working Paper No. 376, April, available at: www.dnb.nl/en/binaries/Working%20Paper%20376 tcm47-289626.pdf.

Bank for International Settlements (2014), 'Market-making and proprietary trading: industry trends, drivers and policy implications', CGFS Paper No. 52, available at: http://www.bis.org/publ/cgfs52.pdf

BlackRock (2015), 'The European Capital Markets Union: An Investor Perspective', ViewPoint, February, available at: <a href="https://www.blackrock.com/corporate/en-co/literature/whitepaper/viewpoint-cmu-investor-perspective-february-2015.pdf">https://www.blackrock.com/corporate/en-co/literature/whitepaper/viewpoint-cmu-investor-perspective-february-2015.pdf</a>.

Börsch-Supan, A-H, Coppola, M and Reil-Held, A (2012), 'Riester Pensions in Germany: Design, Dynamics, Targetting Success and Crowding-In', NBER Working Paper No. 18014, April, available at: http://www.nber.org/papers/w18014.pdf.

British Business Bank (2014), 'Small Business Finance Markets 2014', report, available at: <a href="http://british-business-bank.co.uk/wp-content/uploads/2014/12/BBB">http://british-business-bank.co.uk/wp-content/uploads/2014/12/BBB</a> Small-Business-Finance-Markets-2014 Online Interactive.pdf.

Business Growth Fund (2014), 'Review 2013/14', available at: http://www.businessgrowthfund.co.uk/wp-content/uploads/2014/06/BGF-REVIEW-2014-.pdf

CEFA (2006), 'Understanding the Advantages of Closed-End Funds', available at: <a href="http://www.cefa.com/\_/docs/content/Learn/CEFA%20Booklet%20Final.pdf">http://www.cefa.com/\_/docs/content/Learn/CEFA%20Booklet%20Final.pdf</a>.

Chetty, R, Friedman, J-N, Leth-Petersen, S, Nielsen, T-H and Olsen, T (2013), 'Subsidies versus nudges: which policies increase saving the most?', Center for Retirement Research at Boston College, March, No. 13-3, available at: <a href="http://crr.bc.edu/wp-content/uploads/2013/03/IB">http://crr.bc.edu/wp-content/uploads/2013/03/IB</a> 13-3-508.pdf.

De Mooij, R-A (2011), 'Tax Biases to Debt Finance: Assessing the Problem, Finding Solutions', Staff Discussion Note, SND/11/11, International Monetary Fund, available at: https://www.imf.org/external/pubs/ft/sdn/2011/sdn1111.pdf.

Devasabai, K (2015), 'Dark pools and platforms vie to fix credit markets', Risk magazine, March, available at: <a href="http://www.risk.net/risk-magazine/feature/2401714/dark-pools-and-platforms-vie-to-fix-broken-credit-markets">http://www.risk.net/risk-magazine/feature/2401714/dark-pools-and-platforms-vie-to-fix-broken-credit-markets</a>.

ECB (2014), 'Survey on the access to finance of enterprises in the euro area, April 2014 – September 2014', November, available at:

http://www.ecb.europa.eu/pub/pdf/other/accesstofinancesmallmediumsizedenterprises201411.en.pdf.

ECB (2015), 'The euro area bank lending survey – first quarter of 2015', April, available at: https://www.ecb.europa.eu/stats/pdf/blssurvey\_201504.pdf.

European Commission (2008), 'Privately-managed funded pension provision and their contribution to adequate and sustainable pensions', available at: http://ec.europa.eu/social/BlobServlet?docld=743&langld=en

European Commission (2012), 'An Agenda for Adequate, Safe and Sustainable Pensions', White Paper, available at: http://ec.europa.eu/social/BlobServlet?docId=7341&langId=en.

European Commission (2012), 'Growth-Friendly Tax Policies in Member States and Better Tax Coordination in the EU', annex to the *Annual Growth Survey 2012*, available at: <a href="http://ec.europa.eu/europe2020/pdf/ags2012">http://ec.europa.eu/europe2020/pdf/ags2012</a> annex4 en.pdf.

European Commission (2014), 'Tax Reforms in EU Member States: 2014 Report', Taxation Papers, Working Paper, No. 48, available at:

http://ec.europa.eu/taxation\_customs/resources/documents/taxation/gen\_info/economic\_analysis/tax\_papers/taxation\_paper\_48.pdf

Fatica, S, Hemmelgarn, T and Nicodème, G (2012), 'The Debt-Equity Tax Bias: consequences and solutions', Taxation Papers, Working Paper No. 33, European Commission, available at: <a href="http://ec.europa.eu/taxation\_customs/resources/documents/taxation/gen\_info/economic\_analysis/tax\_papers/taxation\_paper\_33\_en.pdf">http://ec.europa.eu/taxation\_customs/resources/documents/taxation/gen\_info/economic\_analysis/tax\_papers/taxation\_paper\_33\_en.pdf</a>.

FSB (2015), Chair's Letter to G20 Finance Ministers and Central Bank Governors 'Financial Reforms – Progress on the Work Plan for the Antalya Summit', 9 April, available at: http://www.financialstabilityboard.org/wp-content/uploads/FSB-Chairs-letter-to-G20-April-2015.pdf.

G-20 (2015), 'G20 Finance Ministers and Central Bank Governors Meeting Communiqué', 17 April, Washington D.C., USA, available at: http://www.g20.utoronto.ca/2015/150417-finance.html

Gray, S and Talbot, N (2006), 'Developing Financial Markets', Bank of England Handbooks in Central Banking, No. 26, available at:

http://www.bankofengland.co.uk/education/Documents/ccbs/handbooks/pdf/ccbshb26.pdf

Hardcastle, R (2012), 'How can we incentivise pension saving? A behavioural perspective', Department for Work and Pensions, Working Paper No. 109, available at: https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/214406/WP109.pdf.

Heale, M (2014), 'CEM Benchmarking Investment Performance & Costs', The World Bank 6th Global Pension & Savings Conference April 2-3, available at:

http://siteresources.worldbank.org/FINANCIALSECTOR/Resources/Session5 MikeHeale Pension20 14.pdf.

HM Treasury (2011), 'Consultation on early implementation of amendments to the Prospectus Directive', March, available at:

https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/81265/consult\_early\_im\_plementation\_amendpd.pdf.

Hornung, D, Beer-Toth, K, Bernhard, T, Gardiol, L and Röthlisberger, T (2011), 'Verwaltungskosten der 2. Säule in Vorsorgeeinrichtungen und Unternehmen', No. 4/11, available at: <a href="http://www.oak-bv.admin.ch/fileadmin/dateien/themen/Forschungsbericht\_4\_11\_Verwaltungskosten\_der\_2.\_Saeule.pdf">http://www.oak-bv.admin.ch/fileadmin/dateien/themen/Forschungsbericht\_4\_11\_Verwaltungskosten\_der\_2.\_Saeule.pdf</a>.

Ionescu, L and Robles E-A (2014), 'Update of IOPS work on fees and charges', IOPS Working Papers on Effective Pensions Supervision, No. 20, available at: <a href="https://www.iopsweb.org/Working%20Paper%2020%20Update%20on%20IOPS%20Work%20on%20Fees%20and%20Charges%20.pdf">www.iopsweb.org/Working%20Paper%2020%20Update%20on%20IOPS%20Work%20on%20Fees%20and%20Charges%20.pdf</a>

ISDA (2011), 'Block trade reporting for over-the-counter derivatives markets', study, available at: http://www2.isda.org/attachment/MTY2NA==/Block-Trade-Reporting.pdf.

Jones, R and Llewellyn J (2013), 'UK Infrastructure: The challenges for investors and policymakers', White paper, Llewellyn Consulting and Pension Insurance Corporation, available at: <a href="https://www.pensioncorporation.com/sites/default/files/news/pic\_uk\_infrastructure\_investment\_white">https://www.pensioncorporation.com/sites/default/files/news/pic\_uk\_infrastructure\_investment\_white</a> <a href="paper\_july\_2013.pdf">paper\_july\_2013.pdf</a>

Lewis, S and Messy, F-A (2012), 'Financial Education, Savings and Investments: An Overview', OECD Working Papers on Finance, Insurance and Private Pensions, No. 22, OECD Publishing, available at:

http://www.oecd-

ilibrary.org/docserver/download/5k94gxrw760v.pdf?expires=1431347358&id=id&accname=guest&checksum=80D79A70888206E7FBB4760D6E8B49C2

London Stock Exchange Group (2015), 'AIM Factsheet', March, available at: http://www.londonstockexchange.com/statistics/historic/aim/aim-statistics-archive-2015/mar-15.pdf.

Madrian, B-C (2012), 'Matching Contributions and Savings Outcomes: A Behavioral Economics Perspective', NBER Working Paper No. 18220, July, available at: <a href="http://www.nber.org/papers/w18220.pdf">http://www.nber.org/papers/w18220.pdf</a>

Mirrlees, J-A, Adam, s, Besley, T, Blundell, R, Bond, S, Chote, R, Gammie, M, Johnson, P, Myles, G and Poterba, J (2011), 'Tax by design', Institute for Fiscal Studies, available at: http://www.ifs.org.uk/docs/taxbydesign.pdf.

OECD (2013), 'Improving pension information and communication: OECD survey and lessons learnt', Russia Financial Literacy and Education Trust Fund, available at: <a href="http://www.oecd.org/daf/fin/financial-education/TrustFund2013">http://www.oecd.org/daf/fin/financial-education/TrustFund2013</a> OECD %20Improving Pension Information and Communication.pdf.

OECD (2013), 'Pensions at a Glance 2013: OECD and G20 Indicators', OECD Publishing, available at:

http://www.oecd.org/pensions/public-pensions/OECDPensionsAtAGlance2013.pdf

Standard Life (2011), 'Keep on nudging: making the most of auto-enrolment', available at: <a href="https://www.standardlife.com/static/docs/2011/reports/keep">www.standardlife.com/static/docs/2011/reports/keep</a> on <a href="https://www.standardlife.com/static/docs/2011/reports/keep">nudging.pdf</a>

World Bank Group (2014), 'Doing Business 2015: Going Beyond Efficiency', report, available at: <a href="http://www.doingbusiness.org/~/media/GIAWB/Doing%20Business/Documents/Annual-Reports/English/DB15-Full-Report.pdf">http://www.doingbusiness.org/~/media/GIAWB/Doing%20Business/Documents/Annual-Reports/English/DB15-Full-Report.pdf</a>.

Wright, W (2014), 'Driving growth: making the case for bigger and better capital markets in Europe', New Financial report, available at: <a href="http://newfinancial.eu/wp-content/uploads/2014/09/Driving-growth-New-Financial-high-res.pdf">http://newfinancial.eu/wp-content/uploads/2014/09/Driving-growth-New-Financial-high-res.pdf</a>.

Zangari, E (2014), 'Addressing the Debt Bias: A Comparison between the Belgian and the Italian ACE Systems', Taxation Papers, Working Paper No. 44, European Commission, available at: <a href="http://ec.europa.eu/taxation\_customs/resources/documents/taxation/gen\_info/economic\_analysis/tax\_papers/taxation\_paper\_44.pdf">http://ec.europa.eu/taxation\_customs/resources/documents/taxation/gen\_info/economic\_analysis/tax\_papers/taxation\_paper\_44.pdf</a>.