

NAVIGATING THE STORM:

Setting long-term goals in volatile market conditions?

Rapporteurs: Cosmina Amariei and Diego Valiante

The 2015 ECMI Annual Conference (Brussels, October 20) was jointly organised by the European Capital Markets Institute (ECMI), the Centre for European Policy Studies (CEPS) and the Brevan Howard Centre for Financial Analysis at Imperial College London. Co-hosted by the National Bank of Belgium and the Belgian Financial Forum, the high-level event brought together academics, policymakers, and market participants from across Europe and beyond to discuss the challenges in creating a true European capital market.

Executive summary

Capital markets are needed to improve the funding of European corporates. But what drives financial integration and private cross-border risk-sharing, at the core of market-based systems? Certain legal and economic conditions are essential for the organic development of larger and more-liquid capital markets across the EU. While the Action Plan on Building a Capital Markets Union (CMU) champions the 'bottom-up' approach, some top-down action in the form of common institutions might be necessary due to pre-existing legal systems, market infrastructure and the economic interests in all 28 member states.

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The effectiveness of quantitative easing (QE) programmes and the path towards a normalisation of monetary conditions are sources of great concern for central banks around the world. QE is beginning to produce an impact on inflation expectations in countries like Sweden, where the intervention was quite substantial (close to 20% of all local government bonds are held by the central bank). There are also signs of increasing risk-taking behaviour, impact on market prices and redistributive effects. The prospect of a prolonged period of low inflation, however, was considered particularly worrisome for investments and economic growth.

A structural shift towards more market-based finance is inevitable and Europe needs to find its own model. In normal times, financial institutions provide liquidity in the market, but we are not in normal times, as central banks are the key source of market liquidity. This is causing a vast restructuring of the financial landscape and bank business models, but it will take some time for capital markets intermediation to develop further in Europe. Bank financing will continue to play a major role. More needs to be done to improve the functioning of “money market funding of capital market lending” at European level, with central banks providing the backstop as “dealer of last resort” to anyone running dealing activities (whether or not a traditional credit institution).

The stability of centralised market infrastructures, such as CCPs (central counterparties), is increasingly taking the centre of the discussion on crisis management. The regulatory framework around margining requirements and crisis management must take into account multiple risks, such as what comes after the ‘end of the default waterfall’. In particular, in case of any market event that may hoard trades on a specific financial instrument, ‘crowded trades’ can increase the overall risk of the infrastructure without changing the portfolio risk composition of individual accounts. These large exposures and extensive interconnections may increase the vulnerability of the system and undermine investor confidence. The current regulatory framework does not take into account the negative network effects of crowded trades. Safeguards must be put in place in order to deal with increased risk that is not picked up by current initial and variation margining models.

Session 1. Europe's Capital Markets Union: What is the 'long-term' view?

Law and finance



Keynote speech

- **Lord Jonathan Hill**, European Commissioner for Financial Stability, Financial Services and Capital Markets Union

Keynote presentation

- **Paul G. Mahoney**, David and Mary Harrison Distinguished Professor of Law, Arnold H. Leon Professor of Law, Dean, University of Virginia School of Law

Preliminary findings of the Final Report of the European Capital Markets Expert Group (ECMEG)

- **Francesco Papadia**, ECMEG Chairman
- **Diego Valiante**, ECMEG Rapporteur, Head of Research, ECMI and Head of Financial Markets and Institutions, CEPS

Panel discussion

- **Kay Swinburne**, MEP, Member of Economic and Monetary Affairs Committee
- **Florencio Lopez de Silanes**, Professor of Finance and Law, EDHEC Business School
- **Yann Le Pallec**, Managing Director, EMEA Ratings Services, Standard & Poor's Europe
- **Philipp Hartmann**, Deputy Director General, Research, European Central Bank

Moderated by **Franklin Allen**, Executive Director of the Brevan Howard Centre, Professor of Finance and Economics, Imperial College London



The ECMI Annual Conference was opened by an in-depth keynote speech by **Commissioner Jonathan Hill**, who described the Capital Markets Union (CMU) as a single market project, a project intended for all 28 member states. The financial crisis showed that Europe's

underdeveloped capital markets were not able to fill the gap left by a banking sector under distress. As evidence suggests, the US economy recovered at a faster pace after the crisis thanks to a greater range of funding sources and deeper capital markets. Moreover, the gap between Member States is even bigger than that between Europe and the US.

The integration and development of Europe's capital markets are therefore of paramount significance. While the Action Plan includes a few early measures, it does take a long-term view, aiming to build the CMU step-by-step and bottom-up by identifying long-standing cross-border barriers to the free movement of capital, e.g. insolvency law, tax treatment and securities law. Several areas were highlighted by the Commissioner, such as providing more funding choices to European businesses at different stages of their development, increasing investment choices for retail and institutional investors, and working with the supervisory authorities to strengthen supervisory convergence. *The full speech is available [here](#).*

From an historical perspective, **Paul Mahoney** explained that the presence of such a large and integrated capital market in the US is the result of a bottom-up, evolutionary process, mostly driven by the needs of issuing companies, investors, brokers and exchanges. In fact, integration was already well

advanced by the time of the Great Depression because financial markets developed around the trade of goods and services, well before financial regulation assumed a more important role. The first federal laws regulating primary securities markets, stock exchanges and listed companies entered into force only in the mid-1930s, as market developments needed some level of rules to minimise the risk of another crisis. The rules regarding negotiable instruments had evolved over a long period to reflect commercial practices and did not vary materially from one state to another. The US federal structure also helped to create uniformity in the choice of law. Over the years, many exchanges and broker-dealers disappeared through liquidations or mergers while a more organised market developed as more centralised structures for clearing, custody and settlement emerged. Only since mid-1970s, when Congress urged the Securities and Exchange Commission (SEC) for the first time to play a leading role in market structure, clearing and settlement and the dissemination of data has its regulatory presence started to intensify.



On the EU versus US comparison, Mahoney noted that the US had the fortunate history of developing its capital markets first and then regulation. Europe is currently doing it the other way around and some level of top-down intervention might be necessary in order to eliminate inefficient regulatory schemes at the country level. *The full speech is available [here](#).*

In discussing the CMU, **Francesco Papadia** indicated that it remains a fairly undefined concept, open to many interpretations. When compared to the monetary union and the banking union, the same degree of understanding and action is yet to be reached. In his view, achieving progress with the CMU is essential before Europe can improve its gloomy economic prospects.



Diego Valiante presented the preliminary findings of the forthcoming ECMEG Report on CMU, including a stylised representation of the European economy's balance sheet by matching the financial assets held by households with the financial liabilities of NFCs (non-financial corporations).

Europe's financial system is over-banked and under-marketed and there's very little cross-border financial integration, except for interbank and sovereign bond markets. The equity markets are largely fragmented along geographical lines; and there is a lack of depth and activity in secondary markets with a poor quality of the trading flow. Bond markets are mainly OTC and as active as equity markets, their structure being largely driven by dealers' inventory. The asset management industry is fragmented and costly compared to the US, with fairly limited cross-border and retail penetration. Unlocking the sizeable amount of cash sitting on the balance sheets (estimated around €1.8 trillion) of the households could act as a real game changer.

He emphasised that CMU should be first and foremost about achieving sustainable financial integration in Europe. Other policy objectives (investment and financial stability) are indisputably important, but they should remain outside the CMU project. The financial crisis revealed that not only the intensity but also the quality of the financial integration process matters. The financial integration driven by senior wholesale interbank flows was far from complete and led to sudden stops and liquidity crises. This process can only be rebalanced by allowing for more cross-sectional (market-based) risk-sharing alongside inter-temporal (bank-based) risk-sharing on a cross-border level. The full harmonisation approach has failed in the past and would not work in the future.

Instead, efforts should focus on removing barriers that reduce cost predictability of a cross-border financial transaction (top-down), and leave the rest to regulatory competition (bottom-up). The ECMEG report will therefore revolve around three main building blocks: a minimum informational infrastructure (price discovery), an integrated infrastructure (execution), and a European legal and institutional architecture (public and private enforcement). *The report will be available [here](#).*

Kay Swinburne expressed the opinion that the CMU is a 'single market' piece of legislation. In her view, CMU is definitely not about the four or five most mature capital markets in Europe. Rather, it is about devising the tools to unlock and further develop capital markets across all 28 member states but also creating the opportunities for global investors to come in and participate. CMU has a very large goal at stake, namely to build confidence and trust in Europe's capital markets and try to instigate the cultural change to turn savers into investors and to connect them with the companies that need funding. There are many challenges ahead, but the bottom-up approach, which was never done in Europe, represents a huge opportunity for market participants to come forward with the ideas necessary to identify the barriers and what needs to be corrected/tweaked in the legislative framework. The European Semester country-specific reports and the cumulative impact study may help to highlight which member states are already raising additional barriers, e.g. gold-plating. A European capital market will emerge even without a single supervisor if the plethora of rules enacted in the past five years, i.e. the single rulebook and the level 2 rules coming through ESAs, were enforced adequately by the Commission.

Another important component of the development of capital markets, namely investor protection, was brought into the discussion by **Florencio Lopez de Silanes**. Stronger investor protection, as measured by a series of indices, can create the conditions for deeper, safer and more stable financial markets, better returns for investors and better financing terms for firms. For example, the cost of capital is lower (roughly 25% less) in countries with higher investor protection. In Europe, the UK, but also NL, DK, SE, are leading in terms of investor protection. He indicated that over-regulation becomes problematic to the extent that it can hurt innovation, but investors need some level of protection, which mainly comes from disclosure requirements and the power to act (private enforcement tools). Enhanced disclosure of conflicts of interests and self-dealing is extremely important. There are EU member states in which transparency requirements are not aligned on average with those in the more advanced economies. These practices are expected to improve once the level-2 rules drafted by ESMA become applicable. *The presentation is available [here](#).*

Focusing on the funding structure, **Yann Le Pallec** argued that CMU needs to fundamentally diversify funding for mid-sized corporates and ultimately make them less reliant on bank funding channels. In 2014 alone, 60% of issuers in the US private placements markets were EU-based companies. In Europe, private placement and corporate bond markets are underdeveloped. A pan-European private placement framework and a common prospectus regime for bond issuance will definitely help these markets flourish. In his view, greater disclosure of standardised information by mid-sized corporates is of equal importance. For example, a body of IRFS disclosure standards catering to the needs of mid-sized corporates can make information available to investors across Europe.

This in turn would allow the private sector to produce a broad range of opinions, benchmarks and indicators so that investors can carry out their own due diligence, and ultimately stimulate more investments. Compared with funding patterns in the US, he observed that bank funding is deeply embedded in the European economy, and the CMU will only bring balance to the way in which the European economy is funded. The ability of an economy to finance itself through various and multiple channels is also important from the point of view of financial stability.

By bringing the inter-institutional perspective, **Philipp Hartmann** indicated that the ECB is strongly supportive of the CMU project as it will also improve the economic resiliency of EMU. The bottom-up approach specific to the capital markets union stands in contrast with the

top-down approach specific to the banking union. Nonetheless, he made the point that some top-down action in the form of common institutions for capital markets would be required sooner or later.

He also drew the attention to something that is not yet featured in the Action Plan, which is the emphasis on cross-sectional risk-sharing via capital markets. In his view, cross-sectional risk-sharing is both wealth-enhancing, i.e. it helps consumers to smooth consumption, and it is more resilient, i.e. if there are asymmetric shocks it will not unravel like inter-temporal (interbank) risk sharing does. Evidence shows that in the US, 80% of cyclical shocks are buffered by equity, debt, savings and fiscal measures before hitting consumption, while in Europe it is at a mere 40%.

Session 2. Quantitative easing, asset prices and economic growth

Macroeconomic and institutional outlook



Keynote speech

- **Marianne Nessén**, Head of Monetary Policy Department, Sveriges Riksbank

Keynote presentation

- **José-Luis Peydró**, ICREA Professor of Economics, Universitat Pompeu Fabra and Barcelona GSE

Panel discussion

- **William De Vijlder**, Group Chief Economist, BNP Paribas
- **Olivier De Bandt**, Director of Research at the Prudential Supervision Authority, Banque de France
- **Colin Ellis**, EMEA Chief Credit Officer, Moody's

Moderated by **Daniel Gros**, Director, Centre for European Policy Studies

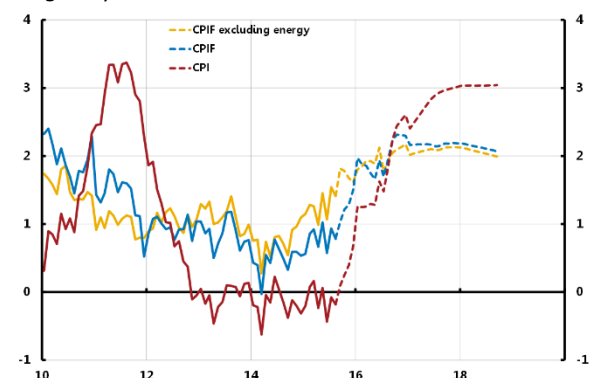
In the aftermath of the financial crisis, central banks around the world engaged in quantitative easing (QE) programmes in an attempt to fuel inflation and growth.



Marianne Nessén opened this session explaining what prompted the Riksbank's decision to significantly step up its intervention at the beginning of 2015, even though both the real economy and the financial sector were in fairly good shape. Firstly, in 2013 and 2014, there was a serious risk for inflation

expectations to become unanchored. Stable inflation expectations are a sign of the stability and credibility of the regime but also extremely important in the wage-setting process. Secondly, the central bank couldn't stand idle when it became clear that the ECB was going to embark on a large QE programme, due to its impact on the currency. Since January 2015, the Riksbank has cut the repo rate from 0.0% to -0.35% and made purchases of government bonds on several occasions, which will amount to SEK 200bn by the end of 2016 (almost 20% of the debt stock).

As to the efficiency of these measures, the interest rate differential significantly narrowed, inflation expectations are rising and economic growth is near to the historical average. These measures also kept the effective exchange rate relatively weak, as the krona risked strengthening earlier and more rapidly than originally forecasted.



When it comes to the impact on other asset classes, house prices are rising very rapidly and so also is household indebtedness. Nonetheless, addressing such risk is not in the realm of monetary policy but of fiscal and macro-prudential policies. *The presentation is available [here](#).*



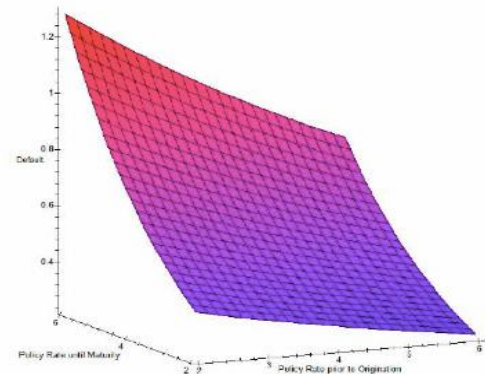
José-Luis Peydró presented empirical studies on the impact of ultra-loose monetary policy in advanced economies via several transmission channels. On the one hand, evidence shows that expansionary monetary policy reduces credit crunches and increases economic activity, especially

during crises. Positive effects are stronger on agents (sovereigns, banks, firms and households) that are financially constrained, e.g. more impact on peripheral countries compared to the core countries in the euro area. On the other hand, conducting monetary policy over a prolonged period of time may encourage reckless financial behaviour and search-for-yield by financial intermediaries, which in turn may lead to the creation of credit and asset-price bubbles, and threaten financial stability. In his view, it should not be ignored that the macro-prudential framework has its own limitations. It has been not tested many times and is susceptible to regulatory arbitrage.

On Peydró's findings about the risk of fire sales by banks and the crowding-out effects on credit provision, **William De Vijlder** argued that in the midst of financial crisis there is a huge degree of uncertainty and opacity and the investment horizons are shortened, i.e. the focus is on instruments that could be priced on a daily basis and exited rapidly. It is only when the uncertainty declines that there is a tendency to move towards longer horizon commitments and extend the central loan book to SMEs. Furthermore, José-Luis Peydró indicated that a positive aspect of QE is that it made this business less attractive for banks but that banks may use central bank liquidity to support trading activities not providing credit to the real economy.

De Vijlder also stressed that current environment is characterised by increasing non-linearity, e.g. while monetary policy in the US is expected to gradually normalise, further stimulus seems to be necessary in the euro area. In his view, the spillover effects, and implicitly the reduced autonomy of monetary policy, have become evident in recent years, e.g. the US vs emerging markets, euro area vs non-euro area countries. On the issue of sequencing, he argued that the problem of too low inflation rates and inflation expectations in the euro area should be addressed first. A strong macro prudential policy framework can tackle the risk of unintended consequences, while the challenges posed by with policy normalisation can be dealt with at a later stage.

From the supervisor's perspective, **Olivier De Bandt** discussed the impact of a QE/low interest rate environment on the risk-taking behaviour of European financial institutions. With respect to insurers, concerns were expressed about a rising duration of their portfolios and a shift towards riskier assets. It was argued that in an attempt to minimise duration mismatches, insurers may increase the duration of their portfolio by investing in longer-term bonds, which may push long-term interest rates down even further.

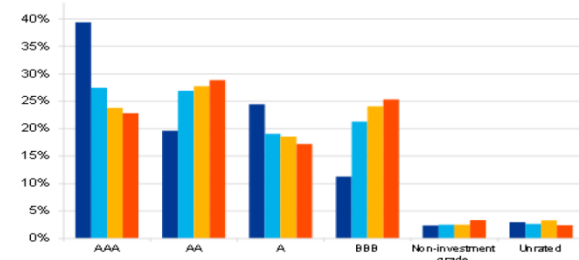


With respect to the impact of the Fed's 2013-14 'tapering' announcements on emerging markets, he explained that countries with stronger macroeconomic fundamentals and deeper financial markets, experienced smaller currency depreciations, smaller increases in government bond yields and almost no decline in stock prices compared to the countries that faced an abrupt reversal in capital flows.

The presentation is available [here](#).

Data between 2013 and 2014 revealed an increase of 3.6% in asset duration of the German insurers but no significant impact for the French insurers. Some insurers appear to be taking on more risks, with evidence of portfolio shifts towards lower-quality bonds.

Bond investments in selected large euro area insurers split by rating category (from 2011 to 2014)



With respect to banks, the low interest rates had an impact on their profitability. The decrease on net interest margins needs to be replaced by other sources of revenue, higher margin businesses, which are also riskier. Similar to insurers, the data show that banks have extended their asset maturities and started investing in riskier asset classes throughout 2014. All these categories of emerging risks differ across countries and their evolution needs to be further monitored by the supervisors. *The presentation is available [here](#).*

With reference to the current environment, **Colin Ellis** argued that it revealed something about the ability of central banks to anchor inflation expectations. A critical aspect of QE is the extent to which it feeds through into the real economy, namely lowering borrowing costs for households and corporates. He argued that this may happen much more quickly in a market-based system than in bank-based system, as is found in the EU. Overall, the impact of QE on growth has been much less than expected and the central banks may have overestimated the efficacy of the programmes.

Also QE didn't steer investment in either the US or Europe; the investment cycle picked up along with the broader economic conditions. He also argued that concerns over the impact of QE on asset prices are warranted but somehow unfounded as there are no signs of strong, pervasive asset bubbles at global level, possibly only isolated instances. Based on scenarios devised by Moody's, the idea that European high-yield corporate default rates would suddenly jump from

current levels of 2% to return to crisis level of 10-12% seems unlikely. He also made a final point that monetary policy, whether conventional or unconventional, is always redistributive. Provided that QE succeeds in raising asset prices and pushing down yields, savers are going to be affected and those that serve them, namely pension funds, insurers and banks to a certain degree, will come under pressure as well.

Session 3. The rise of asset management and capital market-based financing: A cyclical or a structural shift?

Market structure



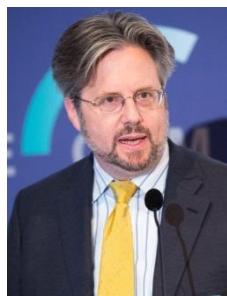
Keynote presentation

- **Perry Mehrling**, Professor of Economics, Barnard College, Columbia University

Panel discussion

- **David Blumer**, Head of Europe, Middle East & Africa, BlackRock
- **Rhodri Preece**, Head, Capital Markets Policy EMEA, CFA Institute
- **Huw Van Steenis**, Head of Financial Services Research, Morgan Stanley

Moderated by **Karel Lannoo**, CEO, Centre for European Policy Studies



From a 'money view', **Perry Mehrling** delivered a comprehensive presentation on the interplay between the real economy and the financial system, the interactions between so-called 'deficit' and 'surplus' agents in a bank-based vs. market-based system, and the evolution and co-existence of financial intermediaries of various types (banks, insurers, pensions funds, mutual funds, shadow banks).

In his view, it should be well understood that the monetary and financial system is not just another sector to be encouraged or discouraged according to various priorities, but rather the essential infrastructure for all sectors of any market economy. This is why when the financial plumbing 'runs into trouble', the real economy is going to suffer. Nonetheless, it is at present very difficult to assess the stability of the financial system given the interventions by central banks worldwide and the instability of the main global currency (the US dollar). He remarked: "We've been through 7 years of war finance, and it takes a long time to make the transition from war finance to peace finance. We aren't really sure how it's going to look like, so it's a good idea to walk really slowly and see how it goes."

With respect to market liquidity, he also stressed that one should look at not how much but at who is providing funding: "We cannot move to peace finance without market prices. QE replaced private dealers with public dealers, central banks became dealers of first resort.

In a peace economy, the market liquidity is supplied by profit-seeking dealers, not central banks." With respect to the rise of shadow banking, he referred to as "money market funding of capital market lending", a natural form of banking in a globalised world, a centrally important channel of credit for modern times, which needs to be understood on its own terms. "We're all trying to figure out how the emerging new system works, and how its inherent instability can best be managed. In this new system with "mature money-dealing systems but immature risk-dealing systems", it is not the shadow bank that needs a liquidity backstop from central banks, but rather the dealers that stand in between, as shown in the stylised model below.

Capital Funding Bank		Global Money Dealer		Asset Manager	
Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
RMBS	MM funding	MM funding	"deposits"	"deposits"	Capital CDS
CDS					IRS
IRS					

Derivative Dealer	
Assets	Liabilities
Credit Default Swaps	Credit Default Swaps
Interest Rate Swaps	Interest Rate Swaps

Mehrling explained that most large investment banks probably have elements of all four functions, while capital funding bank structures can be found on the balance sheets of most European universal banks, but also in off-balance sheet conduits of various kinds. MMFs (money-market funds) might be considered global money dealers, but they are not the only ones.

Pension funds might be considered asset managers, but also non-financial corporate treasurers and even synthetic ETFs (exchange-traded funds). CCPs might be considered derivative dealers, but so also is anyone running a bespoke swap book.

On the question of which model would be best for Europe and the comparison with the US, Mehrling explained that the US system itself is in institutional flux, and is therefore a moving target. Each financial system and its institutional framework are in fact the result of an evolutionary process and there is a particular organic logic behind it. Hence, Europe will

On the growth of asset managers and AuM (assets under management), **David Blumer** explained that it is actually a reflection of the significant growth of asset owners (private individuals and institutional investors). He welcomed the renewed focus of policy-makers on stimulating greater funding from asset owners into the real economy, whether directly or through intermediaries.

In recent years, both primary and secondary corporate bond markets became extremely fragmented, which is unsatisfactory to both private and institutional investors. For example, the top 10 issuers in Europe and the US have issued together 20 equities but approximately 18,000 bonds. Consequently, he stressed that market participants and policy-makers should focus on repairing market plumbing, in order to not only lower the cost of capital for issuers but also to improve the fairness for the end investors by reducing execution costs in heavily fragmented markets.

Interestingly, more stringent bank rules also have an impact on business models, namely by encouraging banks to focus much more on low capital-intensive activities, such as private banking and retail wealth management, but also to revamp their asset management arms. In the post-crisis period, the financial system is far more robust and ready to go through periods of higher volatility and reduced market liquidity in a much more considered manner. For example, as a result of regulation, there is a shift towards business agency models, where the market risk is borne by end investors and not only by bank balance sheets. There is also a move towards more risk management applied not just within the banks but also at the level of investment funds.

Rhodri Preece indicated that a confluence of factors has allowed asset managers to step up into the credit provision space. First, there is a segment of alternative asset managers, in particular private equity vehicles, that are engaging in direct loan provisioning to borrowers such as mid-sized companies. Second, there is a set of funds that actually invest in loans marketed on peer-to-peer lending platforms. These loans can offer a relatively attractive rate of return to the end investor, who bears the risk, sometimes in the range of 10-15%, which makes them particularly attractive.

have to find its own model (monetary union, banking union, capital markets union, and so on) and think about whether the group of financial services should be different (given that social insurance in Europe is much greater than in US). Equally important is how Europe wants to interface with the emerging new global system in terms of capital inflows and outflows. On the discussion about CMU, one should not be thinking about the 'perfect' model and then pass laws, but about how to contribute to an organic development of capital markets across Europe. [The presentation is available here.](#)

Even though significantly smaller in comparison with traditional banking, there is a growth potential for this segment in the short to medium run, particularly in an environment with constraints on banks and low interest rates. Nonetheless, such conditions are likely to fade in the long run, so that the sector will depend on the sustainability of these channels and whether it can compete in a fair manner with the bank-based finance.

In the Action Plan on CMU, there is a special mention about loan originating funds. The Commission has acknowledged the need to look at different legal rules currently applying in different member states, the conditions in which these funds can originate loans and what may be hampering their ability to market these funds cross-border and make the loans available across jurisdictions.

Huw Van Steenis stated that the overreliance on an oversized banking system poses many challenges. A shift towards market-based finance is already happening. In recent years, the capital markets acted as a shock absorber. For example, the eurozone banks have reduced lending by €600 billion in the last five years, while the market-based finance has provided €370 billion more funding to same cohort of eurozone corporates, meaning that 2/3 of all the bank shrinkage has been replaced by market-based funding.

In looking at the possibility for mid-sized companies to tap long-term funding through a European private placement market, one should think about who are going to be the buyers of small bonds from unrated companies, which have not come to the bond market ever before or only episodically. These bonds are likely to be illiquid and quite risky for retail investors, and therefore they would be better placed with insurance companies and pension funds, which have long-term locked-up money, and potentially mutual funds.

He also emphasised that supervisors must be able to understand the risks and test them under various scenarios. For the stress testing of the banking system, the internal and external analytics have significantly improved. Adapting those in a less heavy-handed manner to the asset management community might be helpful, e.g. running mini-stress tests between the supervisor and the asset manager.

Session 4. Unravelling Penelope's web: Crisis management and resolution of financial market infrastructure

Crisis management



Keynote presentation

- **Albert Menkveld**, Professor in Financial Economics, VU University Amsterdam

Panel discussion

- **Martin Merlin**, Director Financial Markets, European Commission, DG Financial Stability, Financial Services and Capital Markets Union
- **Geert Vanderbeke**, Executive Director, Global Sales & Sales Support, ABN AMRO Clearing
- **Sheri Markose**, Professor of Economics, Essex University
- **Dennis McLaughlin**, Group Chief Risk Officer, LCH.Clearnet

Moderated by **Andrei Kirilenko**, Visiting Professor, Brevan Howard Centre, Imperial College Business School



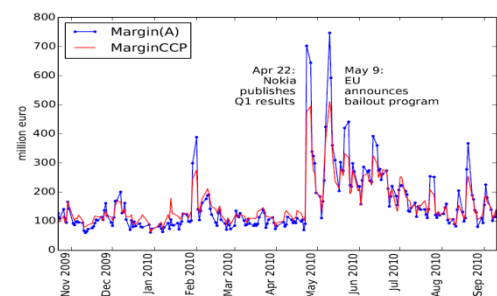
Albert Menkveld presented the main findings a recent [paper](#) entitled "*Crowded Trades: An Overlooked Systemic Risk for Central Clearing Counterparties*". Crowded trades, i.e. when the trades crowd on a single security/set of securities or risk factor, constitute a risk to a CCP (central counterparty), and even

more when the markets get turbulent. They raise CCP tail risk without changing individual member portfolio (tail) risk. At present, the crowded-trade risk is not appropriately accounted for in the standard CCP risk-management practice of imposing margins on a member-by-member basis. The margins collected by the CCP reflect the risk in that clearing member's portfolio but the extent to which there is a correlation between a clearing member's portfolio returns (P&Ls) due to crowded-trades does not come up.

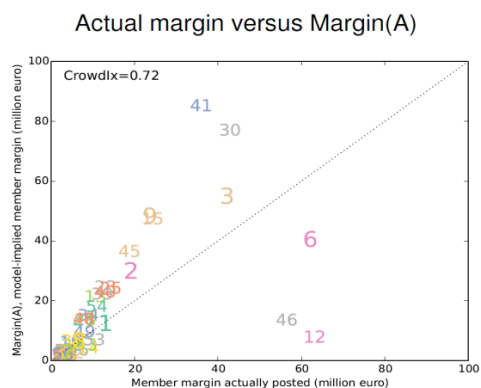
In order to manage the crowded-trade risk at the CCP level, Menkveld developed two measures: i) *CrowdIx*, a crowding index, which can take a value between 0 and 1, in order to measure the size of crowded-trade risk; and ii) *Margin(A)*, an alternative margin methodology, which takes a fundamentally different approach relative to standard margin methodologies, as it first computes the aggregate collateral needed at the level of the CCP and then disaggregates it across clearing members. In short, those who join crowded trades are required to post more collateral.

Furthermore, he calculated these two measures for a 2009-10 sample of trades in Nordic stocks by members of a large European CCP. The graph below shows, for the first peak margin day, that the difference between what was actually posted against the margin and what should have been posted, if crowded risk had been accounted for, amounted to €250 million.

Aggregate daily margin: actual margin and Margin(A)

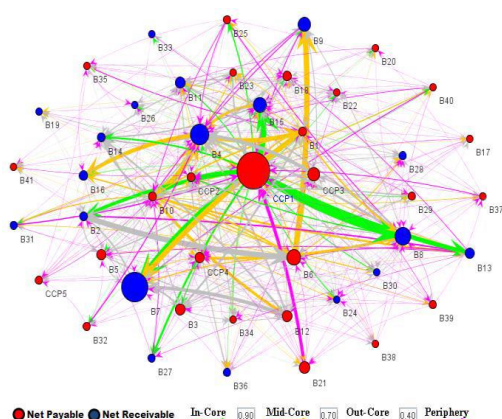


The plot below, in which 57 clearing members were anonymised by a random number between 0 and 100, pertains to day after Nokia's announcement of very disappointing Q1 earnings. For example, member 41, with a trade portfolio heavily exposed to Nokia (around 21%) posted less than €40 million but should have posted more than double that amount, while member 12, for which Nokia was not a top-ten exposure, posted more than €60 million but it should have posted less than €10 million.



Sheri Markose presented the main findings of a co-authored [paper](#) “*CCPs and Network Stability Analysis: Reforming OTC Derivatives Markets*”, which uses data on derivatives assets and liabilities, Tier 1 capital and liquid asset holdings for the 41 largest banks active in the global OTC derivative markets (interest rates, credit, currency, commodities and equity) in Q2 2012. The network analysis confirms that the increased use of central clearing (under four different scenarios) is fundamentally changing the topology of the financial network, leading to higher risk concentration in CCPs.

Clearing scenario 1 (near term)



The analysis also underscores the importance of understanding the stability of networks in which central clearing and non-central clearing co-exist. Any shortcomings in the design or risk management framework of the CCP could, in the event of an extreme shock, have spillover effects throughout the system. Interconnectedness risk is becoming as important as other categories of risks. The data on banks’ OTC derivatives positions also showed that there is a trade-off between liquidity risk and solvency risk. While collateralisation reduces credit risk, at the same time it increases liquidity risk by encumbering banks’ high-quality assets. This has broader macroeconomic implications in a collateral-hungry financial system. [The presentation is available here.](#)

From a business perspective, **Geert Vanderbeke** indicated that is important for every CCP to have a diversity of clearing participants and to preserve their trust by fulfilling the payment obligations towards them, e.g. timely distribution of profits.

As to how industry received the proposals to measure and account for the crowded-trade risk, it was indicated that unpredictable elements/inputs in the computation of the margins might affect trading in negative ways and therefore should be avoided. In other words, solutions that do not interfere with day-to-day trading need to be designed. For example, one possible way would be to measure crowded trades over time, and if the risk manifests itself a lot, then perhaps there should be a discussion of default fund contributions every quarter and an analysis of whether some members should contribute a bit more to the fund. [The presentation is available here.](#)

This suggestion is based on a number of financial safeguards, such as membership structure and supervision, a validated risk-management model, and an efficient default management process (loss absorption waterfall, default fund, recovery and resolution plans). Vanderbeke also stressed that the role of the general clearing member (GCM) should not be underestimated. In Europe, for instance, the GCM is liable for the positions of its portfolio of clients, including non-clearing members. In his view, the risk-management capacity of the clearing members is as important as that of the CCP itself, as they are managing the true risk of their clients. This should also be looked at in the context of highly interconnected global infrastructures, e.g. members clearing their clients’ trades, executed on various trading venues, by guaranteeing positions in multiple CCPs. With respect to the burden-sharing in the case of a member default, he was of the opinion that all participants in the chain should participate, including end-investors and even trading platforms. This view may not be particularly welcome by the buy-side using clearing members’ services, i.e. it would mean that clearing members will most likely pass-through certain losses to end-users.

Dennis McLaughlin indicated that it will be helpful to look at the risks faced by CCPs in a more structured manner, e.g. counterparty risk, liquidity risk, investment risk, operational risk and externalities, focusing in particular on those risks that can hit directly the capital of the CCP – those that fall outside the normal clearing risk protection.

The default of one member or more will give rise to a temporarily unbalanced book and CCPs can apply various well-known tools in order to flatten the book, such as margins, credit policies against members, default funds and unfunded assessments, and even apply variation margin haircuts, if necessary. The CCPs are also facing a large liquidity risk that is related to the market risk of storing the initial margins. For example, EMIR doesn’t allow CCPs to keep more than 5% of the collected initial margins unsecured in any commercial bank, which means by default that 95% must be invested in repo markets.

Liquidity risk is even more important at the present time. In McLaughlin’s view, there are some contradictory forces at play, in which one set of regulations is mandating central clearing and increasing the liquidity needs of CCPs, while another set is contracting the various avenues available to the CCPs

in which to invest the initial margins, e.g. dealer banks retreating from the repo markets.

CCPs can also incur losses on their investment portfolio and directly hit the capital of the CCP, as there are no members' margins in the way to buffer against them. One way to reduce such an investment risk is for CCPs to introduce 'new skin in the game' rules for clearing members. CCPs are also facing custody risk if their ability to turn paper margins into cash is impaired.

McLaughlin also referred to the pro-cyclicality risk, which manifests itself as a result of central banks' actions around the world that are keeping yields very low. In short, margins are falling vis-à-vis yields and volatility, thereby masking the risk in the CCP. Even though these risks have been acknowledged, it is very difficult for CCPs to justify the need for higher margins to their clearing members.

On the crowded-trade risk, he mentioned that three years ago LCH.Clearnet started to measure the alignment risk and charge a margin for the extra risk in the case of securities trading. The CCP is currently looking into extending this into derivatives trading where things are a bit more complex.

Martin Merlin indicated that the regulators have mostly focused on addressing the too-big-to-fail problem in the banking sector, the same questions are now being raised with respect to CCPs. Central clearing does not eliminate the interconnectedness and counterparty risks, but it basically reconfigures these risks within the CCPs. With more classes of OTC

derivatives designated for central clearing in Europe, a greater accumulation of risk at the CCP level is expected in the future. The EMIR Review, which is currently under way, provides the possibility to revisit the legislative text if it finds that the prudential measures originally established are in need of further adjustment.

The European Commission is working on a legislative proposal on the recovery and resolution of CCPs within the EU, consisting of a comprehensive toolbox for recovery for CCPs and a comprehensive toolbox for resolution for regulators. It is desirable to stay at the recovery stage and never go into resolution, employing widely accepted tools such as 'cash calls', variation margin haircuts and possibly the forced allocation of contracts among non-defaulting members.

One issue that is still open is whether initial margin haircuts (IMH) should be added to the toolbox. This is particularly problematic as it does not fit well with many insolvency laws in Europe where initial margins, which contain the largest amount of money, are bankruptcy remote. It might also create distortions and possible regulatory arbitrage between the EU and US, which should be avoided. At the same time, in order to minimise taxpayers' losses, one should look upon haircuts of initial margins as a last resort. Dennis McLaughlin replied that members have a choice: they can give cash or certain securities for initial margins. Those securities are locked up in a custodian box, which is opened up only if the members go into default, but this solution may also pose liquidity issues.



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