



THE FIVE YEARS AHEAD:

A New Action Plan for Europe's financial markets?

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A lack of risk-sharing financial integration makes the financial system more prone to fragmentation when losses on financial claims materialise. Bank-based over-indebtedness in Europe's private sector has endangered the solvency of states and driven fragmentation. Banking union will not thrive without a fully-fledged fiscal backstop.

If not properly designed, new capital requirements on banks may have long-lasting effects on liquidity, but they are necessary to prop up the financial system against the risks we experienced during the last financial crisis. Law's elasticity also played a key role in creating the liquidity that financial markets needed to grow and, consequently, offer a space for central bank interventions. Nonetheless, policy-makers should pay more attention to pricing mechanisms. Illiquidity is not necessarily a problem if it is correctly priced.

Trading technologies have improved market liquidity and offered better price formation through increased competition among trading venues. Despite the unanimous view about the disruptive nature of those technologies advances, views still diverge about what the infinite race to be faster (continuous trading) may produce in terms of collateral damages for market quality. A proposal for discrete trading has reopened discussions about the future of market microstructure.

Led by social networks, crowdfunding has become a catalyst for the democratisation of innovation and finance. Its rapid development confirms that this social and financial phenomenon is here to stay and could soon complement traditional bank and capital markets funding, especially for start-ups and SMEs.

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Session 1: Reverting Financial Disintegration: What implications for the future of the Euro area in the European Union?

Macroeconomic and institutional outlook







Keynote speech

Thomas Wieser, President of the Eurogroup Working Group and the Economic and Financial Committee, Council of the EU

Keynote presentation

Barry Eichengreen, Pitt Professor of American History and Institutions, University of Cambridge and Professor of Economics and Political Science, University of California, Berkeley

Panel discussion

- Fabian Amtenbrink, Professor of European Union Law, Erasmus University Rotterdam and EURO-CEFG
- Peter Grasmann, Head of Unit, Economic Analysis of Financial Markets and Financial Stability, European Commission
- Yves Lemay, Managing Director, Financial Institutions and Sovereigns, Moody's
- > Philippe Gudin de Vallerin, Chief European Economist, Barclays

Moderated by Rebecca Christie, Bloomberg News Correspondent.



Thomas Wieser, President of the Eurogroup Working Group and the Economic and Financial Committee at the Council of the European Union, opened the conference by discussing the importance of achievina sustainable financial integration for the euro area. While financial deepened integration after significantly the

introduction of the euro, the incomplete nature of the financial integration achieved before the crisis - mostly debt-driven and over-reliant on bank-based financing, made the euro area susceptible to fragmentation during the crisis and created many vulnerabilities. Despite improvement in most market segments in the past two years, a relatively high degree of fragmentation still persists. Doubts over the viability and effectiveness of the euro area will only be removed if substantial steps towards economic, fiscal and political union are taken. Nonetheless, Mr Wieser stated that growth in Europe would not come from huge expansionary fiscal policies, but rather from continued reforms and higher levels of private investment. Finally, he argued that the creation of the banking union (BU) contributed to restoring confidence in the banking sector, and that the capital markets union (CMU) has the potential to deepen integration even further.

Barry Eichengreen, Pitt Professor American History Institutions at University Cambridge, questioned the ability of BU to reverse financial fragmentation in the absence of a fully-fledged/adequate fiscal the backstop to resolution mechanism, and perhaps common deposit guarantee scheme. Greater fiscal integration



will create further tensions with EMU outs, he argued. The CMU project will also have to deal with greater integration of securities payment infrastructure, which is not currently as integrated as the currency payment infrastructure. This may be another area of conflict between EMU and non-EMU countries. According to Mr Eichengreen, Monnet's neo-functionalism triggered the law of unintended consequences, particularly if people are not asked about the merits of this approach. This statement was echoed by Fabian Amtenbrink, Professor of European Union Law at the Erasmus University Rotterdam, who called for more inclusive governance of the euro area in order to enhance citizens' support for the project and to avoid a generalised public backlash/resistance. This would also require a greater inter-institutional balance and more powers for the European Parliament.

Although the EU has and will continue to have a predominantly bank-based financial system, the panel saw a greater role for capital markets as the pressure on banks is likely to continue and credit growth will remain sluggish. Yves Lemay, Managing Director for Financial Institutions and Sovereigns at Moody's, argued that facilitating effective market discipline is crucial for the safety and soundness of the banking system. A clear roadmap for capital markets union (CMU) has thus been regarded as essential in view of the new economic climate, not necessarily due to novelty of the project. A more diverse financial system should be able to serve the real economy better and contribute to economic recovery. Peter Grasman, Head of the Economic Analysis of Financial Markets and Financial Stability Unit at the European Commission,

made the point that a better understanding of the project is necessary.

With the high likelihood of recession and deflationary spectre in the euro area, Mr Eichengreen recommended more action on the demand side and more caution with respect to structural reforms and fiscal consolidation because they can have deflationary effects, especially in bad times. In the long run, however, these would indeed bring positive effects because the main problem in the euro area is a structural one. Philippe Gudin de Vallerin, Chief European Economist at Barclays, concluded that reforms could be a major contribution to restoring confidence and boosting consumption and investment

Session 2: Regulating under uncertainty: The impact of financial reforms on liquidity

Law and Finance







Keynote speech

Mathias Dewatripont, Vice Governor, National Bank of Belgium

Kevnote presentation

Katharina Pistor, Michael I. Sovern Professor of Law, Columbia Law School

Panel discussion

- **Ed Fishwick**, Co-head of Risk & Quantitative Analysis Group, BlackRock
- > Franklin Allen, Executive Director, Brevan Howard Centre for Financial Analysis, Imperial College London
- **Enrico Perotti**, Professor of International Finance, University of Amsterdam

Moderated by **Alessio Pacces**, Professor of Law and Finance, Erasmus University Rotterdam and EURO-CEFG.



Matthias Dewatripont, Vice Governor at the National Bank of Belgium, argued that liquidity regulation, together with capital regulation and resolution mechanisms, have been considered necessary to make financial institutions more resilient, less reliant on central banks (free riding) and less likely to induce risk in the system. He nevertheless

pointed to the conflict between liquidity requirements and the new "bail-in fashion", which is politically viable but enlarges the set of bank claim-holders, even under systemic stress. Greater long-term junior liabilities may be able to reduce pressure on senior debt-holders and

thus reduce the likelihood of systemic stress (or even a run).

Katharina Pistor, Michael I. Sovern Professor of Law at the Columbia Law School, argued that law can shape liquidity in the financial system, given that liquidity vulnerabilities are in some way inherent



to most forms of financial intermediation. The legal enforcement of property rights on the financial claim allows liquidity creation in times of growth but also rapid liquidity shrinkage in times of crisis. Suspension of the law can control the downward pressures.

Franklin Allen, Executive Director at Brevan Howard Centre for Financial Analysis (Imperial College), claimed that the mispricing of liquidity caused panic and disorderly interventions during the crisis. Ed Fishwick, Co-head of Risk & Quantitative Analysis Group at BlackRock, echoed this statement by arguing that illiquidity is not a problem per se, as long as it comes with the right risk premium.

Financial reforms are gradually being implemented worldwide. Until a couple of years ago, liquidity risk was not the main focus of banking regulators. But the financial crisis showed how rapidly market conditions can change, exposing severe liquidity risks for some institutions. The pricing of liquidity should be factored

in when deciding to regulate liquidity in one form or another. Liquidity pricing varies over time and depends on volatility in the market conditions, changes in the fundamentals and distortions caused by implicit guarantees (fictitious protection) or reliance on ex post intervention.

The panellists agreed that in the current climate of tighter banking regulation, the 'shadow banking' (or capital markets-based banking) sector is set to grow further. Enrico Perotti, Professor of International Finance at the University of Amsterdam, sounded a note of caution about the incentives that financial institutions have to arbitrage around regulatory capital ratios. Investment products that are similar to banking products will be treated in the same way. Mispricing of shadow banking liquidity requires costly (because unpredictable) ex post intervention.

Session 3: Too fast too furious? The future of market microstructure in shaping a pan-European financial markets architecture

Market microstructure







Keynote presentation

Fric Budish, Associate Professor of Economics, Chicago Booth School of Business

Panel discussion

- Mark Hemsley, Chief Executive Officer, BATS Europe
- > Rhodri Preece, Head Capital Markets Policy, CFA Institute
- > **Johannah Ladd**, Secretary General, FIA European Principal Traders Association
- Frederik ten Veen, Chief Risk Officer Europe, ABN AMRO Clearing Bank

Moderated by **Gundars Ostrovskis**, Economic Analyst of Financial Markets, European Commission.



Eric Budish, Associate Professor of Economics at the Chicago Booth School of Business, described how the latest developments trading technologies have radically changed microstructure of today's financial markets. Highspeed and sophisticated quantitative and algorithmic computer programs for

generating, routing, and executing orders have become 'business as usual' in the high-frequency trading space. While recognising the benefits in terms of lower volatility and lower transaction costs of the first wave of

HFT technologies, Mr Budish argued that a root problem emerges with the high-frequency trading 'arms race' in a continuous trading environment. In his view, this environment does not actually work in continuous time: market correlations that function properly on human-scale time horizons completely break down on high-frequency time horizons (Figure 1), i.e. at a margin of the highest technically possible speed. This correlation breakdown has real consequences: it creates purely technical arbitrage opportunities, available only to whoever is fastest (Figure 2). This is a violation of the efficient market hypothesis (EMH).

Figure 1. Time Series at Human-Scale and High-Frequency Time Horizons

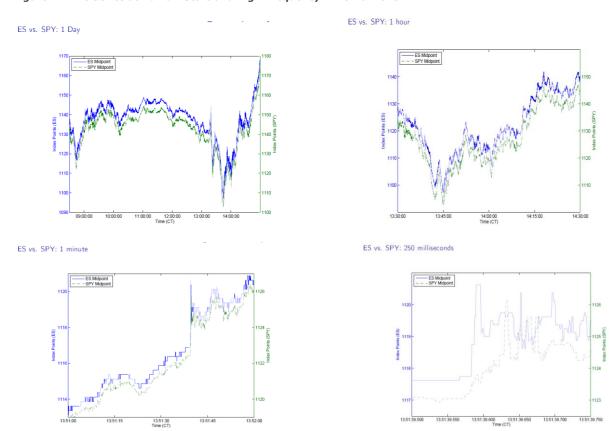
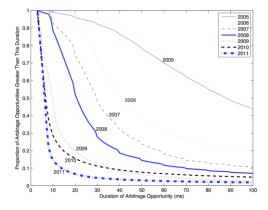


Figure 2. Arbitrage durations per year



Note: Figure 1 depicts the price paths of the two largest securities that track the S&P 500 index, the iShares SPDR S&P 500 exchange traded fund (ticker SPY) and the E-mini Future (ticker ES), on an ordinary trading day in 2011. Figure 2 illustrates how the ES-SPY arbitrage has evolved over time (2005-2011).

Source: Budish, Cramton and Shim (2013): The High-Frequency Trading Arms Race: Frequent Batch Auctions as a Market Design Response

The possibility to do arbitrage at the highest speed by occasional HFT 'snipers' creates an additional liquidity cost for market-makers (systematic liquidity providers) whose (by then) old quotes are picked off in the race. Market-makers then pass on sniping costs to investors through higher bid-ask spreads or decide to reduce their liquidity provision engagement. This situation may deteriorate market quality. As a result, Mr Budish and his co-authors proposed a switch to an alternative trading environment where time is discrete and orders are matched at time intervals via batch auctions. This will slow down the zero sum arms race; eliminate sniping and make markets deeper by narrowing bid-ask

spreads; and remove purely technical arbitrage profits to achieve a more efficient market structure conducive to greater market quality. The panellists debated an alternative market design to continuous trading, namely discrete trading in the form of frequent batch auction. Mark Hemsley, Chief Executive Officer of BATS Europe, claimed that changing the market microstructure to a series of batch auctions would eliminate pre-trade transparency, which would then be substituted by high-frequency post-trade transparency information. Rhodri Preece, Head of Capital Markets Policy at the CFA Institute, echoed Mr Hemsley by doubting whether continuous trading and discrete batch auction could co-

exist. It was also not clear how feasible batch auctions would be for most non-equities, given their liquidity profile. At present, there are industry players that decided to run pilot tests using batch auctions.

Finally, Johannah Ladd, Secretary General at FIA European Principal Traders Association, argued that the

HFT community is open to any market change that is sustainable and does not harm market quality or overly burden the industry. Frederik ten Veen, Chief Risk Officer Europe at ABN AMRO Clearing Bank, also stressed the importance of a well-functioning market infrastructure and the role of HFT to increase interconnection and market efficiency.

Session 4: Sourcing from the crowd: The 'democratisation' of finance? Access to finance







Keynote presentation

Dan Marom, Co-Author of "The Crowdfunding Revolution", Entrepreneur, Consultant and Researcher

Panel discussion

- María Teresa Fábregas, Head of Unit, Securities Markets, European Commission
- Oliver Gajda, President, European Crowdfunding Network
- Karen Kerrigan, Legal & Financial Director, Seedrs
- Paul Belleflamme, Professor of Economics, Louvain School of Management
- > Rainer Riess, Interim Director General, Federation of European Securities Exchanges

Moderated by **Florencio Lopez de Silanes**, Professor of Finance and Law, EDHEC Business School.

Dan Marom, co-author of "The Crowdfunding Revolution" and entrepreneur, opened the session by claiming that crowdfunding is much more than money, it is a source of engagement and



empowerment. He described the different types of crowdfunding platforms, of which there are more than 1,200 today. While still in its infancy, crowdfunding is growing at a very fast pace and Mr Marom believed that it is more than a financing tool as it keeps the capital provider engaged in the initiative over time. In recent years, crowdfunding has become a notable contributor to the democratisation of innovation and finance; an important social and financial phenomenon. It represents a source of funding for those firms that find the traditional intermediation channels very costly. Four models have been developing, based on: a reward, profit-sharing, a loan and equity.

While they all share the advantage of bringing down transaction costs and bridging the gap between fundraisers and funders, Paul Belleflamme, Professor of Economics at Louvain School of Management, argued that they vary significantly in terms of complexity. There are also risks associated with this form of financing, such as fraud, misleading financial

promotion/advertising, no proper delivery on promised products, but also underestimation of funds needed to complete promised projects, overvaluation of the project/company, intellectual property rights, thin due diligence, limited exit options from the investment.

Crowdfunding is arguably an infant and deregulated industry. More steps need to be undertaken to raise awareness and gain the trust of the general public. The panellists discussed how industry rules function, to what extent they address various risks, how these could be further improved or complemented and the limitations of self-regulation and competition acting as a primary disciplining device. Having in place a clear legal framework will ensure that contributors are well informed and adequately protected. Several member states have introduced ad hoc legislation for crowdfunding, while others will introduce new laws soon. María Teresa Fábregas, Head of the Securities Markets Unit at the European Commission, claimed that it was important to bring more coherence to the fragmented national frameworks on crowdfunding. The European Commission is currently assessing the benefits and risks associated with this new form of finance, analysing successes and failures, as well as impediments to cross-border activities (fragmentation of the rules on prospectus, legal, tax and accounting treatment of the contributions collected on platforms' accounts, the applicable law in the event of insolvency of the platform).

Oliver Gajda, President of the European Crowdfunding Network, argued that crowdfunding is a disruptive form of financial intermediation that aims to replace segments of financing to start-ups and SMEs that are not covered by banks anymore, as they continue to scale down. Rainer Riess, Interim Director General of the Federation of European Securities Exchanges (FESE), stated that once the industry fixes issues of trust and rights for investors, it can develop on a larger scale as an alternative form of intermediation to business angels and venture capitalists. Karen Kerrigan, Legal & Financial Director at Seedrs, raised awareness about how important effective communication and educational policies are for a better positioning of the industry. Under certain circumstances, platforms may also allow for institutional investors to co-invest alongside the crowd (retail investors). In terms of

investment schemes, the funds are either directly transferred between the investor and the company or there is an SPV in-between (one-shareholder type of structure with subscription arrangements in place). Some platforms play a more active role than others in screening and evaluating companies and during the investment and post-investment stages. However, investing in start-ups and early-stage businesses entails many risks, including risk of illiquidity, loss of investment, the possibility of equity dilution, and lack of exit. Some businesses offer pre-emption rights that protect an investor from dilution while some platforms might create put-and-call options that allow better exit options for investors. Increasing awareness about risks is important, especially for an intermediation channel that promises to invest in innovation and ultimately in renewed economic growth.

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