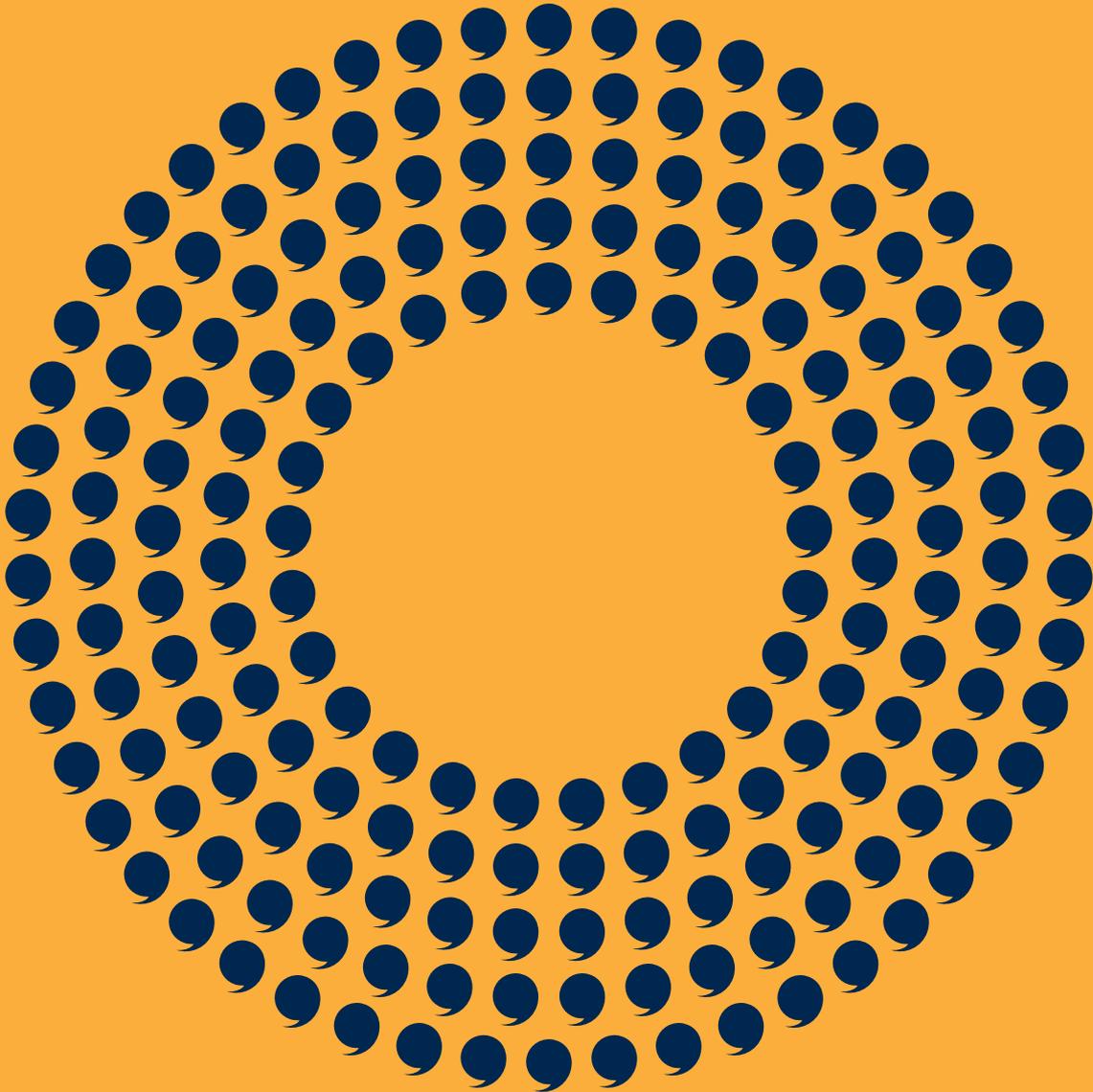




BANK OF ENGLAND

Open Forum 2015

An open discussion on the
role of markets in society
#BoEOpenForum



Open Forum 2015

Building real markets for the good of the people

Guildhall, Wednesday 11 November 2015

9:00–9:15	Welcome by the Lord Mayor and opening remarks by the Governor of the Bank of England
9:15–9:40	Remarks by George Osborne, Chancellor of the Exchequer
9:40–11:00	Plenary: The role of financial markets in the economy
11:00	Observe the Remembrance Day moment of silence
11:10–12:30	Breakout Session 1 Panel 1: The impact of regulation on financial market resilience Panel 2: Building a social licence for financial markets Panel 3: Improving the effectiveness of market finance in serving the economy
12:30–13:15	Lunch
13:15–14:00	Remarks by Mario Draghi, President of the European Central Bank
14:10–15:30	Breakout Session 2 Panel 1: The role of liquidity in the wider economy Panel 2: How financial innovation and technology can support the economy Panel 3: The role of central banks in financial markets
15:30–15:45	Break
15:45–17:00	Plenary: Where next for financial markets?
17:00–17:15	Closing remarks by the Governor of the Bank of England

9:40–11:00**Plenary: The role of financial markets in the economy****Organised by: Alex Brummer (Daily Mail), Helena Morrissey (Newton Investment Management) and Frances O'Grady (Trades Union Congress)****Session speakers and panellists**

Chair: Stephanie Flanders, Managing Director, Chief Market Strategist for the UK and Europe, JPMorgan

Julia Black FBA, Pro Director for Research, London School of Economics

David Kynaston, Visiting Professor, Kingston University

Helena Morrissey, CEO, Newton Investment Management

Rabbi Baroness Julia Neuberger, DBE, House of Lords

Lord Jim O'Neill, Commercial Secretary to the Treasury

Nicola Smith, Head of Economic and Social Affairs, Trades Union Congress

Background

Financial markets can and should be powerful drivers of prosperity. They finance trade, investment and growth. They price and allocate capital. And they transfer risks to those best able to bear them. Many of these activities depend on fixed income, currency and commodity (FICC) markets. These markets determine interest rates for savers and borrowers, the exchange rates we use when we travel or buy goods from abroad, and the prices of our food and raw materials. What happens in wholesale financial markets affects every consumer and every business, large and small.

These markets have become ever more important as reforms over decades have delegated responsibility, opportunity and risk to citizens. People are increasingly responsible for financing their retirements and insuring against risks. Their decisions will depend heavily on how well financial markets function.

The United Kingdom's specialism in financial services brings enormous economic benefits and opportunities. As such, it creates a particular responsibility — local and global — for the authorities and market participants in the United Kingdom. These markets contribute to prosperity well beyond the United Kingdom. Hosting one of the foremost global financial centres broadens the investment opportunities of the institutions hosted here, and it supports the United Kingdom's manufacturing, creative and service industries competing globally. The United Kingdom's financial sector serves the global economy, connecting global commerce and thereby supporting global growth.

Over the longer term, the size and importance of UK financial markets is likely to continue to grow. For example, if the United Kingdom maintains its market share in global finance, and the long-running trend towards global financial deepening continues, the size of the UK-based non-bank financial system could increase from a little over six times UK total output or GDP to nearly fifteen times UK GDP by 2050. In short, markets matter today and are likely to matter even more tomorrow.

But markets work best when they work in the interests of society, not just market participants. To enjoy the trust of society, they must reliably and effectively allocate capital and risk in the economy. Markets must meet two essential pre-conditions: they must be effective — ensuring competitive pricing and proper allocation of capital and risks; and they must maintain their social licence — the consent of society to operate and innovate. The basic building blocks of effective markets are resilience and fairness. The foundations of a social licence are fairness and accountability. The international reform agenda has substantially increased the resilience and effectiveness of markets. And with the recommendations of the Fair and Effective Markets Review earlier this year, reforms are now in train to further improve fairness and accountability as well.

But ensuring markets are effective is not an exercise with a defined end point. Rather, it is a continuous process to update the infrastructure supporting markets as they innovate and evolve. With a full programme in place and much already having been achieved, now is an opportune time to take stock of the reforms as a whole and to discuss the way forward for financial markets.

Focus of the session

The aim of the session is to cover three areas in turn. First, the role that financial markets play in supporting the economy. Secondly, how that is likely to change over time. And finally, what the authorities and market participants are doing and what further might need to be done to support effective financial markets in the period ahead.

The results of a poll, focused on these areas and conducted across the business community, the general public and students in advance of the event, will provide insights on prevailing opinion among different societal stakeholders and will serve as an input to discussion in the session. The session will be interactive, with questions welcomed from inside and outside the room, as well as via social media.

The session will bring together a wide range of perspectives, including representatives from consumers, workers, the City, as well as moral, academic and policymaking voices to address these questions. The session will also incorporate feedback from the general public via a live video-feed to an event hosted simultaneously in Birmingham.

The plenary aims to address questions including:

- Why do financial markets matter to households and companies?
- How well are financial markets playing this role?
- Is their role likely to become more important over time?
- If so, what implications does this have for their relationship with wider societal stakeholders?
- How can financial markets best contribute in future to greater prosperity?

Supporting reading

Bank of England (June 2015), Open Forum: building real markets for the good of the people, available at www.bankofengland.co.uk/markets/Documents/openforum.pdf.

Bank of England, Financial Conduct Authority and HM Treasury (June 2015), Fair and Effective Markets Review: Final Report, available at www.bankofengland.co.uk/markets/Documents/femrjun15.pdf.

Kay, J (2015), Other people's money. Finance: Masters of the universe or servants of the people?

11:10–12:30**Breakout Session 1****Panel 1: The impact of regulation on financial market resilience****Organised by: James Aitken (Aitken Advisors), Samir Assaf (HSBC) and Matt Zames (JPMorgan Chase & Co)****Session speakers and panellists**

Chair: Baroness Shriti Vadera, Chairman, Santander UK

Andrew Bailey, Deputy Governor and CEO of the Prudential Regulation Authority, Bank of England

Douglas Elliott, Fellow in Economic Studies, Brookings Institute

Abdallah Nauphal, CEO and CIO, Insight Investment

Jean Paul Villain, Senior Investment Advisor and Head of Strategy, Abu Dhabi Investment Authority

Nigel Wilson, Group CEO, Legal & General

Kathleen Yoh, Deputy Treasurer — Long Term Funding, GE Capital

Background

The financial crisis demonstrated that many markets were vulnerable to instability and closure. Episodes of severe illiquidity were frequent. Markets proved fragile, meaning that companies found it difficult to access capital and banks found that their funding sources evaporated.

Since the financial crisis, policy makers globally have taken steps to make the financial system more resilient. Measures have included increasing the overall quality and quantity of capital that banks have to hold and taking steps to promote the orderly resolution of banks. A framework to support clearing of derivative transactions through central counterparties has been developed, in order to make derivative markets more transparent. And reforms are in train to transform the provision of credit by entities and activities outside the regular banking system — so-called 'shadow banking' — into sound market-based finance.

While these measures will make the financial system more resilient, the scale, breadth and pace of regulatory change has been unprecedented. This has the potential to have unintended consequences. It could in principle create new risks as market participants adjust to the new framework of regulations, leading to changes in the structure of financial markets.

This session will address three specific issues. First, the structure of financial markets is still changing in response to the new regulatory landscape. Financial institutions are adapting to the new regulatory environment in which they are operating. In most cases, these changes are likely to be desirable and intended. But it is important to understand how regulation is

changing markets and institutions and whether it is bringing some unintended, or possibly undesirable, consequences.

Second, it may be difficult to disentangle the impact of regulation from wider, structural changes that are influencing the roles of both investors and intermediaries. One example of this might be changes in technology, such as the move to electronic trading.

Finally, interest rates in many countries continue to be at historically low levels and a number of central banks (including the Bank of England) have used policies such as quantitative easing to provide the market with additional liquidity. It will be important to understand the degree to which these monetary policy actions are influencing the functioning of financial markets.

Focus of the session

The aim of the session is to discuss the cumulative impact of regulatory reforms on the functioning of wholesale financial markets, focusing on the perspectives of key users of those markets, such as non-financial companies and investment institutions.

The session will begin with a brief overview of the main regulatory changes since the crisis. The panel will then discuss the impact of these changes, individually and cumulatively, on wholesale financial markets, including any differences across different countries and different business models. It will also debate how these changes interact with other developments, such as the low interest rate environment and structural changes to the roles of investors and intermediaries. Speakers

will consider the likely resilience of wholesale financial markets in good times and in periods of stress.

The session will explore how regulatory changes have affected specific market activities and business models from the point of view of investors, intermediaries and businesses using real-life case studies, such as securitisation and/or the central clearing of markets. The session will also consider the impact that regulation has had on non-financial companies, such as whether financial service providers can still deliver the financing and risk management products that companies need.

The session will be interactive, providing the audience with the opportunity to input into this debate through questions from the floor and voting. The key questions that the panel will look to address are:

- What have been the most significant regulatory changes since the crisis?
- How has regulatory change affected the ability of users to borrow, invest and manage risk through financial markets, in good times and bad?
- How are those users adapting their trading activities and business models in response?
- What other key factors — technological, policy etc — are shaping the functioning of financial markets?

Supporting reading

Cecchetti, S (November 2011), 'The rules of the road: making the financial system safe for everyone', available at www.bis.org/speeches/sp111103.pdf.

Financial Stability Board (July 2015), 2nd Annual Report, available at www.financialstabilityboard.org/wp-content/uploads/FSB-2nd-Annual-report.pdf.

11:10–12:30

Breakout Session 1

Panel 2: Building a social licence for financial markets

Organised by: Julia Black FBA (London School of Economics), The Hon. Mr Justice Blair (HM Courts), The Hon. Mr Justice Knowles (HM Courts), Richard Lambert (British Museum) and Edwin Schooling Latter (Financial Conduct Authority)

Session speakers and panellists

Chair: Richard Edgar, Economics Editor, ITV News

Sir Howard Davies, Chairman, Royal Bank of Scotland

Richard Lloyd, Executive Director, Which?

Tracey McDermott, Acting Chief Executive, Financial Conduct Authority

Saker Nusseibeh, CEO, Hermes Investment Management and Banking Standards Board member

Baroness Onora O'Neill, House of Lords, University of Cambridge and Banking Standards Board member

The Right Reverend David Urquhart, Bishop of Birmingham and Banking Standards Board member

Background

Markets only maintain the consent of society to operate and innovate if they are perceived to be fair, accountable and trusted to work in the interests of society. Only if markets maintain this 'social licence' can they function effectively and thereby contribute fully to prosperity. Conversely, an erosion of trust and loss of social licence risks the imposition of rules or restrictions on markets that are detrimental to their overall effectiveness and hence societal prosperity.

As the Fair and Effective Markets Review notes, the years prior to the financial crisis were characterised by three key trends, each of which materially reduced the ability or willingness of firms to uphold strong standards of market conduct.

First, senior managers became increasingly remote and unaccountable for the maintenance of standards in day-to-day trading operations. Second, senior managers faced few apparent consequences for failing to ensure that their teams upheld these standards of market practice. That was particularly true in less regulated markets. And, third, there was an increasing shift in power within firms and their management teams towards trading staff.

Amplifying these failures to uphold standards of market conduct, it is now recognised that bonuses and other elements of the variable pay of staff at many firms were too closely linked to short-term revenues. These pay structures both incentivised excessive individual risk-taking and left firms, their shareholders and, in some cases, taxpayers absorbing losses when risks (including misconduct fines) materialised.

Significant steps have been taken — by Parliament, regulators, the international authorities, and firms themselves — to

improve individual accountability and governance within UK-regulated financial firms. The Senior Managers and Certification Regimes will come into force in March 2016 and will strengthen the accountability and incentives of those working in banks and, prospectively, insurance firms to behave appropriately. The PRA has also published for consultation a supervisory statement that underscores the importance it places on good Board governance and in particular the key role Boards play in setting clear strategies and measurable risk appetites.

There have been significant steps to enhance the effectiveness of enforcement and criminal sanctions for market abuse in the UK and regulators internationally. Global action has been taken to align remuneration with prudent risk taking. The United Kingdom's rules here will be among the most comprehensive globally, with proposals for senior bank managers' bonuses to be deferred and variable remuneration already paid to be open to being 'clawed back' in certain circumstances.

Firms themselves have also made efforts to improve their internal governance, accountability and control structures. Further measures to improve accountability within financial institutions have been recommended by the recent Fair and Effective Markets Review. These include a consultation on strengthening the process around employment references when hiring at regulated firms, an extension of the Senior Managers and Certification Regimes to a wider range of regulated firms and the new Fixed Income, Currency and Commodities (FICC) Market Standards Board which can provide guidance on minimum expected standards of training for FICC market personnel.

However, law and regulation can never be comprehensive. The greater the volume of regulation, the greater the risk of those who are regulated not 'seeing the wood for the trees'. And it tends to be a feature of law and regulation that they may more readily discourage poor conduct than encourage an aspiration to best conduct.

This helps explain why a focus on values, delivered by a change in culture, is also necessary as a conscious addition to law and regulation and to avoid future instances of 'ethical drift'. In financial markets, a duty to wider society may be necessary, feasible, and timely.

Focus of the session

The aim of this session is to explore the concept of a social licence for financial markets, to consider how to develop that social licence and to assess how to recognise when a social licence has been granted.

The session will bring together philosophical, faith, consumer and business perspectives in a diverse panel of experts in these fields. It will be interactive, with an opportunity for the audience to ask questions, both from inside and outside the Guildhall through Twitter and through participation in the session's poll. Opinions from Northern Ireland will input into the panel's discussion through some pre-recorded interviews.

The session will begin by considering the concept of a social licence. The crisis, and the response to it, has informed and altered perceptions of the role and value of financial markets and financial institutions in our society. Society expects financial markets to act responsibly, to create jobs and to encourage growth whilst being seen to have the right values. The panel will explore how financial markets can work in the public interest and how society can influence this agenda.

The session will then debate the appropriate role of legislation, regulation, culture and professional standards in governing

behaviour. It will also consider how the balance of risks should be distributed among financial market participants and between them and end-investors/borrowers. It will ask what more should be done and the best way to achieve any further necessary changes.

It will then finish by exploring how we will know and be able to demonstrate that trust has been established in financial markets. Trust is an intangible quality, but we need some way of objectively measuring it. It implies more than just legitimacy and acceptance which require only that participants play by the rules. It suggests having more than credibility which can be achieved by sharing clear information about how commitments have been complied with. Trust is the highest quality of relationship between financial markets and the public. It requires positive approval.

The key questions the panel will look to address are:

- What is a social licence and how can we build public trust to create a social licence for financial markets?
- What has been done so far, what is left to do and how will we go about doing it?
- How do we measure success and how do we recognise that financial markets have achieved the goal of being granted a social licence by the public?

Supporting reading

Admati, A and Hellwig, M (2014), 'The bankers' new clothes: what's wrong with banking and what to do about it', Princeton University Press.

Bank of England, Financial Conduct Authority and HM Treasury (June 2015), Fair and Effective Markets Review: Final Report, available at www.bankofengland.co.uk/markets/Documents/femrjun15.pdf.

Blair, W, Kershaw, D and Awrey, D (2013), 'Between law and markets: is there a role for culture and ethics in financial regulation?', *Delaware Journal of Corporate Law*.

11:10–12:30**Breakout Session 1****Panel 3: Improving the effectiveness of market finance in serving the economy
Organised by: Mark Barber (General Electric Company), Neil Garrod (Vodafone)
and Xavier Rolet (London Stock Exchange)****Session speakers and panellists**

Chair: Ed Conway, Economics Editor, Sky News
Anne Glover, Chief Executive and Co-founder, Amadeus Capital Partners
John Knowles, Chairman, Haydale Graphene Industries
Simon Lewis, Chief Executive Officer, Association for Financial Markets in Europe
Sophie Muir, Co-founder and Director, Capital Engine
Matthias Neugebauer, Managing Director, Fitch Ratings
Xavier Rolet, CEO, London Stock Exchange

Background

Resilient markets are essential for the safety and soundness of the financial system. But they also need to be effective in the sense of supporting economic growth and providing stable access to finance for companies of all sizes and households of all types.

It is well established that many smaller and medium-sized companies — referred to collectively as 'SMEs' — typically rely on banks to provide them with the financing they need to fund investment. This reliance was brought into sharp relief during the global financial crisis, when banks cut their lending across all borrowers in order to safeguard their balance sheets. This left many businesses unable to access the finance they needed to grow, both in the United Kingdom and overseas.

For the very smallest companies, a reliance on bank lending may be entirely appropriate. Banks have well-established networks and can provide a range of different services to clients, from credit lines that support companies' liquidity management to investment advice. But even in normal times, bank lending may not be the most effective form of financing for some SMEs. For example, banks may not have the risk appetite to lend to firms with relatively high levels of debt, even if they have the potential to grow quickly. Banks may not lend to small and newly-established firms or innovative, capital-intensive firms, because there is uncertainty about their short-term cash flows. And banks may not necessarily be well-placed to lend for longer periods of time, including to infrastructure companies.

Corporate debt and equity markets provide an additional source of long-term risk capital. They are an important alternative to banks for providing the finance that companies need. But while such markets exist in Europe, including the United Kingdom, European SMEs remain more reliant on bank finance than in the United States.

Any market that brings together issuers and savers — allowing companies to get the finance they need to invest in productive projects, and enabling savers to earn appropriate returns — may potentially be a socially useful form of so-called 'market-based finance'. Such forms of financing for SMEs need not be traded publicly, as with corporate bonds and quoted equities. Familiar non-traded forms of such finance include private placements, private equity, venture capital, angel investing and peer-to-peer lending.

For market-based sources of finance to flourish and provide a stable form of long-term funding for firms of all sizes, there needs to be a vibrant and resilient ecosystem between savers and borrowers. This has many facets. For companies, the cost of financing needs to be proportionate. This depends not only on the returns savers demand to invest in businesses, but also on the fixed costs of issuance, including meeting prospectus requirements and accessing professional services. For savers, it is essential that they have access to the information they need to assess the risks of their investment.

Focus of the session

The aim of this session is to explore how the effectiveness of markets can be enhanced in a way that provides stable, long-term access to finance for companies of all sizes and thereby supports economic growth and stability.

It will provide an opportunity for speakers and panellists drawn from both financial and non-financial institutions to propose their own 'big ideas' as to how access to finance for companies in the United Kingdom can be improved. The audience will be invited to share their own thoughts and experiences, as well as voting for their preferred idea. Regional information gained at a pre-event in Manchester, aimed at SMEs and recent start-ups, will be fed into the session.

The panel will discuss how issuers and investors might get better access to market-based sources of financing. Improving firms' access to markets could go beyond well-established markets. For instance, angel investors, venture capital, mini bonds and private placement markets could be encouraged. If market-based finance is to be developed, investment in such products needs to be made more attractive to retail investors to encourage stable sources of financing.

The panel will also consider how to ensure these markets function effectively. The infrastructure underpinning financial markets and efficient pricing are both essential to effective markets. The Fair and Effective Markets Review has identified a number of areas where improvement would be desirable, for example, enhanced transparency and more effective competition. The panel will debate whether there are further aspects of the market infrastructure that should be developed and whether measures can be taken to improve market functioning further.

The key questions that the panel will look to address are:

- How can access to market financing be enhanced, in particular for smaller companies?
- Are there new markets that could usefully be catalysed and developed?
- What role can and should the authorities play versus industry initiatives? How could investors be encouraged to invest in SMEs?
- Are there additional elements of market infrastructure that should be developed to ensure that capital is properly allocated and risks are effectively shared?

Supporting reading

Anderson, N, Brooke, M, Hume, M and Kürtösiová, M (February 2015), 'A European Capital Markets Union: implications for growth and stability', *Bank of England Financial Stability Paper No. 33*, available at www.bankofengland.co.uk/financialstability/Documents/fpc/fspapers/fs_paper33.pdf.

Association for Financial Markets in Europe (September 2015), 'Raising finance for Europe's small and medium-sized businesses', available at www.afme.eu/funding-economy/.

Bank of England, Financial Conduct Authority and HM Treasury (June 2015), Fair and Effective Markets Review: Final Report, available at www.bankofengland.co.uk/markets/Documents/femrjun15.pdf.

European Commission (September 2015), Action plan on Building a Capital Markets Union and accompanying Economic Analysis, available at http://ec.europa.eu/finance/capital-markets-union/docs/building-cmu-action-plan_en.pdf.

HM Treasury (July 2015), Fixing the foundations: creating a more prosperous nation, available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/443897/Productivity_Plan_print.pdf.

14:10–15:30

Breakout Session 2

Panel 1: The role of liquidity in the wider economy

Organised by: Elizabeth Corley (Allianz Global Investors) and Richard Payne (CASS Business School)

Session speakers and panellists

Chair: Kamal Ahmed, Business Editor, BBC

Bradshaw Crombie, Global Head of Fixed Income, Aberdeen Asset Management

Gene Frieda, Global Strategist, Moore Capital Management

John Kay, Visiting Professor of Economics, London School of Economics

Steven Maijoor, Chair, European Securities and Markets Authority

Huw van Steenis, Managing Director, Financial Services Research, Morgan Stanley

Background

'Liquidity' is the ease with which something can be exchanged for something else. It will always be possible to exchange some assets more easily than others. Cash, by definition, is highly liquid. The more complex or diverse an asset, the less liquid it is likely to be. So some assets will be characterised by greater liquidity than others.

In any market, the concept of liquidity is defined by the ability of buyers and sellers to complete transactions. This can be measured by both how much it costs to conduct the transaction and by how long it takes to complete it. For an economist, a more liquid market is likely to be one in which prices more accurately reflect relevant information, thereby attracting resources into markets where they can be put to their best use. For an individual, greater liquidity will make purchases and sales of any assets they own quicker and the associated transactions costs lower.

The notion of 'liquidity risk' is based on the idea that the costs of undertaking a transaction might change significantly over time. The cost of, for example, selling a share or bond might then become quite significant. Investors who are worried about this are likely to respond by paying lower prices for shares and bonds when they acquire them. If a market is deep and liquid, the costs of establishing or exiting positions should be less sensitive to market conditions and so any liquidity risk is correspondingly smaller.

In financial markets, there have been concerns that some markets may have become less liquid, especially in periods of stress, and that as a result they have exhibited greater volatility. A number of factors have been cited as possible causes: a macroeconomic environment in which interest rates have been

at historic lows for a prolonged period; the impact of various regulatory measures on the willingness of market participants to undertake traditional market-making; increased concentration among participants on both the buy and sell side; and the increased prevalence of electronic trading which may contribute to rapid withdrawals of liquidity from some markets.

More fragile illiquidity raises a number of issues for key stakeholders in financial markets. For example, participants may need to re-consider their risk management practices if they feel it may prove hard to sell their assets at short notice without paying additional transaction costs. Investors may change their investment practices if they face lower liquidity and higher transaction costs. Moreover, it may become harder for stakeholders to judge the broader impact on financial markets of their trading activities as interest rates start to rise from their historically low levels.

Focus of the session

This session will look at what is meant by 'liquidity' and 'liquidity risk', and at the importance of liquidity for both the wider economy and within financial markets.

It will bring together academics, researchers and financial market participants to address their key concerns about market liquidity. It will devote a large proportion of the session to contributions from the floor and will invite voting on some of the key questions being posed regarding changes in market liquidity and their impact on market functioning.

The session will look at the drivers behind recent changes in market liquidity. In the 2008 crisis, we saw the impact on market liquidity of a combination of a major fall in asset prices, an escalation of concerns about financial institutions'

creditworthiness and great uncertainty about the value of these institutions' assets. This led at times to what could be termed a 'liquidity strike' where market participants followed defensive strategies in order to protect themselves. Regulation since the crisis has aimed to reduce the likelihood of this being repeated in the future.

The more recent concern has been that, even without such an extreme event, market liquidity has shown itself to be more fragile and at times has disappeared in some of the world's deepest fixed income markets. For some, these recent changes are temporary and short-lived losses of liquidity, while others view them as a sign of a more profound move to a state of lower market liquidity and greater vulnerability.

The session will explore the implications of this for the effectiveness of financial markets and their impact on the wider economy. For example, in a world of greater illiquidity, the economy may become more responsive to events that affect liquidity, such as falls in asset prices. It could also become harder to judge what asset prices are telling us, thereby making it more difficult to allocate resources efficiently across the economy.

The panellists will debate the degree to which liquidity in the financial system should be nurtured. If market liquidity is likely to disappear without the stimulus of a major 'shock', there may be limited value in the authorities nurturing market liquidity. But at the same time there could be increased demands for them to step in to support market liquidity during times of stress.

The key questions the session will consider are:

- How much does liquidity really matter to the functioning of financial markets and the wider economy?
- How much liquidity should we expect from our markets? Are our current expectations for liquidity realistic?
- Is the change in financial market liquidity overstated? Are we only seeing problems in times of stress?
- What are the risks of having lower liquidity? How do economies which don't have deep and liquid financial markets cope?
- What key factors have contributed to lower liquidity? What implications does this have for market design and for users of financial markets?

Supporting reading

Committee on the Global Financial System (November 2014), 'Market-making and proprietary trading: industry trends, drivers and policy implications,' available at www.bis.org/publ/cgfs52.pdf.

IMF (2015), 'Market liquidity — resilient or fleeting?', *Global Financial Stability Report: vulnerabilities, legacies, and policy challenges*, Chapter 2, available at www.imf.org/External/Pubs/FT/GFSR/2015/02/pdf/c2_v3.pdf.

Liberty Street Economics (August 2015), 'Introduction to a Series on Market Liquidity: Part 2', available at www.libertystreeteconomics.newyorkfed.org/2015/10/introduction-to-a-series-on-market-liquidity-part-2.html.

14:10–15:30

Breakout Session 2

Panel 2: How financial innovation and technology can support the economy

Organised by: Michael Sherwood (Goldman Sachs), Mark Yallop (PRA Board Non-Executive Director) and Richard Knox (HM Treasury)

Session speakers and panellists

Chair: Dame Colette Bowe, Chairman, Banking Standards Board

Niamh Barker, Managing Director, The Travelwrap Company

José María Fuster, Global Head of Innovation, Santander

Nick Hungerford, CEO, Nutmeg

Mariana Mazzucato, RM Phillips Professor in the Economics of Innovation, University of Sussex

James Meekings, UK Managing Director and Co-founder, Funding Circle

Background

Innovation and technological advances have transformed many sectors across the economy:

- Many in society make consumer purchases online from sellers in locations that they could not have accessed previously;
- It is now more common to stream digitally live media content than rent a DVD;
- Phone calls are no longer the exclusive purview of phone companies, with many using the internet to communicate using VOIP technology.

The confluence of new technology opportunities and severe pressure on business models has created a highly fertile set of conditions for transformational innovation in financial services. The financial services industry spends more money on IT than any other business sector — about US\$500 billion annually. Banks alone account for over 40% of this, around US\$200 billion each year.

Investment in 'FinTech' has been rising rapidly: growing at four times the rate of overall venture capital investment and tripling in size globally over the five years to 2013. It has grown more quickly in London — with average annual growth of 74% — than anywhere else.

Innovation has the potential to change fundamentally the traditional model of finance:

- Developments in the ways that customers access financial products, in particular through the internet and mobile

applications, can change the way that service providers interact with their customers and allow access to a greater array of financial services. As an example, the stock of peer-to-peer lending now stands at well over £1.5 billion in the United Kingdom alone and grew at over 17% over the past year;

- Developments in data analytics, as well as so-called 'big data' technology, allow greater access to and manipulation of data. This potentially reduces the differences in knowledge between market participants and facilitates new entrants to financial markets;
- Developments in digital technology also have the potential to re-shape the financial services sector, where many of the products and services offered relate to digitised information. One example is the distributed ledger technology (eg the blockchain). This technology underpins digital currencies and has raised the potential for payments to be executed through the reliance on trusted technology, rather than the reliance on a trusted central authority, with corresponding implications for payments and settlement within and across financial markets.

But these headlines belie a rather modest degree of real change in the financial sector so far. This session will assess whether we can expect significant disruption to the financial system over the coming years due to the combination of innovation and technology. And if such transformational change does occur, there are many questions to be considered about how markets and regulation should adapt to these developments to support economic growth.

Focus of the session

The aim of the session is to assess how financial innovation and technology will change the financial sector in the years ahead in ways which support the wider economy. It will discuss the key drivers of innovation, drawing lessons from other sectors and exploring how financial markets may adapt to the changing environment.

A video will set the scene. It will describe how trends in technology are shaping the way businesses across all sectors are servicing their clients. Short interviews will offer different perspectives on how financial innovation and technology is transforming business and the role this can play in driving economic growth, including by enabling a '24/7' marketplace, the development of real-time payment systems and changes in the way products and services are distributed.

An in-depth panel discussion will follow. Within it, insights from a prior session held in Cambridge will provide a different perspective, focusing on how innovation and changes in technology are affecting the financial services industry, including the way SMEs are accessing finance to grow their business. There will be an interactive question and answer session with the audience.

Questions to be covered by the panel include:

- How is financial technology innovation changing business models in the financial intermediation chain? And how is it affecting the nature of risk at individual institutions and in the financial system generally?
- What factors are driving financial technology and innovation? And what factors are restraining it?
- How successful have innovators been in exploiting the opportunities created by 'big data' analytics? What more could be done and how do we facilitate this?
- What would success look like in five or ten years time?

Supporting reading

Ali, R, Barrdear, J, Clews, R and Southgate, J (September 2014), 'Innovations in payment technologies and the emergence of digital currencies', *Bank of England Quarterly Bulletin*, Vol. 54, No. 3, available at www.bankofengland.co.uk/publications/Documents/quarterlybulletin/2014/qb14q3digitalcurrencies/bitcoin1.pdf.

Government Office for Science (March 2015), 'FinTech futures: the UK as a world leader in financial technologies', available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/413095/gs-15-3-fintech-futures.pdf.

HM Treasury (August 2014), 'Measures announced to support the growth of the country's FinTech sector', available at <https://www.gov.uk/government/news/plan-to-make-britain-global-centre-of-financial-innovation-set-out-by-government>.

HM Treasury (March 2015), 'Digital currencies: response to the call for information', available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/414040/digital_currencies_response_to_call_for_information_final_changes.pdf.

World Economic Forum (June 2015), 'The future of financial services', available at www3.weforum.org/docs/WEF_The_future_of_financial_services.pdf.

14:10–15:30**Breakout Session 2****Panel 3: The role of central banks in financial markets****Organised by: Minouche Shafik (Bank of England) and Gillian Tett (Financial Times)****Session speakers and panellists**

Chair: Martin Wolf, Associate Editor and Chief Economics Commentator, Financial Times

Douglas Holmes, Professor of Anthropology, Binghamton University

Blythe Masters, CEO, Digital Asset Holdings

Minouche Shafik, Deputy Governor, Markets & Banking, Bank of England

Axel Weber, Chairman, UBS

Background

The defining feature of modern central banks is their ability to create domestic currency in potentially unlimited amounts. This naturally gives them control over central bank money and the level of short-term interest rates — monetary policy. It also means that a core component of financial stability policy — acting as lender of last resort to private financial institutions at times of financial stress — falls naturally to central banks.

More broadly, central banks are guarantors of public trust and confidence in money and financial intermediation. These are essential underpinnings of a smoothly functioning economy.

How this translates into specific responsibilities for central banks has varied over time and between countries. Before the financial crisis, central banks typically focused on price stability and their financial stability role was often narrowly defined. That reflected the belief that price stability was the best contribution a central bank could make to macroeconomic stability and, by extension, to the broader public good.

The financial crisis underlined that financial stability is as important an objective of macroeconomic policy as price stability. That prompted a widespread recognition that central banks have a vital role to play in ensuring financial stability in normal times, as well as during crises, through the operation of so-called macroprudential policy. This is aimed at safeguarding the overall stability and resilience of the financial system as a whole.

The crisis also demonstrated the importance of central banks offering effective liquidity insurance to the financial system. During the course of the crisis, the Bank's own liquidity insurance facilities were altered in fundamental ways, to improve their flexibility and widen their scope. Many other central banks also made fundamental changes to their liquidity facilities.

Central banks today interact with the financial system in a wide and deep set of ways: implementing monetary policy; implementing aspects of the regulation of the financial system as part of their financial stability role; playing a central role in the interbank payment and settlement system; and reducing the cost of disruption to the liquidity and payment services supplied by banks to the real economy through liquidity facilities.

Focus of the session

This session will consider how far the role of central banks in financial markets should extend, how that role might evolve in response to current and future challenges, and what central banks can learn from historical experience.

This session aims to be accessible and interactive, with a panel that brings a range of academic, practitioner and policymaker perspectives. There will be an opportunity for the audience to ask questions from inside the Guildhall and for those outside to tweet questions into the panel on the day.

The panel will begin by considering what should guide or limit central bank interventions in support of financial markets. It is clear that central banks have both a strong interest, and an important role to play, in ensuring the effective functioning of those markets. In particular, alongside any specific responsibilities they have, they may also have a role to play in supporting other authorities and market participants to build more effective markets for the social good. Such interventions are likely to promote central banks' core objectives of monetary and financial stability, but they also raise a number of questions, including whether there is a risk of central banks going too far and whether some modes of intervention are preferable over others.

The session will then consider how central banks should respond to the growing importance of market-based finance. Central banks have an important role to play both in shaping the regulatory environment to manage risks that arise outside the core banking system, and in monitoring and responding to them. Central banks must also decide to what extent they will backstop market liquidity in times of stress. For example, they will need to consider how to assess the risks that lie outside the banking system and how to judge the potential impact of any actions that they take, including any unintended consequences.

The session will conclude by considering how innovation — both in central banks' policy toolkits and in financial markets more broadly — might affect the role of central banks over the next 20 years. For example, central banks will have to consider the role of large-scale asset purchases and forward guidance in normal times. And, looking ahead, central banks will continually have to adapt to innovation in financial markets — for example the rise of algorithmic trading, the increasing prevalence of peer-to-peer transactions, and the advent of digital currencies. What can we say today about the likely changes in central banks' role that these and other innovations will necessitate?

The key questions the panel will consider are:

- How broadly should central banks interpret their mandates? What are the risks to central banks of going too far — for example, to their credibility and legitimacy? How can these be managed?
- What principles should guide central bank interventions in pursuit of market resilience and effectiveness?
- To what extent should central banks provide liquidity insurance to the wider market beyond the banking system? Under what circumstances, if any, should they stand ready to support core markets directly through 'Market Maker of Last Resort' actions?
- Which 'unconventional' policy tools should become conventional?
- How should central bank communication strategies evolve?
- In what other ways will central banks' role differ in 20 years from now?
- Which technological or market trends pose the greatest challenges to central banks' ability to meet their core objectives? And how should central banks respond?

Supporting reading

Buiter, W (January 2012), 'The role of central banks in financial stability: how has it changed?', available at <http://willembuiter.com/chicago.pdf>.

Carney, M (October 2013), 'The UK at the heart of a renewed globalisation', available at www.bankofengland.co.uk/publications/Documents/speeches/2013/speech690.pdf.

Group of Thirty (October 2015), 'Fundamentals of central banking: lessons from the crisis', available at http://group30.org/rpt_68.shtml.

Padoa-Schioppa, T (October 2002), 'Central banks and financial stability: exploring a land in between', available at <https://www.ecb.europa.eu/events/pdf/conferences/tps.pdf>.

15:45–17:00

Plenary: Where next for financial markets?

Organised by: Andy Haldane (Bank of England)

Session speakers and panellists

Chair: Sir Richard Lambert, Chairman, British Museum

Alex Brummer, City Editor, Daily Mail

Elizabeth Corley, Global CEO, Allianz Global Investors

Sir Jon Cunliffe, Deputy Governor, Financial Stability, Bank of England

The Revd Canon Giles Fraser, Church of England

Gillian Guy, Chief Executive, Citizens Advice Bureau and Banking Standards Board member

Background

This session will provide feedback on the key points coming out of the breakout sessions, discussions at the regional forums and from Twitter and wider social media. A panel of speakers will reflect on the earlier discussions and provide suggestions on the future agenda for reforming financial markets.

There will be a live link to a parallel session in Edinburgh, involving a broad range of participants. This will provide a summary of the key questions and reflections emerging from their discussion. The session is intended to be interactive. It will revisit the polling questions asked during the opening plenary. Questions will be welcomed from inside and outside the room, as well as via social media.