BANK OF ENGLAND

Speech

Challenges for financial markets

Speech given by
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I am very pleased to have the opportunity to speak tonight at the annual dinner of the Association for Financial Markets in Europe (AFME). The Bank of England has throughout its history had a close association with financial markets and with the institutions that support them.

Indeed, the Bank was instrumental in the creation in 1914 of one of AFME's distant ancestors – the quaintly named Accepting Houses Committee. The outbreak of the First World War and consequent disruption of international payments threatened to bring down the London markets and the international merchant banks that supported them. The Bank enabled a moratorium on war disrupted payments and offered to purchase the war disrupted bills. One contemporary historian of the City hailed this as

> "*the greatest evidence of London's strength as a financial centre that could have been desired or dreamt of*".[1]

Over the following century, the Accepting Houses Committee became the forum of the City's most influential merchant banks; its members enjoyed the implicit backing of the Bank of England. The Committee eventually became part of the London Investment Banking Association which merged with the European part of SIFMA to create AFME in 2009.

Transparency requires me to record, in this genealogy, that one of the founding Houses of the Accepting Houses Committee back in 1914 was Cunliffe Bros, whose founder was actually Governor of the Bank of England at the time. Transparency however also requires me to make clear that he was no relation. I do, however, feel a little sense of eponymous history in speaking here tonight.

Financial markets of course have changed greatly since Cunliffe Bros, with half a million pounds of capital, was a force in the City. I want to look today briefly at how financial markets have grown worldwide, why they are subject to strong pressures to cluster activities in key centres and how this has affected the concentration of financial services in the UK – or as it is often, and misleadingly described, in London.[2]

I also want to touch on two of the fundamental challenges faced by financial markets and the institutions that support them – maintaining, or some would say, restoring their 'social license' and managing systemic risk. And finally, given that this is the Association for Financial Markets in Europe, I will touch briefly on one or two possible implications for European capital markets of the UK's exit from the European Union.

In passing, I will say a little about how the Bank sees these issues. Our role and responsibilities have evolved as markets have evolved. We are now explicitly charged with the objective of ensuring financial stability in the UK and by extension in the world's leading financial centre. We no longer stand behind and

[1] Hartley Withers. *War and Lombard Street* (1915), page 99.
[2] There are 1.1 million people employed in financial services in the UK – two-thirds of these jobs are located outside of London.

implicitly endorse the credit of the successors of the Accepting Houses. But an essential part of what we do still depends on understanding financial markets and the risks and benefits they create.

The financial market ecosystem

The wave of financial globalisation that happened in the heyday of Cunliffe Bros came to an end with the outbreak of World War I. The world did not turn back to financial globalisation for another 60 years or so. But the current, second, wave of financial globalisation now outstrips its predecessor. One can see this in the numbers: external financial assets were 60% of global GDP in 1900, 20% in 1960 and are now around 180%.

As part of this, financial markets have grown in size, reach and complexity, and despite the financial crisis have accelerated since the beginning of this century. Global stock market capitalisation is around $70 trillion – around 100% of global GDP – and has tripled in the last 20 years.[3] Global debt securities outstanding are nearly a third higher at just over $90 trillion, having quadrupled over the same period. Turnover in foreign exchange markets has also quadrupled over a similar period to some $5 trillion a day.

Completely new markets have developed to manage and match risk and to expand funding options. Derivative markets now dwarf the markets in the underlying instruments on which they are based. Total derivatives outstanding have increased nearly six fold over the past 20 years to around $550 trillion. In 1914, such markets existed on a small scale for agricultural products.

Repo and securitisation markets which hardly existed when financial globalisation restarted are now each worth around $12 trillion.[4]

As financial globalisation has grown, so has the tendency for activity to concentrate in financial centres. Concentration, as Paul Krugman observes, is the most striking feature of many industries' economic geography. Labour market externalities mean that larger concentrations allow for a more efficient matching between employers and employees, and encourage the formation of a pool of specialised workers. Concentration increases the scale of the demand for intermediate inputs encouraging the development of more specialisation in the suppliers of those inputs. And concentrations facilitate the exchange of knowledge and skills.

Given the importance of access to specialised labour, to intermediate inputs and to knowledge, it is not surprising that financial services are subject to very strong pressures to concentrate activity in key centres.

[3] See World Federation of Exchanges H1 2016 Market Highlights.
[4] The securitisation figure covers US and European securitisation markets.

As a knowledge intensive service industry, the financial sector depends crucially on the availability of specialised labour. Complex financial service firms rely on access to a large pool of skilled workers. For example, 390,000 people work in financial services in London and 330,000 in New York, the two largest financial centres.

Financial services have an increasingly complex production chain that depends on the availability of specialised intermediate inputs of both financial and non-financial services. A modern financial market transaction may be the simple purchase or sale of a single financial asset. But it is more likely to be a complex chain of transactions involving a range of financial markets and intermediaries.

One can see this complexity in the value chains of financial services. In 2014, every £100 of Gross Value Added created by the financial services sector in the UK relied on £23 of inputs from other financial services firms and £29 of inputs from legal, accounting, consultancy, information, IT and business support services.

Knowledge and information is a critical input to financial services – perhaps more than any other industry. Quick access to information can lead to better decisions about the allocation of capital. Information about successful innovations in financial firms' production processes can lead to more efficient production across the industry.

In addition to these general forces that lead to industrial concentration, there is for financial services the particular importance of market liquidity and the ability to trade efficiently, which depends in turn on a large number of market participants wanting to trade in a particular venue. And the necessary market infrastructure generally has increasing returns to scale.

Concentration in financial markets

Financial services concentration has increased with financial globalisation and with the revolution in information technology. There are more financial centres now and the largest have become very large.

This may appear puzzling; the death of distance, the ability to interact instantaneously with market participants and end users anywhere in the world should perhaps have led to less not more physical concentration of financial services. One can only assume for financial services the returns to face-to-face contact, to physical proximity and co-location of workers remain high.

And it is possible that the information technology revolution has perhaps had the opposite effect of making it more possible for activity that used to happen in more localised markets to benefit from the lower costs, greater efficiency and specialised products of the larger financial centres.

There is some historical support for this. The development of transatlantic cables, telegraphs and tickers in the late 19th century seems to have led to greater not less concentration, perhaps by giving greater access to economies of scale. It is not clear that before the late 19th century a single dominant financial centre existed in Europe as the economies of scale were not sufficiently developed.[5]

There is perhaps another puzzle in the way financial services have developed, one that is closer to home. The resurgence of London. According to the Global Financial Centres Index, London is the world's leading financial centre, just as it was in the days of Cunliffe Bros.[6] But as we know, London did not enjoy uninterrupted status as a premier financial centre over the intervening period.

As I have noted, international financial activity dried up materially after the First World War. But even accounting for the overall decline, London's relative importance as a financial centre declined further as the global footprint and importance of the UK economy decreased along with sterling's reserve currency role. It was only with return to financial globalisation, some 50 years ago, that this process was reversed – leading to the concentration we now see.

The puzzle here is that historically, the clustering of financial activity has tended to follow trade and commerce. It was commerce that led to the rise of Venice and then Amsterdam as financial centres in the 16th and 17th centuries. It was the rising economic importance of the British empire that underpinned the rise of London as a financial centre and it was the emergence of the US as an economic power that drove the concentration of activity in New York at the end of the 19th century. We may be seeing this effect in Shanghai today.

One can only postulate, why, over the last 50 years, London has flourished as a truly international – not just a European – financial centre despite the relative decline in global importance of the UK and indeed the European economies as globalisation has advanced. The UK ceased being a surplus country and thus exporting savings in the 1930s (see Chart 1) and moved into a sustained deficit at the start of the 1980s.

There are a number of possible explanations that are not mutually exclusive.

A number of members of the European Union have maintained large surpluses of savings relative to domestic investment. Since the creation of the single market in financial services in the mid-1990s, London has become the financial centre for the whole European region. But while this may explain some of the resurgence of London in the past 50 years, it does not explain it all. London's revival started well before the EU's single market in financial services – indeed at a time when most EU members had capital controls. And the share of non-EU related business is markedly greater than of EU business.

[5] This point has been noted by Charles Kindleberger.
[6] See 'The Global Financial Centres Index 20', September 2016, published by the Z/Yen Group.

A second possible explanation is that modern financial markets are so large that the surplus generated by an original trade or manufacturing activity is far less relevant now than before. After all, since the abolition of capital controls after the end of the Bretton Woods era, financial services have grown a lot faster than global trade.

In the UK, gross financial flows grew rapidly from the 1980s to the end of the 2000s and became larger than trade and current account flows. Once financial flows start to move through a financial centre, the ensuing returns to scale and specialisation generate greater financial flows through the centre. The flows associated with the UK's extremely large external asset and liability position may have helped to reinforce this dynamic.

A related point, one that I touched on earlier, is that physical location does not matter anymore, since technology allows investors to pick the most efficient location to manage the global allocation of capital. In this case, London is playing the role of asset manager, intermediating flows between different global regions. The investment decision and risk management skills are in London but the assets may be booked elsewhere.

Allied to the increase in gross financial flows, it is possible that financial markets demand different inputs than in the past. For example, the market for derivatives encompasses more human capital (in the form of law experts writing contracts) than physical capital. Given the dominance of UK law, this would tend to encourage activity in London.

Finally, regulatory changes may have played a role. London became the main trading centre for the Eurodollar market in the 1960s. The City went through a wave of deregulation in the 1980s and beginning of the 1990s which may have contributed to its position as a global financial centre.

All of these drivers are likely to have played a part in concentrating financial market activity in London. And indeed they are likely to have been mutually reinforcing.

The social license for financial markets

I have described at some length why concentrations of financial services develop and the economies of scale, lower costs and greater efficiency they should bring. In the case of financial markets and financial centres, however, one does have to ask the question, 'for whose benefit'?

Financial services exist, as we would all agree, to serve the real economy by channeling savings to investment, by providing insurance and by facilitating economic activity and trade.

The great financial crisis and its aftermath was a painful reminder, however, of how financial markets, particularly in the international financial centres in which they have become concentrated:

- can act to generate and amplify risk, rather than to spread and dampen it,
- can become disconnected from the real economy and deflected into 'socially useless' activity and
- can become subject to ethical drift and lose the social license on which ultimately they depend.

Financial markets currently face many challenges but perhaps none is as fundamental as maintaining the support of society for the functions they perform. Meeting this challenge will require them to show that they are fair as well as effective.

And as my colleague Minouche Shafik has recently pointed out, while misconduct in financial markets is older than the South Sea bubble, the scale of the misconduct which has emerged since the financial crisis is unprecedented.[7] The magnitude of the fines is indicative of the scale of the problem – since 2008 wholesale market participants have paid $170 billion in misconduct fines and the story is not yet over. Perhaps most worrying is that while some of this relates to misconduct before the financial crisis, a good part of it is more recent.

A year ago, the Bank used its convening power to bring together a wide range of stakeholders and market participants in an Open Forum on Fair and Effective markets. A message that emerged with great clarity and force from the non-financial sector participants was that there remains a major lack of trust in financial markets and financial institutions because of misconduct. Participants saw cultural and ethical changes as an essential component of restoring the social license for financial markets.

The Bank of England is not responsible for market conduct and integrity in the UK. That task rests with the FCA under the very able leadership of my erstwhile colleague Andrew Bailey. But our overall responsibility for the financial stability of the UK, our prudential responsibility for the major wholesale financial firms and the Bank's close and historic interaction with London as an international financial centre means we have a very active interest in the integrity and fairness of the wholesale financial ecosystem which is located here.

That is why the Bank, alongside colleagues from the FCA and HMT, led the fair and effective markets review which reported last year and why we have made significant progress in ensuring that its recommendations are implemented.[8]

[7] See 'From 'ethical drift' to 'ethical lift': Reversing the tide of misconduct on global financial markets', Remarks given by Minouche Shafik, 20 October 2016, available at: www.bankofengland.co.uk/publications/Pages/news/2016/078.aspx.
[8] See 'Fair and Effective Markets Review – Implementation Report', July 2016, available at www.bankofengland.co.uk/markets/Documents/femr/implementationreport.pdf

It is why alongside the necessary development of 'hard law' to enforce minimum standards of conduct and accountability, such as the Senior Managers Regime, the Bank is using its influence to bring together market participants to solve collective action problems, for example, through the FICC Market Standards Board, to set expectations on behalf of broader society about expected behaviours and to encourage adherence to voluntary market standards.

Addressing ethical drift – and persuading broader society that it has been addressed and that markets work for the benefit of society – is a huge challenge for financial markets and the financial centres in which they are concentrated.

I do not want to go into detail tonight – though I would encourage you to read Minouche's excellent speech on the subject. I would just want to emphasise one crucial point – industry leadership is and will remain vital if this challenge is to be met.

Resilience and regulation

Restoring public support also requires authorities and the financial sector to demonstrate that the risks that are posed by large, very complex and highly interconnected financial markets can be effectively managed.

I am not sure whether my namesake in 1914 would have recognised the term 'financial stability' let alone 'macroprudential' policy. There certainly was no Deputy Governor for financial stability in those days. But I suspect he would have recognised well the way in which financial markets and the institutions that support them can generate and amplify stress in the financial system and how they can be subject to runs, fire-sales and contagion.

This is a lesson we had to relearn, very painfully, eight years ago. The result has been a major programme of reform of the regulation of wholesale financial market firms and of some aspects of markets themselves.

We are still in the process of implementing that reform programme. Again, I do not want to go into detail tonight. But, looking forward, two particular points are worth stressing.

First, as far as the Bank is concerned, there will be no going back to the future. The great financial crisis reminded us that the failure of the financial system, though rare, is possible. Contrary to the received wisdom pre-crisis, we learned that greater scale, complexity and sophistication of financial markets can make the system more not less vulnerable. And it also taught us again the cost of systemic failure.

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Or to put it in banking terms, we were reminded brutally not only of the probability of default but also of the social and economic loss given default.

For those charged with protecting financial stability, this lesson shifted our tolerance for risk. We are now much more aware of risks further into the tail of the distribution. And much more concerned to manage them. Given the size and scale of the concentration of financial market activity in the UK, that is particularly true for the Bank of England.

The events of eight years ago are receding into time. But I very much doubt that the generation of regulators that lived through the great financial crisis will revert to their pre-crisis tolerance and ignorance of systemic risk. And I very much hope that our successors do not forget those lessons either.

The regulatory reforms now being implemented will not in practice prove perfect in every specific. There will be places where reforms aimed at one part of the financial sector will cut across changes made elsewhere. And where reforms have both an unintended and an undesirable effect greater than their benefits.

The Bank has made very clear that we will look carefully at hard and clear evidence of such effects. Where justified we are prepared to adapt the reforms.

In this respect, I would point to the changes we and the ECB have championed to the EU regulations on securitisations. And to the change the Financial Policy Committee recently announced to exclude reserves held by banks at the Bank of England from the application of the UK leverage ratio capital requirement. We will offset this elsewhere to ensure that the overall stringency of the capital requirement is not weakened.

But while I can envisage that there might be specific and targeted change based on clear evidence, I do not envisage wholesale changes to the reforms. And I for one will continue to treat with caution generalised claims of 'unintended consequences', comparisons of conditions with the pre-crisis years and dire threats that regulation is preventing the financial sector from doing its job of providing credit and liquidity.

My second point about regulation is that the past is not a perfect guide to the future. Financial centres innovate and change at speed. New products and ways of working can become significant very quickly. And sectors that have not generated risk in the past can change their profile quickly.

In this respect I would mention the explosive growth since the crisis in the size and importance of asset managers and in the funds they manage, especially open-ended investment funds.

Market-based finance has grown very strongly in recent years. Since the crisis it has accounted for virtually all of the growth in net lending to businesses in Europe and the US.

The assets under management of the top 500 asset managers grew by nearly $30 trillion over the last 10 years or so. It now stands at $77 trillion, broadly equal to annual global GDP. Over half of this is accounted for by open-ended funds, most of which promise daily liquidity to their investors.

Such funds have generally been stable in times of stress – during the crisis they experienced relatively modest outflows. Unlike the banking sector they are not in the main highly leveraged. But they have grown markedly since 2008 and, with the search for yield, have become active in more illiquid and volatile markets while still in the majority of cases promising daily liquidity to their investors.

We do therefore have to ask not just whether individual funds are properly managed and can cope with redemption pressures. We also have to ask whether this increasingly important element of market-based finance, as a whole or in large part, would under stress transmit pressure to the rest of the system, for example, through fire sales of assets. And whether there needs to be a stronger link between a fund's promise of liquidity to its investors and the nature of the assets in which it is invested.

The Financial Stability Board and IOSCO are now taking forward important work to address these broader potentially systemic risks. This issue illustrates more generally that as markets innovate and market-based finance develops we need to remain very alert to possible systemic implications and keep our eye on the management of risk.

The UK exit from the European Union

I have discussed the fundamental challenges around ethics and risk that are crucial to building societal trust in and support for modern, international financial markets.

I am however conscious that I am the guest tonight of the Association for Financial Markets in Europe and the clue is in the entire name. I therefore should perhaps say a few words on the challenges for Europe's financial markets that may be posed by the exit of the UK from the European Union.

We do not yet know what arrangements will govern the trade of financial services and the integration of financial markets between the UK and the EU once the UK has completed its exit. That will be one of many issues to be determined by governments in negotiations over the coming years.

Nor do we know how the financial sector in the UK and elsewhere in Europe will respond to the process and outcome of those negotiations. There are many possible answers to both questions.

What I think is clearer is that this is not a zero sum game.

It is certainly possible – indeed some would say likely – that some wholesale financial market activities currently carried out in London and elsewhere in the UK are in future carried out elsewhere in Europe.

But as I have discussed earlier this evening, the re-emergence of London as the world's leading financial centre over the past 50 years, despite the decline in importance of the UK in the world economy, is the product of many factors.

It may in part be due to London's role as Europe's financial centre. But the scale and scope of broader international activity here suggests that clustering effects such as labour market externalities, specialised inputs and knowledge transfer have become even more powerful in a world of financial globalisation.

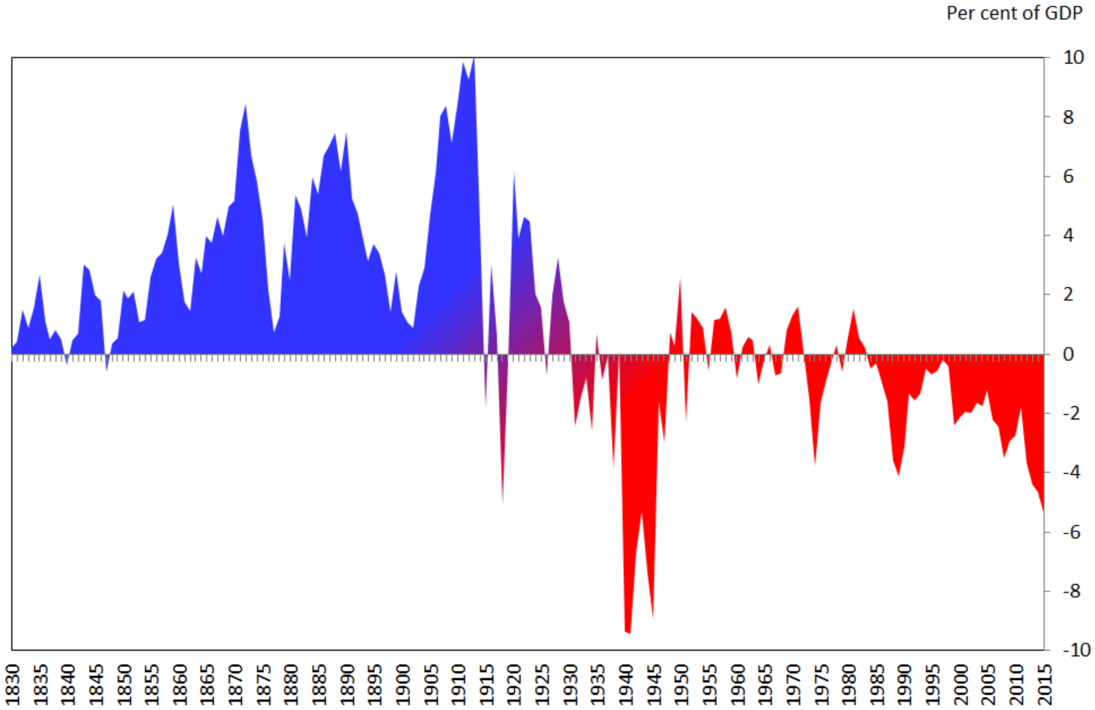
It is conceivable that given time these effects and the benefits they bring in terms of more efficient allocation of capital and risk could be replicated elsewhere in Europe. It is in my view more likely that if they are lost in London they would be lost to Europe – for the foreseeable future at the least. Fragmentation of wholesale financial markets activity in Europe, to the extent it occurs, is likely to have a general cost to European economies, including the UK.

And to the extent that the transition to whatever new arrangements will apply is not orderly and smooth, the costs and risks will be greater.

This is of course a technocrat's view and these issues, rightly, will not be settled by technocrats. The impact of Brexit on European financial markets is only a part of a much broader set of considerations. As an ex EU negotiator, I have some inkling of how many other factors can come into play. Whatever the outcome, and the twists and turns on the way, the Bank will continue to focus on its role in protecting financial stability.

Financial markets have come a long way since Cunliffe Bros became a founding member of the Accepting Houses Committee at the end of the first wave of financial globalisation. After a long hiatus, the second wave has led to an even greater development of large, interconnected and complex financial centres. But the markets here and the ecosystem that supports them, the challenges they face and the risks they pose, remain as central to the Bank's objectives and responsibilities as they have ever done.

Chart 1 UK current account (% of GDP)



Source: Bank of England.