Introduction

Dear Professor Goodhart. Dear Charlie Bean. Ladies and gentlemen.

Thank you very much for inviting me to speak here today. It is a great honour to give a public lecture at the LSE and the Financial Markets Group Research Centre, which truly is one of the leading European centres for academic research into financial markets.

In my speech tonight I will outline the status quo in the banking sector and the most pressing challenges. "Shaken but not stirred" might be an accurate description of its present state, which still presents many challenges. In saying that, I am, of course, alluding to one of your country's most successful exports: The agent who not only solved the Cold War, but who has recently also begun to prevent wrongdoing on the financial markets - James Bond.

In the 2006 version of Casino Royale, for example, Bond's opponent, Le Chiffre, engages in insider trading and market manipulation. In anticipation of his terrorist plot to destroy a prototype aeroplane, he bets on the fall in the stocks of the aircraft manufacturer. Moreover, he engages in extreme leveraging: by financing the bet with money borrowed from African rebels, whom he has promised high returns on the 'invested' money. Of course, it is not the supervisory authority, but Her Majesty's agent James Bond who prevents the attack, resulting in the collapse of Le Chiffre's fraudulent plan.

Insider trading, market manipulation, extreme leveraging, terrorism financing - you can imagine how daunting a task like financial supervision is in a world without James Bond.

Seriously, though, besides the aspects I have just mentioned, there were even more problems with banks and the financial markets before the financial crisis.

Reconstructing the financial infrastructure after a perfect storm

Seven years ago, we were in midst of a perfect storm unleashed by the financial crisis that had the Lehman Brothers insolvency as its focal point. The events and revelations that ensued put the global economy into recession and discredited the banking sector. This led to an overwhelming demand to bring the state back in: for robust regulation of financial markets, and of banks in particular, so that the financial sector would serve the real economy and society, not the other way around.
I guess many, if not most observers back then would have expected such a task to have been completed seven years later. Nevertheless, I stand here today to convince you that we have not yet arrived at that point. Rather, we need to continue the reconstruction of the banking sector. We need to finalise reforms with the aim of ensuring a stable banking sector that, at the same time, serves the real economy and achieves sustainable profitability - in that exact order. This remains a broader challenge for society as a whole - one not only for banks, markets and supervisors, but also the general public, academia, and the media.

The financial crisis and the subsequent recession revealed to us why this is such an overwhelming challenge: the financial system, and banks in particular, provide an essential infrastructure function for modern economies. Their stable functioning is a public good. The negative externalities of actions taken by bankers and their banking institutions have profound repercussions for the entire system.

In my speech today, I will outline why work on this infrastructure is still in progress: if you think of the financial system as streets and bridges, the regulatory reforms around the Basel III package have led to some repairs, some renovations, and some closures. The infrastructure has become safer, but there are still several potholes and too many possibilities of a localised collapse in the system. At present, we are still in the process of finalising these reforms, of completing the reconstruction work that is very much needed.

Lessons learned, realities accepted

But first, let me restate three truths that had to be learned the hard way during the crisis. And let me borrow the support of one of the leading academic figures in financial market research. About four months ago in this very room, Nobel laureate Robert Shiller presented the third edition of his book "Irrational Exuberance", earlier editions of which had already pointed to the misguided policies of financial re-regulation in advance of the crisis long before policymakers, markets, and the general public even became aware of them.[1] His simple message this time was that irrational exuberance is still a defining feature of how financial markets function. Investors still follow cycles of mania and crashes, rather than rationally calculating the probabilities of all relevant scenarios - and rather than considering the negative externalities of their transactions. Full stop.

This confirms the three truths or crucial lessons to be learned - realities to be accepted – and remembered. First, people are, in the majority of instances, irrational; rational calculation is severely limited - internally, by our limited neurological capacities; and externally, by uncertainty in a complex world. For supervisors this implies that regulation cannot assume rational behaviour, but interconnection and herding behaviour. Negative externalities of market participants’ decisions are still pervasive.

Moreover, second, these human limitations are not mitigated by market structures. If anything, blind faith in unregulated markets has made herding behaviour worse. Markets are not self-regulating entities, but socially constructed institutions that need publicly enforced rules. The third truth is that banks, supervisors, and policymakers neglected these insights and failed in providing a stable financial system that serves the real economy.

So, when we discuss the consequences and further course of regulatory reform, we should always keep these simple, but rather inconvenient truths in mind.

Where we are, and where we need to go

What helps this purpose is to remember the costs of the crisis. Combining the direct costs of stabilising the financial system with the costs of foregone production due to underutilised economic capacities, the global costs are huge. When we carry out cost-benefit analyses of
regulatory measures, we should remember the enormous amount of tax money spent on bank bail-outs.

This experience and the fact that regulatory failure was one of the key causes of the financial crisis, put pressure on policymakers and supervisors to revamp the regulatory framework. And the Basel Committee on Banking Supervision, the Financial Stability Board and other standard-setting bodies have paved the way for this reform. I will come to some elements of this later, but, most importantly, the Basel Committee devised the Basel III framework with enhanced capital requirement rules, a leverage ratio, new liquidity regulations, new macro-prudential instruments and several further elements. In the EU these rules have been translated into the Capital Requirements Regulation, CRR, and the Capital Requirements Directive IV. Moreover, in the euro area, we have created the Banking Union with a single supervisory mechanism and a single resolution mechanism.

And the reforms have actually worked. They have played a considerable part in stabilising the banking sector. Between 2008 and 2014 European banks have shrunk their balance sheets by 20% and have increased their capital ratios by 5 percentage points from less than 9% to around 14%, where the latter has been achieved through reduced volumes of risk-weighted assets as well as increases in own funds. As a result, most balance sheets have been reduced, and refinancing has become more sustainable.

Against this backdrop and as memory of the crisis fades, some have begun to argue that further regulatory reforms are no longer necessary, and that they are choking the only recently restarted engine of growth.

But let me be clear: all macroeconomic studies on the impact of regulatory reforms are consistent in stressing that the overall economic benefits far outweigh the costs.[2]

And that means that there is no way around fully implementing the reforms that have already been initiated and finalising their outstanding elements.

To summarise the current status quo, the banking sector's construction site show that good progress has been made; the most important bridges have been renovated, rebuilt or newly constructed. Yet, several projects still lie ahead before reconstruction is complete; let us move to the, in my view, three biggest challenges facing the banking sector.

**Challenge 1: Manage and supervise banks in a multi-polar regulatory regime**

The first challenge is encapsulated by a quite technical term, namely multi-polar regulation. Andrew Haldane of the Bank of England has published an article on it.[3] Multi-polarity refers to the now multiple regulatory requirements that banks have to meet. Rather than having to meet just one capital ratio, they now will have to surpass several minimum requirements: there are, first, the improved risk-weighted capital ratio; second, two new liquidity requirements have to be met - a short-term Liquidity Coverage Ratio as well as a longer-term maturity mismatch ratio; third, the upcoming Leverage Ratio; fourth, macro-prudential buffers; and, last but not least, besides better capital also subordinated debt requirements. I could go on. But the simple point is that a multi-polar regulatory system is a reasonable approach to make banks safer and the system more stable.

Multi-polar regulation is a "third way" between overly complex measures on the one hand and very simple measures on the other. Both alternatives have failed in the past. The complex approach – in other words, Basel II – was tested in the crisis. The crisis and the rather poor performance of internal market risk models as a basis for calculating regulatory capital requirements have made sole reliance on such an approach impossible. The simple approach, on the other hand, proved to not to be entirely adequate either: the Basel I capital ratio of 1988, which was such a simple figure, was rendered useless through regulatory arbitrage. Therefore,
the new framework combines the virtues of complex and simpler instruments in a multi-polar system that overcomes several of the pre-crisis shortcomings.

Which is why the Basel Committee is currently in the process of finalising the Basel III package. The new Basel framework, as agreed in 2010, marked a milestone in the regulation of banks. No sooner had it been put in place than the Basel Committee set about tackling the variability of risk-weighted assets in portfolios with essentially similar risk profiles. This variability makes it more difficult for investors to compare one bank with another. That is why the Basel Committee is currently overhauling the standardised approaches for credit, market and operational risks. It is also planning to introduce capital floors for internal models based on the standardised approaches. And, finally, we will improve the regulation of internal models so that risk sensitivity, simplicity and comparability will be enhanced.

Another much needed change to the regulatory framework for banks is a revision of the privileged treatment of sovereign bonds. This is another item currently on the agenda of the Basel Committee, given the experience of the recent sovereign debt crisis in the euro area. The Bundesbank is arguing for government bonds to be backed with a risk-appropriate amount of capital and for large exposure limits, just like those for claims on private debtors.

These reforms and the reforms that have already been finalised reforms have led us into a world of multiple regulatory instruments. Some criticise this. Still, I believe it to be a reasonable approach, because it keeps in check the complexity that is inherent in today's risk-based regulations. Each of the new instruments will capture and limit the risks from banks with differing business models and risk profiles. The leverage ratio might not allow the detection of high-risk investment strategies, but that job will be performed using the risk-weighted approach. And the future floor will limit the problems that have emerged with internal models.

For banks, risk regulation becomes an even more complex optimisation problem. A bank's management has to integrate its business model with the multiple regulatory requirements. This implies a major challenge for operational processes, for risk management and, last but not least, for profit generation.

To sum up, the successful management and supervision of banks under multiple regulatory instruments is a key challenge for bankers and supervisors - and one, I might add, that needs to be combined with the challenge of rethinking a bank's strategy and business model. I will come back to this point later.

**Challenge 2: Ending "Too Big To Fail". Finalising the recovery and resolution framework and making it work in reality**

The second challenge opens up a previously untouched layer of the banking infrastructure for reconstruction. As my colleague Andrew Bailey from the Bank of England has rightly criticised, the call for ever-higher capital provisions neglects that there are other ways to successfully protect financial stability. I refer to the rules that are designed to make banks resolvable without systemic disruption. Such reconstruction is sometimes so delicate that we might think of it as open heart surgery on the patient bank. Given the scale and sensitivity of this issue, the fact that the recovery and resolution regime has been globally agreed and will soon be implemented across Europe is an outstanding achievement. It was created to solve the problem of "Too Big To Fail" banks and to protect taxpayers from having to bear the costs of a failure. This resolution regime is a vital step forward in acting on one of the key lessons learned from the financial crisis: the much-discussed issue of moral hazard - a problem that arose because institutions that were previously "Too Big To Fail" could not be held accountable for their actions.

Looking ahead, there won't just be recovery and resolution plans for credit institutions: clearly defined liability cascades will be established, too, so as to ensure that the taxpayer really is last in line to foot the bill - that is to say, after shareholders and creditors have been bailed in, and then
only in absolutely exceptional cases. But, to put this theoretical resolution model into practice, institutions will need to hold a certain amount of additional debt which, should the need arise, will be transformed into loss-absorbing capital.

For global systemically important banks, this will be achieved by a standard for total loss absorbing capacity of banks, TLAC in short, which the G20 leaders will hopefully finalise at their summit in Antalya next month. The same principle applies to the European institutions, but implementation here is based on what is known as the MREL standard, which differs in some respects from the TLAC requirement. One difference is that the minimum requirements will be set individually for each institution by the competent resolution authority.

These new standards will have a transformative impact on the market for loss-absorbing debt capital. They will introduce new instruments and will enhance standardisation of subordinated debt. In combination with new disclosure requirements, these standards will lead to transparent, attractive investment opportunities. But, at the same time, this will also lead to the pricing in of the increased probability of a bail-in - in other words, investors will demand higher risk premiums.

**Challenge 3: Learning to live with different market structures**

This brings me to my third challenge, namely adapting to new, different market structures. What do I mean by that? Two things: first, market structures are going to be different than before the crisis - in particular less liquid; second, in such a new environment, banks need to adapt their strategies to survive. While both trends will be monitored closely by supervisors, it is the banks and market participants that have to adapt.

Let's think first about the market environment before I come to banks and their business models. Before the financial crisis, ever-present liquidity was the touchstone of the free financial markets philosophy. The belief was that, if only demand and supply of a tradable asset were sufficiently high, you could assume perfect, frictionless markets.

But this was an illusion. Rather, the pre-crisis 'liquid' market structure resulted in interconnectivity and the well-established problems of "Too-Interconnected-To-Fail" and "Too-Many-To-Fail". Moreover, this liquidity supported unsustainable trading strategies and short-termism.

Now, in the post-crisis environment, in which tougher regulation is one element, we have witnessed several new dynamics resulting from changing market structures. Particular attention has been paid to extreme, unexpected price movements that seem to have come from nowhere. The incident which received the most attention was probably the so called flash crash of 2010. On May 6 of that year, investors were stunned when the Dow Jones plunged almost 6 per cent before recovering - and all that in 20 minutes.

In light of such incidents some have argued that post-crisis regulation has put pressure on banks to quit activities, which led to reduced liquidity, thereby increasing the likelihood of extreme price swings. This logic provides the basis for some people's demand for a redesign of regulation.

Regulators are carefully monitoring the micro- and macro-prudential implications of the reforms. However, any analysis and recommendation would have to recognise that a reduction in the trading activity of banks was a genuine intention of the post-crisis reforms. We therefore need to weigh up concerns about liquidity against reduced trading activity.

To put it bluntly: Yes, markets are going to be less conducive for the generation of quick profits, but that was what was intended by the reforms - what we very much need are informed and committed investors, not short-termism. This will strengthen stability.

But that is also why banks need to adapt to the new environment. While the banking sector has been shaken, business models have not been stirred - that is, only few have been overhauled.
Some stirring, however, might not hurt. And, here, it is market forces, rather than regulatory forces that come into play. What I mean is that banks must apply the acid test to their business models. Especially European banks are lagging behind in redirecting their strategies. Against the backdrop of changed market structures and in a low interest rate environment - which is, in all likelihood, here to stay - banks must urgently rethink their strategies to survive.

I cannot emphasise enough how pressing it is for banks to assess and adapt their business models. But let me also stress that it is not the task of supervisors to intervene in the strategic orientation of banks. We have a public mandate to put a stop to imprudent activity with the aim of securing a stable banking sector that serves the real economy. Therefore, we tax and limit negative externalities. For example, in addition to what I have already discussed, legislation and regulation of banking structural reform - also known as "ringfencing" - is under way in the US, the UK, and the EU. The regulations will ringfence those segments of banks that deserve particular protection, in particular deposits. This is designed to internalise negative externalities and reduce moral hazard. Banks will have to accept the new public framework and construct sustainable business strategies which are compatible with it and which may restructure their group. In this regard, I fully understand the case for a large European investment bank as a response to the large US institutions - as long as it is properly regulated and not "Too Big To Fail". Nevertheless, it is ultimately and exclusively the banks themselves that have to take these decisions. The role of universal banks, and whether they should be broken up, should be decided by their owners, not by the supervisors.

In terms of market-induced restructuring, supervisors prefer the banks to be stirred, but not shaken. In that sense, living with new market structures and adapting business models to sustainable profitability is the third vital challenge that the banking sector is facing.

**Conclusion**

Ladies and gentlemen,

The crisis has taught us a number of important lessons: humans, whether acting on financial markets or not, are not rational; markets are not self-regulating and do need politically mandated regulations; and supervisors, market participants and, before the crisis, policymakers failed in providing a stable financial sector.

Regulatory reform has already reversed some of the earlier mistakes, and these reforms have been highly beneficial for our economy and society. Completing these reforms will continue to be a demanding task for markets and supervisors alike. But there is no viable alternative.

In Casino Royale, when asked if he wants his vodka martini shaken or stirred, Daniel Craig alias James Bond replies 'I don't give a damn'. Well, I do. The banking sector has been shaken by the financial crisis, but not stirred by markets - at least not sufficiently. We cannot leave it to 007 to track-down bad guys. Bankers and regulators both still have to do a lot to finish the reconstruction of the banking sector.

Ladies and gentlemen, that concludes my speech - thank you very much for your attention. I am looking forward to a productive discussion. And for those who missed it, the new James Bond movie was released on Monday.
Footnotes


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