Speech by

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Finance: A Return from Risk

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Master, Sheriff, My Lords, Alderman, Ladies and Gentlemen,

Introduction

The financial turmoil that began in August 2007 led to a financial panic in September 2008 and now to a severe worldwide economic downturn. It is fair to describe the events that followed the failure of Lehman Brothers as the Panic of 2008 because of the almost complete collapse of confidence in financial institutions and the flight of funding that ensued. Perhaps we had forgotten that such panics and banking crises have occurred with depressing regularity in the financial systems of market economies. But the history of the City is in large part the history of banking crises.

The measures that central banks took, and continue to take, to restore confidence in the banking system were extreme and on an extraordinary scale – the Bank of England has lent hundreds of billions of pounds to the banking system. But they were not unprecedented – it has happened many times before in crises over the years. So I want tonight to reflect on why we seem to find it so difficult to learn from experience.

But even when set against that historical background, the extraordinarily sudden, severe and simultaneous downturn of activity and trade in every corner of the world economy last autumn is remarkable. A collapse of confidence in the coffee houses of Lombard Street was one thing; a collapse of confidence in the world economy is quite another.

An examination of these parallels will, I hope, help to throw light on three questions. First, does the nature of financial risk explain the frequency of crises and what does it imply for the design of banking regulation? Second, what are the lessons from the crisis for central banks in their pursuit of both monetary and financial stability? And, third and most urgently, how do we find our way out of the present crisis?

The nature of financial risk and its implications for the regulation of banks

There is no shortage of proposals for reform of bank regulation from official groups, such as the Financial Stability Forum, and unofficial groups, such as the G 30, chaired by Paul Volcker and the Geneva Forum. Since the excessive risk-taking of recent years has now given way to an extraordinary degree of risk aversion, there is no hurry to choose among them. Whatever exuberance – rational or irrational – existed has been destroyed by the crisis. So we have time to reflect before we decide on the shape of a new regulatory system.

Another reason for reflection is that recent years have seen a natural experiment. Some regulatory systems were light touch, others heavy touch, and yet others placed both ownership and regulation of banks in the public sector. Yet they all failed to some degree to prevent the accumulation of risks that finally produced the crisis. So it is unlikely that there is a simple answer.

Any plan for reform should take into account the nature of financial risk. Why were so many people misled for so long? And was there an inherent weakness in the structure of modern banking?

Banks are dangerous institutions. They borrow short and lend long. They create liabilities which promise to be liquid and hold few liquid assets themselves. That though is hugely valuable for the rest of the economy. Household savings can be channelled to finance illiquid investment projects while providing access to liquidity for those savers who may need it.

But given how risky banks are, it should not be surprising that from time to time they get into trouble. And they have done so regularly since banking began. Confidence in a bank can disappear quickly making it vulnerable to a destructive bank run. If a large number of depositors want liquidity at the same time, banks are forced into early liquidation of assets – lowering their value. And, of course, if banks make sufficient unwise loans to borrowers who do not repay, then that can threaten solvency as well.

Banks can of course take their own actions to ensure that investor confidence is maintained. For example, a visible source of liquidity helps. In the panic of 1906, the founder of what is now the Bank of America displayed his gold reserves on the street and offered to convert deposits into gold, creating confidence in his bank at a time when many others failed. Forty years ago, the clearing banks in London held around 30% of their assets in short-term liquid instruments. Today that liquid assets ratio is about 1%. For the major UK banks, almost 25% of customer loans are now funded by short-term borrowing in wholesale markets. At the turn of the new century it was close to zero. This was the distinctive feature of the contemporary British model of banking. Distinctive it may have been; sensible it was not. HBoS and RBS paid the price as the availability of this funding dried up, and not one of the building societies that de-mutualised in the 1980s and 1990s in order to expand beyond the constraints of their deposit base has survived as an independent entity.

Banks have changed. They have encouraged the expansion of proprietary trading, the funding of long-term assets in short-term wholesale markets, a rapid expansion of balance sheets and a marked rise in leverage. Commercial banks followed the path of investment banks. Balance sheet size and high leverage were seen as the key to obtaining funds at lowest cost. The total assets held by the world's largest banks roughly doubled in the five years to the end of 2008, and leverage in UK banks rose on average by two-thirds. The bulk of credit growth in the economy as a whole was taking place within the financial sector. And the complexity of the products being created made it hard to evaluate the underlying risks.

Why did banks change so much and take risks which eventually led to some spectacular downfalls? Ultimately, the main factor was an inability to perceive the true nature of the risks involved. In this they were not alone.

John Maynard Keynes took pains to distinguish between risk, where probabilities or frequencies could be calculated, and uncertainty, where there is no scientific basis on which to form any probability estimates. Keynes went on, in an article published in 1937, to spell out exactly how we tend to behave in the face of such ignorance. It explains a great deal of recent behaviour in financial markets. Keynes argued that uncertainty affects our behaviour in three ways:

“(1) We assume that the present is a much more serviceable guide to the future than a candid examination of past experience would show it to have been hitherto. In other words we largely ignore the prospect of future changes about the actual character of which we know nothing.

(2) We assume that the *existing* state of opinion as expressed in prices and the character of existing output is based on a *correct* summing up of future prospects, so that we can accept it as such unless and until something new and relevant comes into the picture.

(3) Knowing that our own individual judgement is worthless, we endeavour to fall back on the judgement of the rest of the world which is perhaps better informed. That is, we endeavour to conform to the behaviour of the majority or the average. The psychology of a society of individuals each of whom is endeavouring to copy the others leads to what we may strictly term a *conventional* judgement”.

This suggests that it is very hard to take a truly independent view – especially a contrarian one that recognises the possibility that improbable but conceivable events could result in large losses. In other words, the sheer difficulty of forecasting the future makes it hard for contrarian investors without substantial net worth to survive in the market. As a result the market is vulnerable to “sudden and violent changes”. As Keynes put it, “the forces of disillusion may suddenly impose a new conventional basis of valuation. … At all times the vague panic fears and equally vague and unreasoned hopes are not really lulled, and lie but a little way below the surface”. So a conventional wisdom that leads to a speculative mania, can quickly collapse as sentiment turns on its head.

But a speculative mania is not the product solely of the creative imagination of financial engineers. It requires the willing collaboration of gullible investors, who may not fully appreciate the risks that they are taking. Take a simple example of an investment that provides a long, regular stream of profits interspersed with occasional large losses, such that on average you would expect it to have the same return as a safe investment – not an unreasonable characterisation it would now appear of many of the investment strategies of

recent years. Over short time periods, where it is unlikely that disaster will strike, it is more likely than not that investors will come out ahead, with a high return. But over long periods, where the risk that disaster will strike at some point is higher, it is likely that the overall return will be worse than the safe investment. And, because charges are often structured so that investment managers receive more of the upside from risky behaviour than they share in the downside, they have an incentive to promote the risky investment strategy. That, allied to a massive increase in the complexity of financial products and instruments in recent years, has meant that investors have, perhaps unwittingly, aided an enormous increase in the risks being run in the financial system.

Given these problems, it seems to me that regulation should aim to be simple and robust. Overly complex measures of risk and capital adequacy are rarely robust to developments that are easy neither to anticipate nor calibrate. And robust rules for regulation will of necessity need to be simple or supervisors will be lost in a morass of unnecessary detail.

For the same reasons we should not expect too much of regulation. Conventional judgment is a safe haven for bankers and regulators alike. It is not easy to persuade people, especially those who are earning vast sums as a result, that what looks successful in the short run is actually highly risky in the long run.

As in monetary policy, it is unlikely that prudential supervision can be implemented as a set of rules to be applied mechanically. Nevertheless, to rely solely on the discretionary judgment of individual bankers and regulators is asking too much of human capabilities. This suggests that the principle of constrained discretion, applied so successfully in monetary policy, needs to be applied to banking regulation. That is not to say that a similar institutional apparatus would be appropriate, but we need to build into the system some simple and robust impediments to excessive risk-taking that can be monitored. And we must ensure that an institutional memory is maintained so that the lessons from the crisis are not forgotten and those impediments to excessive risk-taking are not swept away once memories of the crisis recede.

The design of those impediments should be based on an explicit identification of the market failures that regulation can hope to correct. Such market failures seem to relate to two dimensions of banking – the "cross-section" and the "time-series" aspects of behaviour. The former reflects the extreme interconnectedness of banks. Each individual institution can appear relatively safe while the links between them mean that the system as a whole is vulnerable. Any shock could lead banks to fail through a domino effect. The superstructure of complex transactions within the financial sector (in derivatives for example) greatly increased this interconnectedness.

The time-series aspect is the pro-cyclical behaviour of risk-taking in the financial system that I described earlier. Optimism feeds on itself until the occasional setback changes the mood to one of pessimism. And individuals are reluctant to accept that success may not be the result of superior wisdom, which should naturally be reflected in compensation, but the short-run outcome of a risky strategy.

To deal with the "cross-section" problems we need to reduce the exposure of the system to domino effects. For some, especially over-the-counter, markets this could be achieved by increasing the role of central counterparty clearing houses. Much good work on this is going on, led by the Federal Reserve Bank of New York. But a clearing house should not be an excuse for allowing flawed financial instruments, such as many of the mortgage-backed securities, to be treated as high quality assets.

We also need to improve the regulation of the liquidity of banks. After the crisis began, the most striking feature of the regulatory system, as embodied in the Basel arrangements and implemented in the UK, was the absence of any effective regulation of liquidity. The FSA is acting to remedy the situation, and the Bank is in active discussion with FSA about how such regulation should best be implemented.

More attention has been paid to the "time-series" dimension where there is now a clear international consensus among the members of the Financial Stability Forum and the Basel Committee that some form of counter-cyclical prudential supervision is required. The principle has been established.

To correct these types of market failure will require a system of regulation that effectively marries the "top down" assessment of the risks to the system as a whole to the "bottom up" supervision of individual institutions. The present system has not delivered that.

A lot of detailed work needs to be done to convert these general principles into concrete implementation. How would the interaction between the "cross-section" and "time-series" risks be taken into account? Would the framework take the form of an addition to capital requirements as a function of the degree of maturity mismatch, leverage or the rate at which the balance sheet was expanding? Or would there be a limit on leverage ratios? How would leverage and maturity mismatch embedded in the assets side of the balance sheet be taken into account? And how would the framework be implemented for banks whose assets and liabilities span jurisdictions? Can we define a group of institutions that are systemically significant? In the present crisis most institutions are deemed to be potentially systemic because of the impact of the failure of any of them on creditor confidence. If most banks appear systemic in a crisis won't countries want to require foreign banks to be subsidiaries not branches? And, more fundamentally, should there be a Glass-Steagall type of provision to prevent retail deposits from being used to fund investment banking activities? There are good arguments in favour – to separate the utility functions of a retail bank taking household deposits and running the payments system from the casino trading of an investment bank, and good arguments against – the difficulty of maintaining a credible boundary between those institutions that are eligible to receive government support and those that are not. We need a public and informed debate on the merits of the arguments.

We also should reflect on the fact that the belief that the authorities will step in when risks materialise encourages risk taking and means that risk-adjusted returns to financial activity are too high. The experience of unsustainably high returns in normal times interspersed by regular crises has been repeated across countries and over time. So if banks are to bear the true cost of the risks they take, changes need to be made to the environment in which banks operate.

All these are important issues. While committing at international level to broad principles on regulatory reform, such as extending the net to all highly leveraged institutions and making capital requirements counter-cyclical, there is time to think through carefully the best way to implement them, and it is important that we take it.

Many of these questions about the future of the regulatory structure will be discussed in the Turner review to be launched tomorrow. The Bank awaits the Review with interest. It will wish to take time to reflect carefully on the Report before expressing a view.

Given what has happened there is now international support for developing a counter-cyclical toolkit for the prudential supervision of banks. But let us be clear what such tools would have entailed had they operated in the past. They would have imposed constraints on the growth and profitability of bank balance sheets. They would have been seen as a tax on the success of the investment banking community and the City of London more generally. And that would have taken place at a time when virtually the entire weight of opinion, not only in this country but also abroad, was in favour of the expansion of financial services. Indeed, just before the financial turmoil broke out in the summer of 2007, there was a debate in New York about the need to follow London's example of unfettered markets if they were not to lose ground.

What are the lessons for central banks?

With the passage of the new Banking Act last month, the Bank of England now has two objectives enshrined in statute: monetary stability and financial stability. Events of the past six months show that there are limits to what can be achieved in respect of either objective. No policy framework can, or should be expected to, stabilise output when demand in the rest of the world suddenly and simultaneously "falls off a cliff", to use the expression heard so often in recent months. Even the safety valve of a floating exchange rate cannot insulate an economy from its trading partners. World trade fell by around 5% in the final quarter of 2008. 54 of the 56 nations for which data are available for the fourth quarter registered falls in industrial output. 7 of those suffered double digit declines. For many years trade has been the route to faster growth. Now trade is leading the world down as the economies most

adversely affected by the current downturn are those most dependent on exports, such as Japan and some of the other Asian economies, not those with the worst banking problems. Sharp changes in sentiment, confidence, animal spirits – whatever words you care to use – are capable of wreaking havoc on the world and our own economy.

I shall turn later to our immediate response to the crisis. I want first, however, to ask whether central banks have the right instruments and the right policy frameworks to deal with a world in which some of the biggest risks are of the type I have discussed earlier, namely events which occur very infrequently but when they do so have large adverse effects; events such as those through which we are living. In other words, was our framework suitable for a world of stability but inadequate for preventing or responding to large adverse shocks?

In particular, should central banks continue to use their single monetary policy instrument – in our case Bank Rate, supplemented when necessary by unconventional operations – to aim solely at price stability, or should they aim also at wider financial stability objectives, as some have suggested? For over fifteen years Bank Rate has been set to meet an inflation target. And it was very successful in achieving that objective until commodity prices pushed up inflation in 2007. Since the Monetary Policy Committee was established, the average inflation rate has been only 0.1 percentage points away from the target. The strategy of inflation targeting ensured that the MPC maintained a balance between overall demand and supply in the economy.

We could, of course, have pursued a different policy. We could have set interest rates consistently at a higher level in order to lower the growth of domestic demand below the rate at which inflation was stable and close to the target. In the words of my predecessor, we could have rejected the approach of accepting "unbalanced growth rather than no growth". But to argue that Bank Rate should have been set to achieve not price stability but other objectives would have meant accepting rising unemployment and falling inflation. And that would not have altered long-term interest rates in world capital markets and "irrational exuberance" in financial markets in the US and elsewhere. If we want to slow the growth of the financial sector balance sheet, and most of the expansion of credit in recent years was

within the financial sector, we can surely do better than raising Bank Rate to a level that undermines the real economy and our commitment to the inflation target.

As Chairman Bernanke rightly emphasised last week, one of the causes of the crisis was the impact of the growing current account imbalances on financial intermediation in the main deficit countries, the US and the UK. The large and persistent inflows of capital lowered market interest rates to extremely low levels and encouraged the "search for yield". In response, the financial services industry rediscovered the time-honoured way of raising rates of return – increasing leverage and taking more risk while finding ways of making the degree of risk less transparent. The crisis resulted from the interaction between the "micro" behaviour of banks and other institutions in creating new financial assets and the "macro" economic strategies pursued by the world's major countries. If we are to make crises less likely in future we will need to concentrate on policies covering these interactions.

The size to which the current account imbalances were allowed to grow reflected the fact that the international monetary system, such as it is, placed no pressures on surplus countries and that the main debtor country issued the world's reserve currency. Year after year international meetings expressed surprise, and indeed concern, that the imbalances continued to accumulate, but in the absence of a correction the theme became a worn groove in discussions and interest waned. The more forcefully the warnings were expressed, the more they were ignored, precisely because each country appeared able on its own to achieve price stability and steady growth despite the continued build-up of the imbalances.

The consequences of this are now evident: a severe global downturn affecting virtually every country in the world. In a world of imbalances it is just as dangerous to rely too heavily on foreign demand for goods and services as it is to rely excessively on foreign borrowing. Surely now no country can be indifferent to the objective of improving the consistency of our macroeconomic strategies. So I hope that the debate about the need for symmetric obligations on surplus and debtor countries alike will move on from previous unsuccessful dialogues stretching back to the Bretton Woods conference in 1944.

Turning to the "micro" cause of the crisis, a root cause was a degree of over optimism in financial markets. History, whether the run up to the 1929 stock market crash or more recently in the dotcom mania, suggests that only very substantial rises in short-term interest rates will bring to an end the excessive speculation, and that such rises bring about the very recession which the policy is designed to avert.

What is needed is an additional instrument, or possibly a set of instruments, to provide the authorities with the ability to control the growth of the financial sector and its interactions with the wider economy. A set of counter-cyclical policy instruments is the right response to the dilemma of trying to use Bank Rate to control both inflation and excessive expansion of the financial sector. It provides the "top-down" judgement for prudential supervision that I described earlier, but detailed work is needed to flesh out that general principle.

How should we deal with the present crisis?

I have spoken so far about the long-term lessons of the crisis for the structure of banking and its regulation. But the immediate need is to deal with the extraordinarily steep and simultaneous downturn in so many economies around the world, and to stabilise the banking system in those countries where it has failed. That should be the main priority at the forthcoming G20 Summit.

There are three parts to the required policy response. First, there is an urgent need for a collective commitment by all the countries in the G20 to restore confidence. Second, in those countries where the banking system has failed, there must be a credible promise that banks will be restructured and recapitalised so that they can resume their normal functions and support the flow of credit to their own and other economies. Third, we need to identify and explain a coherent exit strategy through which all of the unprecedented official policy actions can be unwound and which provides a bridge back to stability.

A joint commitment to a macroeconomic stimulus – the division between monetary and fiscal measures is a matter for individual countries to determine – is required to ensure a growth of nominal demand sufficient to reverse the extraordinarily steep and simultaneous

downturn in output around the world. Much has already been done. But the measures need to add up to a collective determination to support an adequate level of money spending, and will need to include actions to help poorer countries borrow either from the IMF or on world capital markets.

Without that collective commitment, countries may neglect the beneficial effects that their policy actions can have on other countries, resulting in an excessively cautious approach. The G20 summit in London in two weeks time offers an opportunity and a challenge. The occasions on which the words and actions of policy-makers really matter are probably fewer than many of us care to admit. But this is one of them. And I was encouraged by an unusual sense of determination at the G20 Ministerial Meeting at the weekend to show a collective commitment to deal with our problems.

In the UK we are already taking unprecedented action to boost nominal spending. The Government announced a temporary fiscal stimulus in the Pre-Budget Report in November. Bank Rate has been reduced by 4 ½ percentage points in the past six months. And this month the Bank began a series of asset purchases aimed at boosting the supply of money in the economy directly. In due course, this will act to expand money spending. In its entire 300 year history, the Bank of England has never acted so swiftly or extensively in response to an economic downturn.

The second aspect of the required policy response is effective stabilisation of the banking system. The experience of those countries that have most successfully resolved banking problems, such as Sweden in the early 1990s, suggests that that will require uncertainty about the values of some of the more opaque assets on bank balance sheets to be dispelled. It will take many months to audit forensically the true state of those balance sheets and for some of the underlying macroeconomic uncertainty to dissipate. In the meantime governments have to stabilise the banking system by reassuring creditors in order to prevent the risk of either retail or wholesale runs of the kind we saw in the Panic of 2008. They have to subscribe sufficient equity capital – plain ordinary equity – in order to underpin the capital position of banks in the event of future losses. Although there are different ways to do this (splitting banks, insuring pools of assets), they all have in common a commitment to provide

contingent capital to banks so that core equity capital does not fall below some minimum ratio and so creditors are protected. It follows that governments must be prepared to hold whatever proportion of equity capital turns out to be necessary.

The final part of the policy response relates to the longer term. There needs to be a clear exit route by which the extraordinary level of official financial support will be unwound as conditions return to normal. And there needs to be a credible commitment to implement the longer term reforms. For monetary policy, the inflation target provides a natural guide to when, and by how much, the extraordinary degree of policy stimulus should be withdrawn. In particular, the outlook for inflation will determine when and by how much asset purchases are in due course reversed and the timing of a return of interest rates to more normal levels. For fiscal policy, there needs to be a credible plan for consolidation of deficits and debt in the future contingent on the state of the economy. And in terms of support to the banking sector, governments should signal their commitment to return banks to the private sector once balance sheets have been restructured. In the UK that will be underpinned by UKFI formulating an explicit mechanism through which the Government's shares can in due course be sold back to the private sector.

There will also, eventually, need to be a way to scale back the extraordinary levels of liquidity support provided by central banks during the crisis. The Bank of England has lent, and continues to lend, over £300 billion pounds through our repo operations and the Special Liquidity Scheme. And a backstop of further liquidity support is still available if the system requires it through our discount window. The Federal Reserve has lent more than $900 billion dollars, and the ECB around €700bn. Relative to GDP, the balance sheet of the three central banks has broadly doubled during the crisis. But in providing this support, central banks cannot offer long-term funding and should not offer support against assets that are unlikely to have a viable future in the absence of official intervention. At some point central bank balance sheets will need to contract.

Finally, although I have stressed the need to take time to think through carefully the long run reforms required, we need to commit now, while the political will exists, to a process for

decisions on long-term reforms in key areas such as bank regulation, reform of the international monetary system and the governance of international financial institutions.

Conclusions

Why did no one see this crisis coming? In fact, most of the underlying causes of the crisis attracted attention from economists, central banks, international financial institutions and regulators. But the difficulty of overcoming coordination or collective action problems meant that nothing was done. Banks felt that they had to keep on dancing while the music was playing. Regulators could never prove that the risks they identified would crystallize, and the "top down" and "bottom up" dimensions of prudential supervision were not married. Central banks and the IMF discussed the imbalances for so long that some came to believe that they were crying wolf. And no one country could prevent the world wide increase in asset prices.

Christopher Fildes' law of the financial cycle says that "disasters happen when the last man who can remember what happened last time has retired". Periods of euphoria and panics in the financial system are inherent features of a market economy. They are the cost we pay for the benefits of a market economy – long-run increases in our standard of living which other systems have failed to deliver. After another twenty years or so, memories of the Panic of 2008 will have faded, and the regulations put in place in its wake will no doubt be seen as old-fashioned, inhibiting of the potential of the City, and as ripe to be swept away as was the Glass-Steagall separation of commercial and investment banking in the United States a few years ago.

A lesson of history is that few generations have been able to avoid a repetition of earlier banking crises. The essential problem is that we can no more bind our successors than our predecessors were able to bind us. Rare events, even when dramatic at the time, lose their power to shape policy as memory recedes. The role of institutions is to retain a collective memory and to resist the temptations of the present. That is one of the most important roles of a central bank. It is accepted as such in the domain of monetary policy. And there is an equivalent role in financial stability.

The introduction of simple and robust policy tools into a regulatory regime based on the exercise of constrained discretion would make it easier to resist overly rapid expansion of financial institutions. In particular, the authorities should maintain a clear focus on the issues that matter when the worst occurs – liquidity and leverage. It should be intrusive, in the sense of knowing what is going on, but not bureaucratic. A system in which it is easier for a large bank to expand and then destroy its balance sheet than for an individual to open a bank account has lost focus. That is not the fault of regulators, but a reflection of the pressures and incentives they have faced – from all of us.

As a Kennedy Scholar at Harvard, I have always treasured Harold Macmillan's words in his tribute to John F Kennedy. He was, said Macmillan, a man "whose eyes were on the horizon but whose feet were on the ground". In re-designing the regulatory framework we certainly need to keep our feet on the ground, and we should also keep our eyes on the horizon, both ahead of and behind us.

More urgent, however, is the immediate task of generating an economic recovery. Most of us come from the generation that grew up believing that mass unemployment and world recession were things of the past, relevant to the history books but not the textbooks. That assumption is under threat. We must rise to the challenge.