The Financial Crisis: What Went Wrong and What is Needed to Make it Right

Callum McCarthy
The Financial Crisis:  
What went wrong and what is needed to make it right

Sir Callum McCarthy  
Former Chairman of the U.K. Financial Services Authority (FSA)  
from September 2003 until September 2008

Mitsui USA Lunchtime Forum  
Baruch College, Zicklin School of Business  
New York City  
December 8, 2010

The Great Financial Crisis

I want to address the question that the Queen famously asked at the LSE of an assembly of economists there: why did none of you see this coming? And to answer the question I want to talk about the world as it was in the first half dozen years of this century; what has gone wrong; and what is going to be needed to put it right. I shall concentrate on the issues raised for central banks and regulators, rather than the wider economic issues, for the very good reason that it is the world which I inhabited as chairman of the FSA, the UK regulator between 2003 and 2008, and about which I can therefore speak with some confidence.

The World We Lived In

As we begin to face the reality of the crisis which we are still experiencing, and the mounting awareness of the long term costs this will bring, it is hard to remember the world we lived in three or four years ago. It was characterised by the present Governor of the Bank of England, Mervyn King, as the NICE years: non inflationary consistent expansion, and described in a more homely way by Bill Rhodes, one of the most senior US bankers, as the Goldilock years: neither too hot nor too cold, but just right. Economists described it as the “great moderation”. Throughout the world, inflation was low (in his time as Governor Eddie George never had to write to the Chancellor to explain why inflation had diverged from the 2% target by a percentage point; Mervyn has had to write on nine occasions so far, and the divergence has been on occasions nearer 2 than 1%; in the UK – unlike the US – we face the prospect of inflation exceeding the 2% target by at least 1% for the whole of 2011); economic growth was high (world GDP grew by over 3.5% in 2007, despite the troubles that developed in the last quarter), and was no longer dependent upon a small number of advanced countries but was increasingly diversified with the growth of the BRIC countries – Brazil, Russia, India and China. There was a consensus on what the right policy prescriptions were - a belief that, after the trauma of inflation in the 1970s in advanced economies and more recently in emerging markets, the answers to how to combine growth and acceptable levels of inflation had been found: inflation targets set by central banks, globalised markets for financial institutions, freedom from exchange controls, a regulatory approach which encouraged markets and which diversified risks. It was a world which was marked on the retirement of Alan Greenspan by his being feted round the world as the architect of the central bank miracle. The past is indeed a different country.
What Were the Features of the Great Moderation?

3 The first feature of the great moderation was the breaking down of a series of cartels in financial services – or, if you prefer to use alternative terms, major deregulation. This was an extended process: in the UK its manifestations included the ending of currency restrictions and the agreement with the stock exchange to end the cartel of separate brokers and market makers – both of course actions of the Thatcher government; and it meant the ending of the monopoly of building societies on the provision of housing mortgages. In the US the most obvious event was the repeal of the Glass-Steagall Act which had required the separation of commercial banking from the underwriting of securities. All these events made financial services more competitive. They enabled new capital to be brought in (often from abroad); they heralded a wave of mergers and acquisitions, perhaps most notably after Big Bang in London in 1986. They incidentally had a profound effect on regulation. The task of regulating a series of cartels, with the power to influence who might and might not be admitted to membership of the cartel – the traditional power of the Governor of the Bank of England, epitomised in his mythical eyebrows – is very different from the regulation of mainly international firms, competing in open markets. It is no accident – nor any criticism of his successor Robin Leigh-Pemberton – that Gordon Richardson is seen as the last patrician figure as Governor of the Bank. The brave new world was both more international and more litigious.

4 A second feature of the great moderation was a fundamental change in the nature of banking. The central skills of banking are credit appraisal – will this be a good loan to make against the rewards it offers? – and what is technically known as maturity transformation – the fact that banks borrow short and lend long, and need to manage their liquidity to avoid running out of cash. There were major changes on both the asset side and the liability side of the balance sheet. On the asset side there was a change in the business model: banks used to make a loan and hold it on their balance sheet until it matured. Increasingly banks syndicated loans: they first originated a loan and then syndicated it among a number of other financial institutions – the originate to distribute model. This was generally welcomed - by bank management, by central bankers and by regulators - as a means of spreading risk. On the liability side, the original model of collecting retail deposits (all or almost all demand deposits which in theory and legally could be immediately withdrawn but in practice, provided that consumer confidence in a bank remained, were sticky and reliable) and lending them for longer periods – the process known as maturity transformation and strangely criticised, for example by the Treasury Committee of the British Parliament, as “borrowing short and lending long” as if this was some strange practice rather than the essence of banking – was increasingly replaced by wholesale deposits, oftentimes secured against assets of the bank. These were typically for extended periods, and the process was generally again welcomed as a means of increasing stability.

5 A third and linked development was the increased use of securities rather than simple loans, and the increased sophistication of those securities. Through various derivatives it was possible to take an asset or a liability and strip it of various risks: to swap fixed for floating interest rate so as to eliminate interest rate risk; to hedge against foreign exchange movements; and even to insure against the credit risk on the borrower (although this of course moved the credit risk to the institution offering the insurance). An asset or a class of assets could be divided into different components, each with different risk characteristics and different rewards, and sold to different investors who had various risk appetites. All these developments, many of which relied on a very sophisticated machinery of mathematical analysis, were welcomed as reducing risk by allowing it to be more widely and generally spread. And it is important to recognise that this was not a stupid view: risk was being analysed more carefully than before and was being spread much more widely than before – or so we thought.

6 Overshadowing all these developments was the globalisation of the economy: the advent of China, India, Vietnam and others as cheap sources of supply; the determination of SE Asian countries after the trauma of the crisis there in the 1990s to build up foreign exchange reserves; the recycling of those reserves into principally US treasuries, and the boost that gave to continuing consumption in the US. The intellectual model, most assiduously promulgated by the IMF and generally known as the “Washington consensus”, was widely accepted.

7 Although everything seemed NICE or Goldilocks-like, there were worrying features of this rosy picture of which we were all aware. It was fashionable to point out that what was incapable of continuing indefinitely would one day come to an end – a remark mainly made in the context of the US balance of payments deficit, and often received as it was an answer to the issue rather than restatement of it. There was an irony that the world economic system increasingly relied on savings accumulated in a
poor and very fast growing country – China – being recycled to a much richer and slower growing country – the US; and much debate as to whether this was the fault of excess US consumption and credit expansion, or a glut of Chinese savings. There was a further irony that, at a time when that distinguished Stanford economist John Taylor who had formulated the Taylor rule for appropriate monetary policy was a member of the US Treasury team, US monetary policy was being conducted in a way which clearly breached that rule – a demonstration, you might think, of the independence though not necessarily the good judgement of the US Federal Reserve. Loose credit conditions throughout the world but principally in the US (which gave the lead to the world) resulted in a problem for investors: investment opportunities offered low returns and there was a compression of yields which resulted in what became known as the search for yield – a polite way of saying that risk was being underpriced. There was much evidence of this: sovereign risk premia clearly didn’t realistically reflect the risks of say the US versus Uzbekistan (the spread between US sovereign debt and a basket of emerging market sovereign debt, which a decade earlier had been 12%, had shrunk to just 2%); issuers found it easier and easier to raise finance with only little or no covenants; those issuing complex securities found a great appetite for the riskier (and higher yielding) tranches. Within banking there was a recognition that the improvements in definition of the capital banks had to hold which had been formalised under a set of quite effective but rough rules known as Basel I had been extensively gamed by those who exploited opportunities for regulatory arbitrage, with the result that banks were becoming more highly leveraged (i.e. their assets were increasing relative to their equity) and there were a series of problems associated with the fundamental accounting for financial institutions, where there were - and continue to be – some great intellectual problems. All this came together in 2007.

**The Crisis of 2007: Liquidity**

8 What has happened since this crisis started in August 2007 can be divided into three acts: the first a crisis of liquidity as the funding model for many banks and other financial institutions was found wanting; the second a crisis of solvency as it was discovered that many banks and other financial institutions were insolvent – i.e. they were bust; and third the very rapid spread from the financial system to the real economy to produce the biggest recession in 60 years. It has been a catastrophe of the first order, whose origins lie in the failings in the intellectual framework we had, and the implementation of that intellectual framework within the arrangements for economic, financial and regulatory policy making. And, of course, there have been a fair number of individual mistakes – some acknowledged, many still unacknowledged.

9 The first act, which opened with the declaration in August 2007 that BNP could not value certain of its funds because there was no market for them, rapidly led to a drying up of the securitisation market, and acute problems for those banks which had developed overreliance on that market. The first casualties were German Landesbanks and – famously – Northern Rock in the UK, all of which had to be rescued by either central bank provision of finance for liquidity purposes, as with Northern Rock, or by other means of indirect government support, as in Germany. There was then a very uneasy period while it was clear that problems would continue to mount unless the securitisation markets reopened, and banks which had relied on long term wholesale markets found that those markets became shorter and shorter in the tenor they offered, and as a result banks had to work harder and harder to raise the funds they needed. Liquidity became tighter and tighter, and it was clear that a number of institutions would run into difficulties unless something was done. And much was done: in the UK Alliance and Leicester was acquired by Santander, in the US Bear Stearns by JP Morgan; much capital raising occurred (between August 2007 and September 2008 the 32 largest banks in the world raised $300 billion by way of new capital); the central banks, with the ECB to the fore and the Bank of England later, offered liquidity via schemes of novel nature and on an unprecedented scale.

10 The second act started in July 2008, and was a growing recognition that there were many banks, particularly in the US, which had made such a mess of one of the two central tasks of bankers – namely credit appraisal – that they were in fact insolvent. In particular Countrywide, the largest mortgage bank in the US had to be rescued by Bank of America, and an aggressive mortgage bank which had been spun off from Countrywide, IndyMac, was rescued by the US FDIC – the seventh bank to fail in the US, and by far the largest. In the US two huge quasi government institutions – Fannie Mae and Freddie Mac – both failed and were taken into what to non US citizens was rather quaintly called “conservatorship”, but which in the UK we would regard as nationalisation. It was generally thought that governments anywhere would step into take over a bank which was deemed “too big to fail” – i.e. those banks whose failure would have such knock on effects (externalities to the economists) that their failure would set the system at risk. After all that was what had happened in Germany, the UK and the US.
11 And then came Lehman Brothers, where the US authorities decided not to act, but rather to allow Lehman to fail. The effect of this was quite simply to destroy already fragile confidence across the financial system, round the world. No one knew whether they could trust another bank to repay any amount offered to it, and people withdrew facilities. Confidence – the essential for banking – had gone, and no bank was safe. There was a clear ladder of vulnerability from Lehman to Morgan Stanley to Goldman Sachs; from Washington Mutual to Wachovia to Bank of America in the US; from Bradford and Bingley to HBOS to LTSB in the UK; from Fortis/Dexia to French and Dutch banks; from HRE to Commerz and Deutsche in Germany. And if banks of this size were threatened, there was no bank in the world which was safe. The sort of one off rescue operations which had been repeatedly mounted (and were continuing to be mounted) were clearly inadequate. A more systematic and huge response was required, which was in fact forthcoming, starting it should be recognised in the UK, but followed elsewhere in the world. In all, something in excess of $10 trillion was spent by governments in rescuing the world’s banking system.

12 The third act was the real economy which was infected by the disaster which had occurred in banking with a speed and to an extent which amazed the experts. In November 2007 the Bank of England’s central forecast was that the UK would see 2% growth in 2008 – a slight fall on 2007 – and a rise to 3% for 2009 and 2010. It gave less than 5% probability to there being a fall in GDP in 2008. The Bank was in good company: the US Fed and the ECB made similar forecasts for their own economies. The reality was frighteningly different.

13 No one should be in any doubt about how close to the edge of the precipice the world came economically in October 2008, when what had initially been a problem of liquidity, then solvency, in financial institutions became a general question of confidence, and then spilled over from finance into the real economy with frightening speed and impact: the Bank of England Governor summarised it starkly when he said that global equity markets fell more sharply in one month than in any month in history; Chinese electricity consumption, which had been growing at 15% per annum, fell in November by 8% on a year earlier; car sales in Brazil fell by a quarter on a year before; in Japan November industrial production fell 8.5% on a year before; in Germany, exports fell by 10%; in the US a million jobs were lost in the last two months of 2008. The impact was worldwide: in the US, in the EU, in Japan, in the BRIC countries.

14 The cost has been immense – in terms of lost output (the reduction from the trend growth worldwide has been twice that of the recession of the 1980s); in terms of the loss in personal wealth (estimated to be more than $10 trillion in US households); in terms of the cost of government intervention (now in excess of $10 trillion); in terms of the resulting indebtedness of governments (the UK’s position, where national debt has risen over two years from 30 to 80% of GDP and annual borrowing from 3 to 12%, is only one example of the deterioration in the fiscal position of many countries). The effects of what has happened have still to work their way through society. We are seeing the translation of issues of bank solvency to sovereign risk, most recently in the arrangements to rescue Ireland. In many countries we are only beginning to see the reality of the cuts in public services which will be required to implement the fiscal consolidation which is so clearly required in very many countries. The price of recovering from what has occurred will have to be paid, via lower economic growth, higher taxes and lower public services, for many years to come.

**The Way Forward**

15 Let me turn to the way forward where there are many proposals to prevent a repetition of what has occurred. There was the G 20 initiative on both macroeconomic policy and more microeconomic, mainly regulatory, issues driven by the then UK Prime Minister Gordon Brown at the start of 2009 – a momentum which has been difficult to maintain in subsequent G 20 meetings, most recently at Seoul. There has been the raft of proposals contained in the Dodd-Franks legislation in the US. There have been a series of proposals advanced in the EU, mainly – though not completely – following the advice of a committee chaired by Jacques DelaRosiere on which I served. In the UK there have been proposals to change the machinery of central banking and regulation, essentially to return many prudential responsibilities to the Bank of England.

16 I want to suggest that the changes so far are a strange mixture: many are at best irrelevant; some are clearly useful; and there are many issues which remain to be addressed.
First, much of what has been proposed in the financial regulation space by way of remedies is likely to be ineffective. For example:

- It is fashionable to claim that the problems arose from inadequate corporate governance and much attention has been devoted, for example in David Walker’s admirable report in the UK on corporate governance, to how to get better boards. In one – tautological – sense boards that make bad decisions are bad boards. The problem however is that there is little evidence either anecdotal or systematic to link board composition with good (or bad) decisions. In the UK, for example, one bank had an exemplary board: the chairman of its ALCO was a distinguished ex-banker, its senior director an experienced businessman who had served on the Court of the Bank of England, and its other NEDs included a very successful fund manager, the finance director of a publicly quoted private equity firm and a partner in a Big Four accountant. That bank was Northern Rock. The difference between JPMorgan – a bank which conspicuously has had a “good war” – and RBS – which conspicuously has not – is not to be found in governance. I could give other examples to illustrate why improving corporate governance and revamping board selection are unlikely to provide the solution.

- Nor do I believe that the answer is to be found in further regulation of hedge funds and private equity, as many in Continental Europe seem to believe. The unpalatable reality is that this crisis originated in the most central and most regulated part of the financial system, namely banks; and for the most part it was associated with poor credit decisions and poor liquidity management, the two most central (and historic) skill sets required of banks. Action on hedge funds is largely an irrelevance.

- Nor is the answer to be found in the reordering of regulatory organisations. There have been mistakes aplenty in regulatory policy and supervisory practices, some very publicly acknowledged, others swept under the carpet. But they are not confined to one model of regulation. They have occurred in countries which have a mixture of principles and rules (as in the UK), and in countries and institutions which were much more rules-based (as in the US). There have been failings in those countries where central banks had responsibility for supervision, and in countries where central banking and supervision were separated. So, again, I think that to seek the answer in reorganising regulatory institutions will prove of marginal value.

- And I would add that, while I agree of course with all those who say we need better supervisors – more thoughtful, more dynamic, harder working – I have yet to hear any proposal as to how to achieve this in practice. La Fontaine’s fable is apposite: we can all agree on belling the cat; it’s just that no one knows how to do it. And aspirations without practical proposals as how to achieve them remain just that – wishful thinking.

There are proposals which address more relevantly the real causes of the crisis. In this category I include:

- The working of the Basel Committee to recalculate the capital banks must hold, particularly against trading activities – something clearly necessary, as both the assumptions about the effectiveness of risk management made by banks and their supervisors alike, and the methodology with its overreliance on mathematical techniques and on ratings from the rating agencies both shared, have been found wanting. It is an indication of just how wanting that if you take the four from the top 40 banks of the world which effectively failed in 2008, all four were comfortably within the capital requirements that then applied. The reality which we are now facing is that the work of the Basel Committee over a period of at least ten years has been ineffective, and there is now the need to recalculate the amount of capital we require banks to hold. What has happened did not for the most part occur under Basel 2, but rather under the previous Basel 1 rules. It is an indictment of the assumptions made over a long period by central banks (who have always provided the chairmen of the Basel Committee), by regulators, by bank managers and by their auditors. The new approach to capital requirements contained in Basel 3 rules are clearly a move in the right direction, although we will have to be careful that they do not become gamed in the way that Basel 1 rules were gamed.

- The emphasis on liquidity management rather than on capital which is now coming to the fore is also an improvement, as for far too long liquidity issues have not received the attention they deserve. Remember that this crisis began as a liquidity crisis, and only then moved to become a solvency event. Setting up standards for liquidity will not be easy (the technical
issues are much greater than those for capital), and I fear will inevitably have to be settled country by country (or more accurately currency zone by currency zone) rather than internationally.

- The new recognition in the G20 and the Financial Stability Board of the need to go beyond the G7, and include other countries, notably India and China, is a step in the right direction. It was clearly a problem that the most important body of international securities regulation, the technical committee of IOSCO, contained two representatives from separate Canadian regulators but none from India or Russia; and it was clearly wrong that the Basel Committee had no Chinese representative. Again, I do not think this will be easy to make effective: there is a problem of establishing and developing candour between and among national regulators which enlargement will do nothing to reduce.

- The effort being devoted, particularly in Europe, to limit the externalities associated with a bank failure by establishing systems which make it easier to transfer the business of a failing bank to other banks, colloquially known as “living wills”. This is clearly desirable, but will require great administrative and systems work to make work, and will require a step change in simplifying the corporate structure of banking groups. It, like other proposals, will take some years to implement.

- The new emphasis on what is now called macro prudential regulation – the move to ensure that there is not only regulation of individual enterprises but also a means of looking at the larger issues which are more than the aggregation of the behaviour of a number of individual institutions. This is being tackled in a series of countries and currency areas: in the US through the creation of the Financial Stability Oversight Committee, in the UK by a revamping of the existing tripartite arrangements which were supposed to provide general oversight but which clearly did not function well in the run up to the crisis, and in the EU as a whole through the creation of the European equivalent to the US Financial Stability Oversight Committee. Making these arrangements work effectively in any of these countries will be a real task.

19 All these will help. But they fall very significantly short of dealing with major flaws in the consensus which has driven best practice in central banking and regulation over the last decade. Unless we face the scale of the task of righting these mistakes – in a way which we have not yet done – we will not succeed in making the changes needed to avoid a repetition of what has occurred. The issues which need addressing include:

(i) We need to re-examine whether inflation targeting – measured against an increasingly narrow definition of inflation – can continue to be given the preeminent position it has enjoyed. It is far from clear that central banks which took the credit for the low retail price index inflation which was such a feature of the years of the great moderation recognised the relative importance on the one hand of their own decisions on interest rates and on the other hand of the beneficial supply side shock from the advent of India, China and other countries as suppliers. We have had a beneficial supply side shock whose impact has been underestimated.

(ii) It is clear that the concentration on an inflation target, and the explicit rejection of responsibility for movements in asset prices – a policy eloquently advanced in the US by the Federal Reserve, but widely shared – is no longer tenable. The results of this policy of allowing asset bubbles to develop and burst, and then clearing up the mess, have been too damaging. This will not be easy: the arguments about the difficulties of identifying ex ante asset bubbles are not without weight; and the argument that monetary policy should not be the weapon to counter asset bubbles is strong. But the received wisdom of the last decade on this issue is no longer tenable.

(iii) If central banks are to assume responsibility for limiting asset bubbles, they will have to have weapons at their disposal other than interest rate movements. There is no agreement as to what these should be: quantitative controls on particular forms of credit growth is an option; dynamic provisioning, by which the capital required to be held by banks would be adjusted up or down depending on where it was judged the economic cycle had reached, is another. But common to all the options is a blurring of the distinction between monetary policy on the one hand and regulatory policy on the other – the first aimed at macroeconomic objectives, the latter aimed at controlling individual institutions, each one considered separately. It is a change in approach which will require quite fundamental rethinking of central bank responsibilities, corporate governance and even independence.
(iv) There are questions of size, both in relation to the size of individual institutions and in relation to the size of the financial sector as a whole, which have begun to be addressed in part, but are far from resolution. Should there be a limit to the size of any bank – either in terms of its size relative to competitors, or relative to the economy in which it operates, or relative to the economy in which it is headquartered? And, if there is a policy objective here, how is to be implemented (the IMF and Basel Committee are beginning to address this)? More fundamentally, should we seek to limit the size of the financial sector in any country relative to that country’s GDP? We know from the Icelandic and Irish experiences the problems (still unresolved) that a very large banking sector relative to a country’s size can cause. But Iceland’s banks had assets which were 10 times the country’s GDP; the ratio for Switzerland is 6, and for the UK 4 1/2. Are we prepared to accept these ratios – and what mechanism is available to restrain them if we decide that it is sensible so to do?

(v) I am doubtful whether we have succeeded in establishing a system of international cooperation which will prove effective. The urgency with which imminent disaster was met by a measure of cooperation in spring 2009 has largely ebbed away as we – at least temporarily – retreat from the precipice. It is not clear that the IMF, for all its increased resources and expanded corporate governance, will prove an effective supervisor of major countries or resolver of international disputes; nor that the Financial Stability Board will be able to command candid discussion or to create an effective mechanism to translate any decision it makes into the necessary action by national governments, central banks and regulators. The precedents of the IMF FSAP programme in the past in overseeing those countries which were subject to the programme (which then did not, but in the future will, include the US), or of the Stability and Growth Pact in the EU are not encouraging. And within the EU we have failed so far to deal with the problem of how to regulate the activities of branches operating outside the home country – the problem of supervision which allowed Icelandic banks to develop large branch activities in both the UK and Netherlands without adequate supervision (or I would add without adequate deposit insurance).

(vi) Last, I should flag up a general class of issues which are normally described as accounting issues, and by implication relegated to a subordinate and technical level. This grossly underestimates their importance. The acute dangers of October 2008 arose from a breakdown in mutual confidence and trust, as no institution believed it could understand the position of any other. Confidence and trust require information on assets in particular which are believable and believed, which in turn requires confidence in the methodology used to identify and measure those assets. This is not a question of data. The most recent report and accounts of Citi runs to 272 pages, that of Deutsche to 352 and that of HSBC to 500 – all of them incidentally at least 5% longer than a year earlier. But more and more data does not equate to - indeed may militate against – better understanding. We suffer at present from a position that the basic measurement systems are inadequate, and lack credibility. There is a fierce argument waging between those who believe that it is essential to use mark to market conventions and those who believe that their use has contributed to the creation of misleading impressions and unnecessary pressures. The present compromise – different treatment for assets held on the banking book and for those held on the trading book – has, like many of the accounting conventions adopted, the advantage of some logic and the disadvantage of considerable scope for manipulation. There are many other examples: the recent Lehman Brothers repo 105 is but the most recent. The unpalatable reality is that the complexity of modern financial instruments has outstripped our ability to describe them adequately, or to understand their effects properly. The solution embedded in much central bank, regulatory and counterparty risk assessment of relying on someone else – namely the rating agencies - to do this, has proved unworkable. But we need to face up to the erosion of confidence that has occurred.

20 You will see from this list of issues still to be resolved that there remain major issues which we have not yet begun to address, but which we need to tackle.

21 While, as I have shown, there are many similarities in the approaches being adopted between authorities round the world, in some important respects there remain important differences. The macroeconomic issues, notably how best to deal with trade imbalances, remain as difficult as they have always been, and attract the most attention. But there are microeconomic and regulatory issues on which there is no agreement internationally. I think, for example, that there is very little chance of agreement between the US and the EU on the Volcker rules for distinction between what I can loosely describe as utility and casino banking (though I would expect some movement on capital requirements which might make this difference less stark than the difference of
principle); and I am doubtful whether there will be much further movement on tackling the problem of bankers’ bonuses. As I indicated earlier, I am sure that liquidity will be dealt with on a local basis. And dominating all this is the question of how to rebalance the risk sharing between those who own and work for banks on the one hand who take so much of the benefits when things go well and the taxpayer on the other hand who takes the costs when things go catastrophically wrong – the fundamental question for which we do not yet have answers.

22 I have tried to show that what happened has been the result of a series of deeply flawed beliefs which underpinned the intellectual model of monetary, financial and regulatory policy making during the period of the great moderation, and which shaped the actual policies and institutions which were active during that period. I have discussed some of the changes being now contemplated and indicated some of the other changes still to be contemplated. My contention is that the answers so far advanced, even when they are relevant and sensible (and not all can be so described), have not yet addressed the most important issues which have to be tackled. A massive rethinking of assumptions is required and we have hardly started on the task.
Sir Callum McCarthy is the former Chairman of the U.K. Financial Services Authority (FSA), a role he held from September 2003 until September 2008. Before his post at the FSA, Sir Callum was Chairman and Chief Executive of Ofgem, the economic regulator of the gas and electricity industries in the U.K., from 1998 to 2003. Prior to Ofgem, Sir Callum held numerous senior level positions in the financial services industry, including Barclays Bank (North America and Japan), Barclays de Zoete Wedd (BZW) and Kleinwort Benson, as well as various posts in the U.K. Department of Trade and Industry from 1972 to 1985.

Sir Callum McCarthy is the former Chairman of the U.K. Financial Services Authority (FSA), a role he held from September 2003 until September 2008. Before his post at the FSA, Sir Callum was Chairman and Chief Executive of Ofgem, the economic regulator of the gas and electricity industries in the U.K., from 1998 to 2003. Prior to Ofgem, Sir Callum held numerous senior level positions in the financial services industry, including Barclays Bank (North America and Japan), Barclays de Zoete Wedd (BZW) and Kleinwort Benson, as well as various posts in the U.K. Department of Trade and Industry from 1972 to 1985.

Sir Callum is a Non-Executive Director of HM Treasury and a Trustee of the University of Oxford Saïd Business School. He joined the Board of Directors of IntercontinentalExchange (NYSE: ICE) in October 2009. Sir Callum holds a Master of Science from the Stanford University Graduate School of Business, where he was a Sloan fellow, a Master of Arts in History from Merton College at Oxford University and a Doctorate in Economics from Stirling University.
The Mitsui USA Lunchtime Forum Series is in its 16th year. Sir Callum McCarthy’s presentation was the 91st in the series. Funding for the Mitsui USA Lunchtime Forum Series is provided by the Mitsui USA Foundation.

**Weissman Center for International Business, Director:**
Terrence F. Martell, Ph.D.
Saxe Distinguished Professor of Finance

**Project Editor:**
Lene Skou
Weissman Center Deputy Director

**Design and layout:**
Rachael Cronin

For more information about this report contact the

**Weissman Center for International Business**
Zicklin School of Business, Baruch College/CUNY
(646) 312-2070

To access a comprehensive compilation of information about New York City, visit NYCdata at
[www.baruch.cuny.edu/nycdata](http://www.baruch.cuny.edu/nycdata)