after the apocalypse: lessons from the global financial crisis

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after the apocalypse: lessons from the global financial crisis

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Introduction

Philip Collins

The most common cause of bad public policy is disaster. It is usually in response to a scandal or a mishap or an unforeseen event that policy makers do their worst work. This volume is, in part, an attempt to supply a thoughtful response to the financial crisis, quickly, in order to avoid ill-considered policy.

There has been a severe financial crisis which several renowned institutions have not survived and during which the credit markets more or less closed down. Inter-bank rates and credit default spreads rose to record levels. Central banks pumped liquidity into the markets, to little avail. Governments stepped in, to recapitalise the banks and, in some cases, to take an equity position. Even if outright nationalisation was avoided in most cases, governments guaranteed bank assets with public money on a vast scale.

The financial crisis accelerated the decline in the housing market and added to the gloomy environment which is so depressingly conducive to recession. Central banks have cut interest rates rapidly, thereby signalling their belief that the threats to growth are more severe than risks of higher inflation, which have been evident for some time in energy prices and in commodities markets. It has seemed at times as though the very future of the banking system was in question. Indeed, there is no consensus that, at the time of writing, the financial part of the crisis is yet complete. This volume, however, is predicated on the assumption that the system will not fold, that banking will go on, albeit with fewer, more cautious, institutions and that a policy response will, in due course, be necessary.

That leaves the question, the one set to every contributor, of what is now to be done? The danger is that too much is done in haste. There are plenty of precedents for that. The scholars of the 1930s mostly attribute the depth of the depression to the policy response that followed the crash of 1929 rather than to the gyrations of the market itself. It was, on this reading, the Smoot Hawley Act to raise tariffs and the Glass-Steagall Act that separated commercial and investment banking that did the real damage. As usual protectionism was a false promise.

There is always the risk that reform of the system does as much damage as it repairs. The most profound point about the current crisis is that nobody really saw it coming. To regulate *ex post facto* may do little more than satisfy the desire for culprits to be identified. It may be less than useless in anticipating the nature of the next outbreak. As one of the contributors to this book says, we might as well ban financial crises for all the good it will do.

The risk of making an inappropriate response is all the greater for the fact that there is no consensus about what caused the crisis in the first place. Was this a bolt from the blue, a shock that could not reasonably have been foreseen in any detail? Or is this, in fact, the working through of the usual cycle of asset inflation and deflation? Or is it the one super-imposed upon the other? The disagreements on policy that we can trace in this volume mostly derive from a difference of diagnosis.

There is a gallery of possible culprits. The indebtedness of the personal sector in the quest for housing assets, which then were bid up to absurd levels; lax monetary policy over a long time in the USA; the failure of central banks and regulators to target asset price bubbles; banking products which nobody understands; hedge funds, short selling, securitisation; regulators with no handle on systemic risk; very poor credit rating; the inadequacy of the Basel II capital regime; the mix of banking with non-banking activities; excessive rewards for bankers for short-term objectives. Even this list is not exhaustive.

Among the myriad causes there is a correspondingly large number of putative solutions. The capital positions of the banks need to be counter-cyclical; capital should be stockpiled in the good times to be drawn on in the bad, along the lines of the Spanish banking system. The terms on which people receive credit need to be tightened. Housing costs should be included in the definition of inflation so that monetary policy takes it into account. Bonuses need to be banned or paid in stock over a longer duration. There should be a levy on capital transfers. Regulation needs to be systemic and concentrated on function rather than institutional type. There should be common standards in the derivatives markets.

There is one thing on which everyone can probably agree. It is very clear that the regulatory regime in place failed to prevent the escalating problems. No national system was up to the job. That fact alone should cause us to pause when solutions are blithely offered. There is a range of regulatory regimes, of different weights of touch, and none of them made much difference. It is also clear that national regulation, for markets that move internationally at a bewildering rate, is hopelessly inadequate.

International regulatory coordination is currently provided by the Basel Committee on Banking Supervision. Whatever its virtues, there is currently no authority whose vision extends across international markets and whose writ carries into domestic law. The IMF more or less stood and watched. The European Union descended into distinct national policies at the first sign of severe stress in the markets. There was all but no coordination at the level of the G7 which, in any case, excludes the Chinese.

If this volume demonstrates nothing else it makes it abundantly clear that this is no simple crisis. The risk of poor policy is never greater than in the aftermath of panic. Into that maelstrom we offer the policy thoughts within.

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strengthen our systems of global governance

Vince Cable MP

Only charlatans or those possessed by extraordinary, extra-sensory, powers can predict, with any precision and confidence, what will happen as the financial crisis evolves and mutates into recession or worse. Although I am often credited with having anticipated some of the consequences of a housing and credit bubble, I was also schooled in the Shell scenario discipline whose starting point is that those who claim that they can predict the future are liars even if, by chance, they are later proved right.

What we can say on the basis of historical experience and basic theory is that we are entering into a recessionary period – albeit of unknown length and depth – as a consequence of contraction of money supply in the 'credit crunch', the shock to business and household confidence, and the negative wealth effects of falling house prices. Highly indebted households – and UK households have the highest level of debt relative to income in the developed world – are currently trying to improve their domestic balance sheets by reducing borrowing (and spending) and increasing savings. Such an adjustment would have had to occur in any event in the UK when the asset bubble burst, but it is being made much more severe and sudden by the simultaneous impact of the banking crisis with its profound uncertainties and associated credit squeeze.

I do not think that there are any cheerful souls left who think that the damage is superficial and short lived and that the concerted government measures to recapitalise banks and guarantee inter-bank lending will translate quickly into a return to 'normality'. The debate is now between those like Professor Roubini who believe that the real horrors have not yet been confronted and who see no prospect of recovery until the banking system has been purged of bad debt, and those – like the author – who hope and believe that the financial crisis has essentially passed with the policy focus now shifting to the real economy as well as long-term regulatory reform.

The pessimists believe that, behind the first tsunami wave, there is another on the way which is potentially more lethal. They point to the $55 trillion in credit derivatives built around $16 to $17 billion of corporate debt. These staggering figures – many times the size of the world economy – are less overpowering than they appear since most institutions have hedged any exposure they have to credit derivatives. But the risk is that if counterparties in the derivatives trade were to fail, claims could not be met. Thirty per cent of credit default swaps, for example, have been written by hedge funds which could have little cash. The effect is similar to large numbers of punters claiming a bet at very long odds, which the bookies, and the insurers of the bookies, cannot meet. Both the Royal Bank of Scotland and Barclays are reported to be exposed to an estimated $2 to $4 trillion of credit derivatives, several times their assets, and their stress testing seems to be based on the assumption that nothing unfortunate will happen. Those who are worried about the problem are advocating multilateral steps to set up a clearing system to liquidate maturing credit derivatives in an orderly way, though the costs would be enormous. The more extreme option, if there is a collapse, if there is a collapse would be to clear the poison out of the system by invalidating all claims, leaving financial institutions to mop up any net exposure through recapitalisation which would also be very expensive. These events need to be planned for on a contingency basis, even if what Warren Buffett calls the H-bomb of the derivatives market does not detonate.

The more pressing concern is the sharp deterioration in the real economy. Before we start to worry about the details of the regulatory architecture, the macro economic policy framework needs to be pointing in the right direction. The key requirement is deep cuts in interest rates to offset the drastic monetary contraction which has taken place. At present official interest rates are a poor guide to the costs of borrowing but, if the rescue plan achieves its objective of gradually restoring inter-bank lending and reducing libor rates, official rate cuts will become increasingly crucial. The coordinated 0.5 per cent was welcome but, certainly in the UK, goes nothing like far enough. Beyond that, monetary policy will need to be reformed to capture inflation (and deflation) in the main asset markets, notably housing, as argued in my annual lecture at the Institute for Fiscal Studies.[1]

With fiscal policy currently being loosened to offset the economic downturn, and with prodigious sums being committed to bank rescue plans, there need to be mechanisms for restoring integrity to fiscal policy – though, in their absence, the bond markets will impose their own disciplines on government. The major deficiency in the UK, as my colleagues and I have argued for some years, is the lack of independent assessment (beyond the peer group review of the IMF, OECD and think tanks) of the government's performance in meeting its own fiscal rules with recommendations for a policy response. We would attach that function to the National Audit Office, which reports to Parliament, rather than the more elaborate mechanism envisaged by the Conservatives.

At the heart of macro-prudential regulation has to be a system of counter cyclical rules governing the capital requirements of the banking system. The existing Basel rules are pro-cyclical in effect and have arguably accentuated the boom bust cycle in lending and – as a consequence of that – house prices. The concept of introducing a counter cyclical capital dimension that has already been applied at a national level in Spain, has been described in policy terms by Charles Goodhart and Avinash Persaud and has been politically adopted by my own party and, more recently, the Conservatives.

The political debate is currently dominated by demands for more regulation to replace the laissez-faire, which is blamed for the collapse of banks. I am happier than most to lay into greedy bankers, the wickedness of short selling, and the amorality of hedge funds. But I worry about what more regulation – beyond the macro-prudential policies sketched above – actually means. Even in 'light touch' London there is no shortage of FSA forms to fill in and firms at the centre of this deregulated anarchy spend a lot of their time on compliance issues. Regulated banks have been more vulnerable than unregulated hedge funds. More regulation did not stop New York becoming the centre of the global meltdown. There must be something in the complaint of Alan Greenspan that more regulation leads to regulatory arbitrage and avoidance. But to do nothing is to counsel despair – as Martin Wolf, a noted economically liberal commentator, recently observed after one of the best reviews of these arguments. To which the answer is 'more intelligent regulation'. But how do regulatory bodies suddenly become 'more intelligent'?

One answer to that question is for regulators to concentrate, for most institutions, on a few key essentials, notably obligatory capital requirements, to limit the scope for dangerous levels of leverage in institutions which are or can be important for systemic stability. These capital requirements would also cover off balance sheet constraints. A related principle is obligatory transparency. The most topical and emotive issue is executive pay and bonuses. In general, government should not be involved in settling individuals' pay and inequalities of income and wealth should be dealt with through the tax system. But there is clear evidence and analysis to the effect that bonus systems linked to maximising returns on equity have led to excessive leverage and destabilising risk taking. There is now a growing body of opinion written within the financial community that while individual pay contracts cannot seriously be regulated, regulation can and should ensure that payments should be in stock which is not redeemable for five years or more when performance has been demonstrated.

One of the biggest regulatory issues to be resolved is what is to happen to the banks. They cannot return to their previous method of operation any more than someone who is a victim of a massive heart attack and stroke can return to their previous lifestyle. The contradiction between competitive profit seeking to enrich shareholders and executives and a responsibility for careful, prudent, behaviour in the interests of systemic stability has proved impossible to reconcile. For the immediate future there will be a large state banking sector that will, in time, create growing problems reconciling their commitment to maximising returns to the taxpayer, social objectives and fair competition with other banking institutions. It may be that the present mishmash of institutional arrangements will have to give way to a system of narrow banking in which banks are confined to a range of low risk activities, though this then creates the problem of flight to higher depositor yields in less regulated institutions which become so over-subscribed that they, in turn, present systemic risk. We are likely to see a sell off of nationalised banks in a few years and it is important that they do not simply return to the unsustainable, unstable, structure we had before.

Finally, the recent crisis has highlighted the weakness in the system of global governance in a globalised economy. The IMF proved to be a bystander. The European Union's discipline almost collapsed in the face of panic stricken bank depositors. Coordination at G7 level has been desultory and excludes the Chinese. There has been a weakening of the authority of global rules as in the World Trade Organization. More positively there was a coordinated interest rate cut and agreement on the principles of recapitalisation. There will have to be a strengthening and redefinition of multilateral bodies if we are to steer clear of the beggar-my-neighbour, nationalistic, economics which helped to turn the global financial crash of the inter-war period into a major slump.

Whether or not this process is christened Bretton Woods II is less important than a recognition that there have to be strong, respected, multilateral rules and institutions.

Vince Cable MP is the Liberal Democrat Shadow Chancellor.

Note

1 See www.ifs.org.uk/docs/vincent_cable.pdf (accessed 30 Oct 2008).

the case for a Tobin Tax

Clive Cowdery

Predictions regarding financial or political events have never felt less certain, but the desire of humans to claim we spot a pattern emerging is irresistible – so here's my last attempt of the year.

January will see the start of a 12-month explosion in competing proposals for financial regulation – the clearest growth market in political ideas. By the end of 2009, some of these proposals will have been adopted, mostly those requiring only a national response rather than international agreement. This will take place against a backdrop of continuing public anger as recession and economic hardship are repeatedly blamed on financial market participants, from predatory lenders fuelling the housing bubble, through to complacent central bankers and regulators.

Surprisingly, many of the changes proposed next year – and a good number of those eventually adopted – will come from the right, who will call for *reform*. The argument will be that free markets work efficiently most of the time, but recent events have shown the need for some tweaking; asset transparency, accounting rules regarding illiquid assets, and possibly a minor mea culpa on risk management. The reform agenda will quickly focus on the external architecture as a cause of blame, and call for more 'joined-up' regulation between central bankers and financial supervisors, implying that government is as much to blame as irresponsible lenders and greedy financial intermediaries.

Proposals from the left will also be described as reform, but in fact will seek *restriction*. A deep suspicion of capitalism's inherent contradictions and unfairness will rise to the surface, for the first time since the triumphalist, end-of-history fundamentalism that greeted 1989's ideological victory for the free market, and the smug certainties of the 20-year Washington consensus that followed. Proposals from the left will include populist measures regarding executive pay, through to serious restraints on financial activity via punitive capital requirements.

Much of what emerges from next year's battle of ideas will be useful. Capital ratios for financial companies will be stronger, some speculative trading curbed, asset transparency clearer, and financial oversight strengthened. Protectionist measures that risk damaging the economy's ability to self generate should, with a little political will, be seen off.

But the battle between *reform* and *restriction* may rob us of a golden opportunity to achieve a 'third way' outcome – the *repricing* of capitalism, in a way that retains the best that free markets offer, with a fairer sharing of the inevitable profit and pain that flow from the – equally inevitable – boom and bust of the economic cycle.

A free market, linked to social redistribution, remains one of the world's powerful forces for good. At its best, the mixed economy model provides the most attractive combination of economic growth with poverty alleviation demonstrated by history. Add a careful bias by government towards the working poor and the socially excluded, and such a market system gives Western economies a fighting chance of tackling their common challenges – accelerating social mobility, funding an ageing population, and (essential to both goals) maintaining international competitiveness.

But the recent market failure has exposed a gross unfairness: that the profits of the last boom had already been largely taken off the table by the private sector by the time the bust arrived – leaving the public sector with the bill. A fundamental repricing of capitalism is needed – one that funds the cost of the whole economic cycle, including the inevitability of a future bust, from the capital transfers and profits generated in the next upturn. But to claim such a prize, policy makers will have to act swiftly, while laissez-faire fundamentalists are at their weakest.

How can we slow down volatility and irrational exuberance during the next upturn, while also providing for the cost of future bailouts from private profits, rather than public subsidy? The world has had a model for such a pay-as-you-go system for exactly 40 years – it's called the Tobin Tax.

In 1978, James Tobin, a Nobel prize-winning economist, first proposed the idea of a levy on capital transfers that would be applied uniformly by all major economies. A tiny amount (say less than 0.5 per cent) would be levied on all foreign currency exchange transactions to deter speculation on currency fluctuations and fund public goods. The rate would be set low enough not to damage longer-term investment (where yields over time are expected to be higher), but it would deter speculators moving massive amounts of currency around the globe as they seek to profit from minute differentials in currency fluctuations.

As well as slowing volatility in fragile economies, the tax would yield enormous sums. But in a classic example of the law of large numbers, the cost would be absorbed by the international currency market of around $2 trillion a day. Only 5 per cent of this is related to trade and other real economic transactions – the rest is simply financial speculation, which often plays havoc with national budgets, economic planning and allocation of resources.

To work an example, let's assume an effective tax base of $75 trillion annually – very conservative, but takes at face value the claims of Tobin Tax critics that currency trade would decline from current levels, and that some trade would circumvent the tax. Now apply a rate of, say, 0.2 per cent, and an annual yield of $150 billion in receipts becomes available. If the next boom lasts for five years, then $750 billion – the size of the current US bailout for the financial system – has been generated at a neutral cost to the taxpayer. Any model of capitalism to emerge next year must accept the reality of both boom and bust during an economic cycle. But we should seek to smooth the future impact of both, and a pay-as-you-go system modelled on the Tobin Tax can aid stability.

How? In markets that are already fairly big, the stabilising effect comes from slowing down the speed with which market traders react to changes in prices of currencies, as they cautiously calculate the need for their profits to exceed the tax. Thus, to the extent that a Tobin Tax causes traders in financial markets to delay their decisions, this deliberate insertion of 'grit' in the system could smooth fluctuations, while the tax receipts fund the correction of future imbalances.

I have presented the argument for the Tobin Tax in the context in which it was designed – currency markets – but the same pay-as-you-go principle could be adopted by policy makers for other large scale capital flows such as credit and derivative markets. The concept is as simple as insurance – collecting a tiny premium from every movement in very large markets, to ensure the stability of the system as a whole.

Critics of the Tobin Tax in the past 40 years have focused mainly on the – admittedly formidable – implementation challenges: international agreements, collection, tax avoidance and the really interesting question of which national or international body will control the tax receipts. But the real barrier has always been political, not practical. Before this year, no one accepted the reality of an interconnected financial system sufficiently to face the need for this level of coordination. And that's exactly why policy makers should now give it urgent and fresh attention – while vested interests are weakest, and the case for a more resilient system is strongest.

Politicians have never felt more powerless than when dealing with the financial crisis of recent months. But in reality they have never held more power to achieve fundamental change to our financial architecture, with vested interest within a shell shocked financial community unable to resist. An agenda which starts with a positive affirmation of free markets, but insists they bear the true cost of the whole economic cycle, has a better chance today than ever before. Presented in populist language as a small daily transfer from Wall Street to Main Street, and with substantial national sovereignty retained over the collection and distribution of tax revenues, it's a platform that I hope proves irresistible to political leaders.

Clive Cowdery is founder of Resolution and chairman of the Resolution Foundation.

reregulating financial markets

Richard Dale

In the past year we have witnessed the failure of a global banking experiment which was based on the premise that banks themselves should be the arbiters of what kind of business they should engage in. The removal of activity constraints on banks, culminating in the repeal of the 1933 US Glass-Steagall Act in 1999, has been associated with the fusion of financial service businesses – notably commercial and investment banking – which in many countries had previously been separated.

The mixing of banking and non-banking financial activities has had three destabilising effects. First it has removed the firebreaks that traditionally separated different kinds of financial institution at a time when, due to globalisation, geographic firebreaks have also been dismantled. Financial shocks can therefore be transmitted more easily around the globe. Second, and more important, it has allowed the moral hazard problem, which is such an important feature of traditional banking, to be extended to banks' non-bank activities. As I expressed it some 15 years ago when warning of the potential for catastrophic destabilisation:

The problem here is that because banks and their depositors are protected by the lender of last resort and deposit insurance, the ordinary market constraints on excessive risk taking are removed. Accordingly, risks banks incur must be limited by regulation, in order to protect the tax payer and the deposit insurance fund. Viewed in this way, allowing banks to engage in risky non-bank activities could either destabilise the financial system by triggering a wave of contagious bank failures – or alternatively impose potentially enormous costs on tax payers by obliging governments or their agencies to undertake open-ended support operations.[1]

The third concern arising from the fusion of banking and securities activities is the inevitable cultural clash between businesses with different time horizons. Traditional banking involves the careful scrutiny and monitoring of long-term risk exposures, whereas investment banking is associated with aggressive risk-taking on a much shorter time horizon, typically driven by bonus incentives. As long ago as 1920, in the run-up to the Great Crash, the US Comptroller of the Currency expressed concern about this aspect of banks' growing involvement in securities activities:

...it would be difficult if not impossible for the same set of officers to conduct safely, soundly, and successfully the conservative business of the national bank and at the same time direct and manage the speculative returns and promotions of [securities affiliates]. These varying institutions demand a different kind of ability and experience on the part of those who manage them, and the two types of business when combined with one management are likely to be operated to the advantage of neither.[2]

While the financial market structure that has emerged over the past 20 years has proved to be a powder keg, the explosion that has taken place was detonated by the bursting of the credit bubble. This is another feature of financial markets that has too often been overlooked – namely, the boom–bust characteristic of asset and credit markets. The uncontrolled credit expansion of 2004 to 2007 was accompanied by an observable deterioration in bank lending standards as evidenced by lending surveys in a number of countries. The inevitable collapse then exposed the regulatory fault-lines and structural weaknesses of the global financial system.

Policy makers therefore have to address two separate issues: the prevention of destabilising asset/credit bubbles and the need for radical overhaul of a flawed regulatory framework. On the first question, useful proposals have already been suggested, such as counter-cyclical bank capital requirements that would automatically impose more stringent constraints as credit expands. However, it may be necessary to supplement such general measures with intervention in specific markets, for example through variable margin requirements for securities and adjustable maximum loan-valuation ratios in residential and commercial property-lending.

Reform of the financial market structure and regulatory framework presents more formidable difficulties. The problem here has been exacerbated by the forced financial restructuring that has taken place during the crisis management of the past few months. We now have a much more concentrated financial services industry and one in which large investment firms have been merged with deposit-taking banks. The financial landscape is now dominated by huge financial conglomerates, which markets will correctly perceive as being far too systemically sensitive to be allowed to fail. Hence the whole moral hazard issue is thrown into even sharper relief.

There are two possible regulatory responses to this situation. The first is to try to put banking back in its box, that is to reverse the trends of the past 20 years by dismantling the financial conglomerates and reimposing strict activity constraints on deposit-taking institutions. This would present enormous practical difficulties and is probably unrealistic.

The second approach is to neutralise moral hazard by subjecting financial institutions to a comprehensive regulatory framework which would also see regulators acting in a much more intrusive, investigative and, if necessary, adversarial manner. Crucially, this new regulatory approach would have to be truly global. At present, national regulatory authorities are inhibited from taking action that might damage the competitiveness of their own financial jurisdiction or induce regulated activities to move to more accommodating financial centres.[3]

International regulatory coordination is currently provided by the Basel Committee on Banking Supervision but coordination is clearly no longer sufficient. What is needed is a new global regulatory authority, which has an overview of international financial market risks and whose rules are incorporated into domestic law. Enforcement is best undertaken at the national level but should be subject to oversight by an international supervisory panel. There is a danger that the UK could become involved in a regional EU regulatory bloc, which would impose competitive disadvantages on London as a financial centre without meeting the urgent need for a fully multinational regulatory framework. Global finance is no longer jurisdiction-based and the international regulatory architecture should reflect this fact.

The specific structural weaknesses which the new regulatory regime would have to address are numerous but the following are particularly important:

1 *Capital* The overall level of bank capital requirements will need to be raised even though this will increase the costs of financial intermediation. The inclusion of subordinated debt in regulatory capital should be disallowed; at times of crisis only equity capital counts, since the presence of junior debt in the balance sheet does not prevent bank failure.

2 *Funding* Bank entities within financial conglomerates as well as stand-alone banks should be required to fund themselves very largely from captive retail deposits and not from the wholesale money markets. As pointed out in my earlier work, increasing dependence on wholesale markets is destabilising: 'As the proportion of captive retail deposits in total deposits falls, the whole deposit base is loosened and banks in general become more vulnerable to confidence-induced deposit withdrawals.'[4]

3 *Bank retail deposits* should not be allowed to fund securities and other non-bank activities since this compounds moral hazard problems and puts a greater onus on regulators.

4 *Liquidity of assets* Bank-related and independent securities firms should be allowed to hold only liquid securities in their portfolios. This is, or should be, a primary principle of securities regulation, the objective being to ensure that any securities business can be run down rapidly in the event of funding problems. One of the major regulatory shortcomings in the present crisis has been the failure to enforce this principle. Financial institutions have been allowed to acquire huge volumes of complex, illiquid, long-term instruments traded over-the-counter (OTC). This 'toxic' paper has had the same devastating impact on bank balance sheets as did illiquid bonds purchased by US banks ahead of the Great Crash in 1929–33. A case can be made for permitting only long-term savings vehicles such as insurance companies to hold unlisted securities on their books.

5 *Off-balance sheet activities* There will have to be a major clamp down on banks' off-balance sheet operations. The revelation that banks had sponsored unregulated off-balance sheet structured investment vehicles (SIVs) with total assets of over $400 billion points to glaring regulatory failures. These entities have been misleadingly described as a shadow banking system; they were in fact shadow securities firms funding themselves from the wholesale markets and investing in illiquid OTC securities, which in many cases came back on to the sponsoring bank's balance sheets when funding dried up. In today's crisis, SIVs appear to have played a similar role to that of state-chartered unregulated securities affiliates which had to be bailed out by their sponsoring banks in 1929–33.

7 *Counterparty risk* Clearing and settlement, which constitute the 'plumbing' of the global financial system, is in clear need of regulatory attention. Wholesale interbank payments and securities settlement has been greatly strengthened in recent years but the absence of a central counterparty in the vast OTC derivatives market, the interbank repo market and

a large part of the forex market (only 55 per cent of forex transactions are routed through CLS Bank, the central counterparty) means that financial institutions are exposed to bilateral counterparty risk in a large part of their business. Regulators will from now on need to ensure that all large-scale OTC financial markets have central counterparty settlement arrangements.

In all of the above areas regulators will have to become proactive now that we know that matters involving systemic stability can no longer be left to the banking industry itself.

Richard Dale is Emeritus Professor of International Banking at Southampton University.

Notes

1 R Dale, *International Banking Deregulation: The great banking experiment* (Oxford: Blackwell-Wiley, 1993).

2 Cited in Dale, *International Banking Deregulation*.

3 A very recent example occurred in late September this year when the US SEC called on Congress to regulate the credit derivatives market. The response of the International Swaps and Derivatives Association was that banks would move more of their business to London.

4 Dale, *International Banking Deregulation*.

a new Committee for Financial Stability

Lord John Eatwell

In April of this year the G7 finance ministers, worried about growing financial turbulence, endorsed the approach to regulatory reform presented to them in a report from an eminent group including the Chairman of the UK's Financial Services Authority, the President of the Federal Reserve Bank of New York, and the Chairman of the US Securities and Exchange Commission.[1]

The report began with an honest recognition of past failure: 'A striking aspect of the turmoil has been the extent of risk management weaknesses and failings at regulated and sophisticated firms.' There followed a series of detailed recommendations, the essence of which was embodied in three core themes: greater transparency, greater disclosure and stricter risk management by firms. In other words, nothing new. The Committee was repeating the tired trinity that has defined financial regulation for the past three decades. The trinity failed, and without a new approach the regulators will fail again.

That failure had two closely related origins: regulation failed to keep up with the institutional changes that in 30 years have transformed financial markets; and the regulators accepted that firms had the technical skills, expressed in their mathematical risk models, to manage risk better than the regulator could.

Thirty years ago most loans, to businesses and to individuals, were made by banks, or specialist institutions such as building societies. The deregulatory fervour of the 1980s changed all that. Credit markets became 'dis-intermediated'; instead of banks acting as intermediaries between savers and borrowers, the markets took over. A significant proportion of borrowing (though still less than half) is now packaged into securities that are sliced and sold through a myriad of financial intermediaries. Investment banks, like Lehman Brothers, Merrill Lynch and Goldman Sachs, were at the centre of this process, taking on massive amounts of debt relative to their capital base (becoming highly leveraged) in order to deal profitably in the complex web of markets. Guiding their operations were their mathematical risk models, statistical models that measure the riskiness of their operations against patterns of past market behaviour. The firms claimed that they could manage risky markets, *and the regulators swallowed that claim.* Faith in transparency, disclosure and risk management by firms is at the heart of the financial regulation today. While the investment banks have disappeared, the same philosophy persists at the heart of financial regulation.

Yet at the same time it is generally accepted that a core purpose of financial regulation is to mitigate against *systemic* risks, like a global credit crunch. Such risks are externalities, their cost to the economy as a whole is greater than the cost to a firm whose actions are creating the risk. But if regulators focus on risks that are recognised by firms already, and neglect systemic risk, why do we need regulation at all, other than to enforce best practice? Firms will manage their risks well enough, using systems that are inevitably (and properly) market sensitive. The flaw is that in the face of *systemic* market failures even the most transparent market is inefficient. In financial markets risk is mispriced, with consequences that are all too evident today. So what can be done to tackle 'systemic' risks?

First, regulators must begin to base their approach on the system as a whole. For example, while financial firms are encouraged by supervisors to conduct thousands of stress tests on their risk models, few are conducted by the regulator on a system wide scale. If it is possible to have system-wide stress tests on the impact of Y2K, or of avian flu, why not on liquidity? The regulator should conduct system wide stress tests of those scenarios most likely to produce systemic stress – such as a 40 per cent drop in house prices. The information gleaned in this exercise should feed into regulatory measures that are likely to be quite different from those suggested by the risk management of an individual firm. After all, banks end up concentrating their resources in places where their *individual* risk management systems tell them, erroneously, they are safe. In the past couple of months the Federal Reserve has started to run such systemic tests.

Second, financial institutions must be required to undertake pro-cyclical provisioning, raising their reserves in good times and using those reserves as a cushion in bad times. The rules determining these reserves would be quite different from those governing the regulatory capital that financial institutions are required to hold today. That capital is a charge, not a buffer. Since the firm must hold a certain capital reserve to be allowed to operate, it cannot use that reserve to tide it over in bad times. The provisioning requirements should be based on the health of the economy as a whole, so capturing systemic strength and weakness. A policy like this has been pursued in Spain where, despite the massive real-estate crisis, the banks have so far remained strong. Astonishingly, the Spanish system is being dismantled because it is not in accord with market-based international financial accounting standards.

Third, the systemic risks inherent in the misuse of the credit derivatives markets should be addressed by developing common standards and effective clearing. The prevalence of custom-made over-the-counter (OTC) contracts greatly increases the complexity of the market in credit default swaps, a complexity yet further increased by the practice of writing derivatives on derivatives. The introduction of standardised contracts would reduce complexity and greatly facilitate the establishment of a clearing mechanism. There are around $55 trillion of credit default swap contracts outstanding today, but once back-to-back contracts have been netted out the remaining risk is less than 10 per cent of that number. Establishing a clear distinction between regulation of standardised contracts that are readily understood and easily netted (requiring an effective settlement mechanism too), and complex OTC contracts, would greatly reduce the downside systemic risk.

Fourth, financial regulation must escape from its present focus on the nature of institutions – commercial banks are regulated differently from investment banks, hedge funds are not regulated at all – and concentrate instead on function. Targeting regulation on highly leveraged institutions, whatever their formal legal status, would be an important step in this direction. Many years ago the only significant highly leveraged institutions were commercial banks. Today, leverage is a characteristic of firms throughout the financial system, whether they are deposit taking banks, investment banks, hedge funds, mutual funds, private equity firms or insurance companies. There is no such thing as safe leverage. It is this leverage that threatens market gridlock in a disintermediated financial system. Regulation must switch from an institutionally defined approach to a functionally defined approach as a vital component of systemic regulation.

Fifth, it would also be useful to distinguish short-term funded leverage from arrangements with longer-term funding. Consider, for example, the current debate over the impact of mark-to-market accounting. From a risk management perspective, the problem with the current value accounting rules is that the focus is on the asset: its perceived liquidity and the intention of the asset holder to hold it to maturity or to trade it. We have seen how asset liquidity and holder intentions can change rapidly in a crisis leading to an increasingly artificial view of value and solvency. It would be far better to focus on the *funding* liquidity of the asset. Where assets are funded with short-term liabilities, then whatever the perceived liquidity or intentions of the asset owners, it is appropriate to mark the value of that asset to market in case funding dries up and the assets need to be sold tomorrow. But where assets are funded with long-term liabilities or set against long-term liabilities, as is typically the case with a young pension fund, then marking asset values to market is not appropriate and can lead to an artificial view of risk and investment decisions based on a risk that is not important to the holder.

Finally, given that a detailed knowledge of the operation and structure of firms and markets is essential to the effective management of systemic risk, it must be recognised that that knowledge, if it resides anywhere, resides in the Financial Services Authority. But the FSA has no responsibility for systemic risk. Why not create a new Financial Stability Committee as a combined committee of the Bank of England and FSA, jointly and severally responsible for financial stability? This would have the dual advantage of informing the Bank's stability analysis about the actual operations of disintermediated markets, and ensuring that systemic risk became a basic tenet of FSA operational philosophy. However, if a joint committee is to be an effective bridge between markets and systemic risk, then it must be composed of, and advised by, the informed, the sceptical and the contrarian. Creating a committee of 'City grandees', those who were richly incentivised to spot the bursting of the bubble and notably failed to do so, would, to put it mildly, be perverse. The contrarian Financial Stability Committee should be backed by a well-resourced research department. As the experience of the past year has shown, it is only the lowly research teams that spotted the dangers of sub-prime mortgages. They were ignored. They now need a voice at the high table.

The fact that the FSA is a comprehensive regulator means that the UK is particularly well placed to implement these changes. In the USA, with its segmented regulators, it will be more difficult. Perhaps an overarching Federal Regulatory Commission would be the answer. But most important of all, domestic and international regulators must abandon the tired trinity, and focus now on the systemic risks generated by today's financial markets.

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Note

1 'Enhancing market and institutional resilience', April 2008, and 'Follow up on implementation', October, 2008, Financial Stability Forum, Basel (www.fsforum.org).

international oversight – a long way off

Peter Hahn

Thinking that we can prevent the next financial crisis is as ludicrous as banning it. We do not know what will cause it and you can bet it will not be the same as this time. Similarly, the calls for global regulation may meet political agendas and move blame but seem more about the poorly coordinated nature of bank regulation today. We can be more vigilant and create an infrastructure to communicate potential international problems, but most of the answers are certainly local.

First, some common sense. Thirty years ago and two years into my banking experience I earned the right to approve a loan of up to circa £20,000. Despite having worked on £1 billion deals, I was a bit awestruck by the fact that I could then actually approve risk on behalf of my bank (in practice all credit extensions have approval processes) but first I also had to be 'credit trained' – perhaps a bit late. The six-month internal credit course was boring and painful with lessons I used for 20 years and still appreciate today. Years later, I mispriced my first bond deal, and another hard learning process began. Fundamentally, banking *is* about credit risk and we forgot that by 2007. There could be no starker example of this than October's four departing Scottish bank heads, who lacked credit experience and training. And they were not unique: many other bank heads were building financial conglomerates while lacking the basics. It would not have even been that bad if their fellow board members had credit and debt market experience, but they generally did not. How was that possible – this absence of common sense and credit experience at the top of the banks? The BP, Shell and Exxon CEOs are hydrocarbon trained. Indeed, our current problems, and how we move forward, are perhaps more about poor corporate governance than any other factor (including liquidity). Shareholders cheered these 'non-bankers' on and regulators failed to notice poorly aligned incentives and poor board control features. The advent of deregulation and principles-based regulation assumed that financial institutions had the correct governance structures at the top and they did not. In fact, regulation overlooked governance completely, even more than the trading and funding risks taken on by the banks. And these are not issues that can be solved by an international regulator.

Indeed, in contrast to the Scottish experience, the CEOs of the UK's strongest banks (HSBC and Lloyds) are career bankers who undoubtedly signed off many a loan early on. HSBC was set up on 'sound Scottish banking principles' in 1865. Would anyone associate Scotland and banking prudence today? Yet, HSBC's governance also comes into question considering the £10 billion it lost on its US sub-prime adventure. Recalling comments by HSBC's last chairman that a 'team of 150 PhD educated financial experts had designed an unrivalled risk-control system' at the unit, it is hard to imagine that he remotely understood it. This may have more to do with the role of PhDs and business schools in finance believing that complex models could eliminate or transfer risk, while their greatest achievement was eliminating judgement. Thus, another governance lapse was that shareholders, regulators and plenty of boards probably did not even know where to begin asking questions in the modern financial world. This certainly includes the liquidity crisis, but was even more poignantly illustrated in the over-the-counter derivatives business. But this is more the fault of financial markets regulators than financial institutions regulators.

So a substantial (and dangerous enough) minority of large bank managements demonstrated incompetence. For the next 20 years, we in academia will debate the causes of the credit crisis, but I believe governance issues go to the heart of how we can build a better financial system and these need to be solved at local levels. International regulation won't help here.

Second, let's identify the banking world that is evolving. In front of our eyes we see government assistance leading to more consolidation in banking. With respect to Adam Smith, the 'visible hand' of governments will leave us with what I call a three-plus ('3+') model of banking where a small group of financial institutions have 50–80 per cent of domestic banking markets. Such mega-banks have long been called 'too big to fail' and more recently 'too big to rescue', but they likely to become 'too bloated' for healthy economies. If we're not careful, and particularly if the visible hand interjects political and non-economic factors as opposed to simply good governance, we will be in trouble and I fear the populist backlash on government assistance.

Politically, we should decide whether we want more boring or dynamic banks.

The new 'get tough' regimes will most certainly force 3+ banks to carry too much capital for rainy days (effectively increasing all borrowing costs and lowering deposit yields) and we will all pay and the recession will last longer. The 3+ size alone may also damage the economy in any number of other ways. In many countries these banks may employ 100,000 employees or many more if they are international. Does that sound efficient to anyone? The equity markets have always provided lower valuations to the largest banks, believing they could not be managed efficiently. Britain's NHS is creating 'foundation trusts' or independent units acknowledging the challenges of running such large organisations regardless of homogeneity. The 3+ banks may also participate in what oligopolies often see as 'zero-sum' games where lowering prices only serves to reduce industry profits, potentially stifling competition. They are likely to have more centralised decision making, which may stifle credit provision to small businesses that depend on local knowledge; they may be less likely to extend credit to 'less established regions' where they have limited appetite for risk, and their size alone limits opportunities for new entrants to achieve scale and compete. Perhaps most frighteningly for the UK, 3+ banks regardless of their size are unlikely to have access than pre-crisis banks to the long-term funding needed for mortgage-lending and may have little incentive to do so, leaving most mortgages to the depleted building society sector. Thus, we need to give some thought to whether it will eventually be possible to break up such banks and how they can access mortgage funding. I do not think it will be feasible to break them up, which makes the funding model ever more critical. In the UK, I suggest thinking about how risk-averse pension investment needs can be matched to funding housing loans.

The current atmosphere suggests that the 3+ banks will become highly regulated and utility-like – think of the water companies – in their functioning. Domestically, they will provide a narrow range of credit and deposit activities although, through the miracle of marketing, it may look as if they're offering hundreds. Efficiency will have to be driven by boards setting demanding operating objectives for systems and staffing, working on marginal credit improvement over the cycle and negotiating capital requirements with regulators – who hopefully are not at too great a distance to understand local needs. Yet, I also fear that heavy handed domestic regulation may only encourage banks to reduce their domestic presence and invest overseas, particularly if banks can structure their overseas operations outside domestic regulatory schemes.

Investment banking, blamed for all evil under the sun these days, must be recalled as a very necessary factor for wealth distribution in our society. Without it. fewer entrepreneurs would succeed in creating societal wealth and better jobs. Our pension funds would have fewer investment opportunities without investment banks. However, although investment banks that are part of giant 3+ banks may provide competitive services for large corporations globally, they will likely have cost structures that dissuade them from working with small to mid-sized businesses – a key issue for Britain (particularly as many of our largest businesses pick up stakes or continue to be acquired by foreigners). This gap provides an opportunity for mostly equity funded, niche or independent investment banks, essentially what Goldman Sachs and Merrill Lynch did long before they took on hedge fund characteristics or Kleinwort Benson did before being acquired. These investment banks, largely equity funded, would require minimal regulation. Their own cost of funds and likely provision of funding from employees will provide better controls than regulators – especially if they are no longer 'AA' rated. However, those trading areas of 3+ banks should require substantial scrutiny particularly recalling how these areas, with their unregulated nature, were the biggest sources of credit crisis losses in the banks. Frankly, in the regulated sector trading books will require massive scrutiny by local regulators.

Third, what kind of oversight should we construct? It is a big conundrum.Can any one country establish effective regulation of its 3+ banks? Indeed, best practice among two to four banks may even be hard to observe. Years ago, the UK's water regulator told me that he needed at least ten companies to observe best practice. The initial Basel regulatory efforts recognised that global regulatory standards were necessary to avoid a variety of lowest common denominators. Yet here is the greatest question of all: if we choose to have a global or regional regulator for 3+ banks, will it stifle regulatory innovation and affect certain financial cultural differences (for example, the variety of home ownership levels in different countries)? So country by country is problematic but equally so for a global regime. There is a possible compromise. Here, banks that operate in the retail and small- and medium-enterprise (SME) domestic market (regardless of ownership) would be forced to operate as independent banking subsidiaries (as opposed to branches) and regulated by a domestic regulator under generally agreed international principles. Meanwhile separately capitalised international banks (with large foreign exposures) – perhaps of the same groups but separately capitalised – can be regulated by an international regulator. In both cases, regulators need to be part of or have funding access.

But taxpayer concerns are considerable. I suggest the IMF could fill the international role, creating an international oversight and alert network as well as a control function, but it would also need a stability fund for these banks through some sort of pre-funding and its traditional resources. Why the IMF? Mostly, because it already exists, while current international bodies dealing with banking are paper tigers. However, it would certainly require fundamental changes of management and control. But this is a very long slog with substantial international political issues to be clarified. Could any country be happy with its major international bank being taken over and broken up by the IMF? Could Japanese or European taxpayers ever accept their taxes going to save Citigroup, or US taxpayers accept their taxes going to save Deutsche Bank or Mitsubishi UFJ Financial Group? I think not. So I think that leads us back, for now, to domestic regulators carrying the weight, but perhaps using more stringent international guidelines and more international risk awareness for their capital determinations. The IMF might grow into it, but international regulation is a long way off.

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responsible economic change

Philip Hammond MP

It is understandable that policy makers are currently focused on the short-term challenge of supporting the economy and helping families and businesses during these difficult times. It is also important to acknowledge the Government's structural mistakes, which meant that the UK entered the downturn with the largest budget deficit in the developed world. But it is also vital that we are also able to think ahead, and set out the long-term reforms that are needed to stabilise our fiscal and financial system, and build a new and better balanced economy.

These three themes – fiscal responsibility, financial responsibility and rebalancing our economy – have been at the forefront of policymakers' thoughts, particularly in the Conservative Party, where we have been developing a detailed plan for economic change in each of these areas. So how might a Conservative government approach this differently to Labour?

First, fiscal responsibility. The government must live within its means and it is imperative that we get our public finances back in order. We need a radical plan for fiscal policy. The Conservatives would introduce an independent Office of Budget Responsibility, which would hold every government to account. And to those who say this is just a duplication of what's already there, or just an admission of politicians' inability to take tough decisions, I say: 'wrong on all counts'. It will have far more authority than a select committee or a Westminster think tank. But, it will not be a substitute for making tough decisions on tax and spending. We will not, as some have wrongly assumed, be subcontracting this core function of government. Quite the reverse: it is because we are so serious about taking those tough decisions on tax and spending that we want to be monitored by an independent authority.

So there will be no more fiddling the figures, dodgy statistics, politically motivated machinations with taxpayers' money – just good, honest, responsible government to bring the public finances back to health.

Second, financial responsibility. We need to reverse a fundamental mistake made a decade ago when the Prime Minister reformed the banking regulatory system, which meant that the authorities took no view at all on the overall level of debt in the economy. That mistake has been central to the financial irresponsibility that allowed debt and asset prices to get out of control.

Instead, we should introduce a new debt responsibility mechanism to ensure that this does not happen again. We should mandate the Bank of England to write regularly to the Financial Services Authority (FSA), setting out its view on the sustainability of the level of debt in the economy. The FSA will then be obliged to take that view into account when setting the amount of capital individual banks must hold. So if the level of debt is growing unsustainably, the Bank will instruct the FSA to ensure banks either slow their lending or put aside more capital.

Third, rebalancing our economy. Over the past decade, 70 per cent of our economic growth has come from just three things – housing, the financial sector and government spending – all three of which are based on rising levels of debt in the economy. This simply is not sustainable.

Unlike many other countries in Europe, we cannot turn to a strong manufacturing base to provide export-led growth, because manufacturing has shrunk by more than a million jobs over the past decade. And we cannot put our faith in the high-tech service sector, as the USA can, to drive growth, because we have not created the right conditions for it to flourish over the past decade.

We have got to change direction and create the conditions that will allow the growth of an economy that is balanced and resilient. We have to broaden our economic base to include more science, more hi-tech services, more green technologies, more engineering and more high-value manufacturing, drawing on a much wider range of industries, markets and people, and with a better geographical spread throughout the UK. But how will we get there?

For a start, we need to create an economic framework that enables new businesses to flourish. The Conservatives are committed to cutting the headline rate of small business tax to 20p, paid for by abolishing complex reliefs. For example, David Arculus, a leading businessman and former head of the Better Regulation Task Force, is leading an independent task force examining ways in which a Conservative government could cut red tape.

But creating a balanced enterprise economy is not simply a matter of government 'getting out of the way'. As

David Cameron and George Osborne have said on many occasions, while we must be aware of the limitations of government, we should never be limited in our aspirations for government. The Conservative position is clear - it is not enough for government to get out of the way, it has got to get involved. Government must also do more to secure the skills, energy and transport infrastructure that will help create new jobs in new industries and new markets.

We need a radical agenda of supply-side reform in the education system, to create more and better school places in every community and we are committed to a bold series of environmental policies, from feed-in tariffs for microgeneration to unleashing a green coal revolution. We have also proposed a series of policies to make it easier for innovative small businesses to win government contracts. And we have pledged to introduce a high speed rail system that will link cities across Britain and transform regional economies.

Fiscal responsibility, financial responsibility and rebalancing of the economy. These are the three pillars of a Conservative plan for economic change, based on responsible free enterprise and responsible government.

Philip Hammond MP is Shadow Chief Secretary to the Treasury.

a Marshall Plan for the financial system

Will Hutton

Where we go from here depends very much on why you think we are in this mess – and how desirable you believe it is that the financial system either be regulated into shrinking or reformed into a new sustainability. My starting point is that finance grew too complex because it actively shirked its responsibilities to committed ownership. Instead, it grew addicted to in effect taxing the real economy via a ludicrous web of excessive transactions whose prime purpose was commission and fees. It is of course vital that this now changes; but it is also vital that the financial system sustains itself and maintains the existing volume of credit, and new credit flows, rather than shrinks in response to punitive regulation and lectures about being less risk averse. We need our financiers to take risks more than ever in a regulatory context that encourages more sustainable business models. The contrary course could see the world economy as a whole actually decline for the first time since 1945.

The heart of the crisis was the mania for securitisation and the false belief that risk could be insured against through tradeable derivatives – credit default swaps. As securitisation became more and more fashionable and the credit rating agencies got ever more ready to award high credit ratings to structured investment vehicles holding tranches of ever more dubious debt, so the financial system became ever more vulnerable to a decline in underlying asset prices. And when the decline struck, nobody knew who held how many risky securities and how good the insurance via credit default swaps was. Fear struck and trust collapsed. In the event the system has accepted $2.8 trillion of mark to market losses in the debt market according to the Bank of England.

Interbank lending froze and it is only just unfreezing courtesy of government guarantees. Banks have been recapitalised with public funding throughout the G7. Liquidity running into trillions has been injected into the system, and still it totters. There will be more failures and shocks before the story is over.

But securitisation was not the only culprit. There has been too much leverage against too little capital. The development of a $360 plus trillion market in derivatives in the so-called shadow financial system compared to a world GDP of $60 billion and world share value of $40 trillion has been a source of instability too – causing violent movements in share prices, currencies, commodity and bond prices as the bets on these real financial variables dwarf the turnover in the assets themselves. This is mayhem.

My view is that the system has collectively neglected its ownership responsibilities in order to create turnover, multiple transactions and an enormous deal flow from which the fees are earned to pay absurd pay packages. Nobody is worth the $500 million in pay and options Lehman's Dick Fuld looted from his company in the three years up to its demise. Salaries like these, and there were many, were only payable because the financial system had neglected what it should do – supply credit and savings for business and households – and focused instead on commoditising every relationship it could in order to tax the real economy to pay itself sky high pay.

Securitisation at its best is a technical way in which the owner of assets can hedge the risk by selling some of them on and assuming different ones to get a more even balance of risk. A mortgage company would not want all its mortgages to go to one class of borrower in one city or region; it would want as wide a range as possible. This is a legitimate and important use of securitisation – as is the general capacity to hypothecate a stable source of income and securitise it. In this sense securitisation is an important new innovation; as is the capacity to extend insurance into banking and lay off loan default risk. Any reform now needs to respect and retain these innovations.

What went wrong is that financiers went wild. Securitisation passed from being a means of owners legitimately hedging risk to a more general retreat from any of the responsibilities of ownership. A bank owns a relationship with its borrowers. Now banks began to think less of the 'owned' relationship, and more of how they could generate fees from commoditising the relationship into a tradeable transaction – securitisation.

The trend became an epidemic. It manifests itself as the practice of lending shares in exchange for a fee to short sellers. It is the practice of 're-hypothecating' assets in order to lend against them again. It is contracts for difference. It is tradeable credit default swaps. It is the mania for bids and deals in which the wider public is told that 'ownership does not matter'. It is the private equity industry regarding companies as vehicles for leverage and mountainous returns to private equity partners. It is a financial system that focuses entirely on transactions, leverage and deal flows – and not the needs of the underlying real economy it exists to serve.

Reform has thus two objectives. We must avert the risk of a credit implosion by restructuring the system at home and abroad, and supporting it with expansionary macro economic policy, so that it does not deleverage and shrink too quickly. Sweden and Japan are awesome warnings of what can happen to economies where the banking system's primary objective is to shrink its balance sheet: decade long economic stagnation. And we must help the banks migrate to a business model in which they recommit to ownership and only transactionalise when it serves the interests of owners rather than bankers. We need less myopia, short termism, focus on the deal flow and more concern with helping the financial system's clients build their businesses.

Over-the-counter trading in financial derivatives must be organised into a system of international exchanges licensed by governments who will ensure that the members are creditworthy, that the derivatives contracts conform to standard rules and that contracts pass through a central clearing house. This will ensure settlement and prices more fully reflect the price of underlying assets rather than tiny margins. Loans and shares should not be lent to third parties for fees, unless proof of long-term ownership can be demonstrated the dealer should forfeit rights to any sales proceeds. Short selling and rehypothecation should be banned. Owners of contracts for difference should have to declare their identity and purpose in buying assets indirectly and short-term trading should be subject to a transactions tax. OECD governments should declare that the same disclosure rules and requirements will be made of all tax havens. The presumption should be that non-compliance implies guilt. All bonuses in financial services should be paid on the basis of five-year performance, long enough to see if performance is genuinely 'alpha'. One-year bonuses should be subject to swingeing marginal tax rates.

But if these actions should limit volatility driven by the shadow financial system and recreate ownership, there is still the awesome task of halting deleveraging and maintaining credit flows to avert an implosion of asset prices and slump. Here there is no doubt that governments must go beyond recapitalising banks and guaranteeing inter-bank loans, thus preserving the wholesale markets as a source of liquidity. Governments will have to step in and act not just as lenders, guarantors and capitalisors of last resort – they will have to undertake two more steps. They need to buy toxic debt off the banking system and hold it in so-called 'bad' banks – the original concept behind the Paulson Plan. And they will have to create government insurance companies or insurance vehicles – such as the one James Crosby recommended in his interim report on British mortgage finance – to insure the new issuance of securitised debt. One target is residential mortgage backed securities, where the market has to be re-opened. I would also create new lending institutions specialising in various sectors – energy, housing, ICT, creative industries, manufacturing – who (in partnership with existing banks) would buy loans from distressed financial institutions and resecuritise them with government insurance, and make new loans.

This will have to be supported by aggressively expansionary fiscal and monetary policy. Discussions should also be opened about building an international financial system around the active management of the yen, euro and dollar into target zones – and the close coordination of American, Japanese and EU monetary and fiscal policy to support the target zones. Sterling can either join the euro or commit to the policies that will hold the pound in its target zone – an impossible commitment if the UK is to continue not to have exchange and capital controls. We will either have to choose sustaining London's role as an international financial centre by euro membership to resist exchange and capital controls, or austerity and controls as the price of not being exposed to continual speculative attacks on the pound.

Above all we have to be generous to a stricken financial system. It grew too large. It paid itself too much. It became a tax on the real economy. It neglected its ownership responsibilities and insisted it should be lightly regulated. It has brought the world to the edge – and the instinct for revenge, like with reparations from Germany after the First World War, is powerful – thus the language of salary caps, punitive dividends on preference shares and regulation to deliver high risk aversion. But it must be resisted. Our attitude should be very much more like the Americans and the Marshall Plan post-1945. We need to rebuild the financial system and accept that the state must foot the bill. It may be necessary to arrest some leading financiers and organise some show trials; but as after the war it was in our self-interest to be generous to Germany, so we must now be generous to finance. We need credit and finance to take risks, and we need to sustain some of the innovations of the last few years. The alternative is the all too real prospect of a world recession, even depression. And there are only months left in which to act.

Will Hutton is Executive Vice-Chair of The Work Foundation.

time for a new architecture

David Kern

The world economy is facing its worst financial crisis in decades. Several large financial institutions either failed or had to be rescued in emergency packages. Inter-bank rates and credit default spreads have risen to record levels. The credit markets have become virtually paralysed. A banking sector meltdown, though so far averted, remains a frightening real possibility. After Lehman Brothers was allowed to fail (with hindsight, a costly mistake), the G7 governments have adopted unprecedented measures to stop their banking systems from collapsing, in contrast to their complacency earlier in the crisis. But the huge rescue packages, though helpful, have so far proved insufficient. Stock markets are plunging, and the deep pessimism sweeping through the financial markets is threatening to become a vicious circle, with damaging consequences for output and jobs. The political environment is febrile, and there is clamour for extreme and potentially damaging solutions.

A combination of blows has weakened real economic activity in all major economies. Past surges in energy and commodity prices have squeezed personal disposable income and have depressed household spending, reinforcing the negative effects of the credit crunch and of plunging house prices. Most major economies are now in recession. Extreme risk aversion is constraining the availability of credit. Weak consumer demand will probably ensure that the downturn in the major economies is serious and prolonged, rather than mild and short. Prospects are undoubtedly grim, but there is also excessive pessimism. The herd instinct, which has engendered complacency in the upturn, has shifted to the other extreme and is now overstating the gloom. Fear has replaced greed as a dominant instinct, and there are menacing calls to punish those held responsible.

A sense of proportion is needed. The recession will be nasty, but we will very probably avoid a major depression. After much dithering, governments have taken essential steps required to address the most urgent priority – avoiding a banking sector collapse. As well as supplying liquidity on a huge scale, governments have acknowledged that there is also a critical solvency problem. By overcoming their instinctive reluctance, governments have therefore purchased and/or guaranteed troubled assets on a colossal scale, and have recapitalised major commercial banks – effectively nationalising them. The central banks have cut interest rates aggressively and have accepted that threats to growth are more severe than risks of higher inflation.

Recession, higher unemployment and business failures are unavoidable in the next 12–18 months. But recovery is likely if banking stability is restored. Much has been done to achieve this aim; but additional measures will be needed to restore confidence. Governments have enough firepower to win the critical banking war and they simply cannot afford to fail. Unless governments can win decisively, talk about a post-crisis new architecture is futile.

The key ingredients of any new framework, which ensures that similar calamities do not recur, must depend critically on one's assessment of the causes of the crisis. Though a number of key factors feature in most discussions, identifying their relative importance and avoiding their recurrence are difficult and controversial topics. The following mutually dependent factors are being blamed, with some justification, for the current problems, but it is not easy to identify conclusively a main culprit among them:

- excessive build-up of debt, mainly by the personal sector, and primarily for buying houses
- unduly lax US monetary policies: interest rates were pushed down to 1 per cent, an excessively low level, and stayed too low for too long; asset price bubbles have been tolerated
- huge global macro-economic imbalances, manifested in massive US external deficits, and corresponding large surpluses in China and among oil exporters
- exaggerated boom in house prices, which rose to unsustainable records in relation to incomes (the bursting of the housing bubble played a key role in triggering the sub-prime crisis)
- highly innovative – but opaque, potentially unstable and lightly regulated – modern banking model; this model, based on 'originating, securitising and distributing' debt, produced a dangerous explosion of complex, obscure and risky off-balance-sheet instruments
- a deeply flawed banking reward structure; this encourages greed, excessive risk-taking and speculation, aimed at securing disproportionate short-term bonuses

There are close links between the above factors. The unsustainable explosion of debt has been made possible by the huge global imbalances, which channelled saving gluts in the surplus countries to the USA (by very low US interest rates and by some irresponsible banking practices). But sanctimonious moralising about greed, either of grubby bankers, or of ordinary people aspiring to acquire their own homes, is unhelpful. We should be humble enough to acknowledge that we do not yet fully know what precipitated the crisis. Even if we could have identified the risks, it is unduly arrogant to believe that we could have prevented the crisis altogether. But we might have reduced the magnitude of the crash, and this should be our modest but realistic aim in designing a new architecture.

At a global level, it is desirable to agree on coordinated policies aimed at reducing unsustainably large deficits and surpluses, and at correcting major misalignments in the pattern of exchange rates. The scale of the crisis may encourage progress in this direction, as demonstrated by China's informal participation on 8 October in the coordinated interest rate cut involving six major central banks. But international policy coordination can only be limited in scope, given the underlying differences in the interests of the main players. China and other Asian powers will continue to rely on exports as their primary growth engines. Even if China decides that its own self-interest is best served by greater reliance on domestic demand and a reduced external surplus, it would be unrealistic to rely unduly on international cooperation.

The argument that US monetary policies have been too loose for too long in 2001–2004 has some weight; but the case against Alan Greenspan should not be overstated. There were genuine recessionary risks in 2001, in the aftermath of the September 2001 attacks, and the US Fed was duty-bound to counter these threats by cutting rates. If that was a mistake, we are going to repeat it now. In the face of the recessionary threats facing us today, the Fed and other central banks will rightly cut rates aggressively again, even though this inevitably entails increased risks of future inflation. But we have learnt some lessons: once the crisis is over, most central banks will probably start raising rates earlier than they have done in the previous cycle. We can also use variable capital ratios as a counter-cyclical tool. The separate argument that tackling asset bubbles should be given greater weight in formulating monetary policy is plausible, but difficult to implement. Supplementing the inflation target with an asset price target may end up producing unduly deflationary policies. Tackling asset price bubbles early on is desirable in principle; but we can only know with hindsight if what we observe is a bubble, or a change in relative prices that reflects new economic realities.

The severity of the crisis has prompted almost irresistible calls for tighter regulations, and the challenge is to put them into effect without causing too much damage. The banks will have to accept radical and unwelcome reforms. The least harmful principle of a new financial architecture is to distinguish more tightly between two elements:

- basic commercial banking, which is a vital utility responsible for running the payments system, and providing finance to individuals and small businesses; this utility cannot be allowed to fail without causing huge damage, and must therefore accept firm regulation in terms of its activities and reward structure
- more speculative investment banking that can be allowed greater freedom and innovation, but where failure will not endanger the whole economy and will not require public bailouts

Such a new structure, though difficult to enforce, need not emulate all the inefficiencies of the US Glass-Steagall Act, established in 1933 and repealed in 1999. A new separation between commercial and investment banking would clearly create distortions; but it would address deep public concerns, and would help to rebuff damaging attacks against the wider benefits of the market economy.

The short-term economic cost of resolving the banking crisis, though high, will not be devastating. But the longer-term political fallout may cause serious damage, if we yield to the menacing attacks against globalisation, free trade and capitalism. There is now clamour for draconian regulation, mainly in finance but also in the wider economy. Yielding to these calls would cause immense damage, resulting in poorer, less efficient and less competitive societies.

We cannot eliminate unavoidable fluctuations in the economic cycle. But the main building blocks of a more solid new architecture can correct many excesses, thus helping to restore public confidence in the market economy. Globalisation and innovation have enabled the world economy to enjoy a long period of genuine growth and wealth creation. The new architecture should not throw away these benefits.

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repent in haste, act at leisure

Colin Mayer

There are clearly many lessons that can be learnt from the current crisis and many policy responses that will be suggested. There is one that I would like to emphasise and that is caution.

We are witnessing a rash of political initiatives. It is commonplace now for political leaders to be called to summits and conventions to discuss responses to the global crisis. After all, as there is a crisis, leaders must act and above all be seen to act. Indeed, had they not acted a few weeks ago the financial system would have gone down the drain in a state of chronic paralysis. It was only the decisive action of governments acting in concert that saved the day.

That is true but it is only true because of their failure to take decisive action when it was needed earlier in the process. Rushing a neglected patient to the accident and emergency room is a correct response to previous misdiagnosis and complacency. But the avoidance of death through decisive intervention does not mean that the subsequent cure can be effected by similar dramatic responses. Indeed, doctors are more likely to prompt unfortunate side effects which will leave the patient permanently disabled as well as mentally distraught. Instead, the intelligent doctor will try to learn lessons from the errors of his ways and undertake an extensive set of tests before prescribing a new course of treatment.

That is precisely what is required at this juncture in the story of our current financial crisis. The history of past financial crises is littered with cases of governments acting in haste and repenting at leisure. The response to the stock market crash of 1929 and the Great Depression is a case in point. The Glass-Steagall Act separating commercial and investment banking took the best part of 60 years to unravel and in the process created serious inefficiencies in the US banking system, which among other things encouraged an undue reliance on bond rather than bank finance.

The pressures on governments to be seen to do something in the face of financial crisis, destruction of wealth and economic recession are overwhelming. To do nothing appears negligent at best and criminal to many. It is therefore inconceivable that we will not observe a rash of hastily constructed policy initiatives.

Most of these initiatives will focus on tightening regulation. After all, we can generally agree that a fundamental cause of our current malaise was the failure of the regulatory system to anticipate or understand risks in financial institutions before they exploded. In the old days we used to lay the blame for moral corruption at the feet of religious leaders and institutions. Today the custodian of economic morality is the regulator and if there is a breakdown it is to the regulator that we point the finger of blame.

Of course understanding whether immorality was a product of weak religious guidance or whether religion mirrored the corruption of the societies in which it operated is a complex problem of causation. Likewise, regulators claim that they merely responded to the political and economic pressures of the time. After all who would have thanked a British Financial Services Authority that undermined the competitiveness of London as a financial centre by imposing tougher regulatory standards than their counterparts in other financial centres? Just look at the reports emanating out of numerous City of London studies pointing out the dangers of excessively stringent regulation.

Hindsight is a luxury we now have. Regulation was blatantly inadequate and therefore needs to become much tougher, and tougher it will indeed become. That is far easier to predict than the crash that prompted it. While it is inevitable that regulation will tighten, it is not necessarily right. Remember the patient who has just been in intensive care. Certainly, the doctor had failed to make a correct diagnosis. But to say that, as a consequence, this patient or even worse every patient in future needs to spend more time in the surgery is far from obvious. Instead, what the patient requires is some careful diagnosis that determines the root cause of the problem before any further course of treatment is prescribed. Likewise, the first stage to sustained financial and economic recovery is a far better understanding of the root cause of the problems.

One aspect of the current malaise is clear. No one really understands it. We all have our own opinions and some have voiced them louder than others. Opinions are cheap but facts are scarce. The first stage is to understand not just what happened but also where the underlying problem lies.

The next stage is even tougher. There are many policy prescriptions on the table, of which tightening the regulatory screw is the most commonplace. In fact it is quite likely that the most appropriate responses are not even being contemplated at present. Certainly there has been nothing in the debate to date to suggest that a coherent or well-designed strategy is waiting in the wings.

If anyone is looking for a response that is both quick and appropriate they are mistaken. The most useful action that we can urge on our policy leaders is caution – do not repeat the mistakes of history and instead resist the temptation to score political points by being decisive in the presence of ignorance.

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after the mess...

David Miles

In retrospect it has become clearer what got us into this mess. If you wanted a single sentence to summarise it, and you did not mind it being a long sentence, this might do: There was too much extension of risky credit at terms which did not adequately compensate for risk of default by institutions that did not have enough capital and which relied on wholesale sources of funding that proved very footloose generating severe liquidity problems once worries about asset quality increased. I stress again that it is far, far easier to see all this now that it has happened. Not so many people saw it all that clearly until the risks had actually crystallised.

Part of the problem has been that some providers of the debt that ultimately financed lending had a poor idea of the underlying risks of loans; some may have relied in an unthinking way on rating agencies to give a reliable guide to the risk of debt securities backed by lending. But many of those who financed lending may have understood the risks much better, but in a search for yield in a world where returns on debt (particularly government debt) had fallen they decided to accept more risks – and on less favourable terms – than they had done before.

Perhaps a more powerful factor was that rises in asset prices – especially in house prices – seemed to make the underlying loans secure because they generated rising collateral, which convinced many that even if the ability of those that borrowed to service the debt was questionable, loan losses would be small. Relatively low capital adequacy weights on mortgages re-inforced the view that they were at the safe end of the risk spectrum

Let me stress again that it is easier to see all this now than it was a few years ago – hindsight corrects lots of vision problems.

Much of the lending that caused problems was residential mortgages; much of it was made in the USA. But the problems have now affected most countries and losses on lending are rising in many economies. And mortgage lending, and house prices, have risen very sharply across many countries.

The problems became clearer earlier in the USA where house prices began to fall ahead of the turning point in most other countries. Underwriting standards in parts of the mortgage market seem to have been remarkably lax – indeed almost non-existent in parts of the sub-prime market in the USA. Fraud may have been rife in parts of that market. Richard Bitner, who ran a sub-prime mortgage company in the USA, estimates that at the peak of the boom around 70 per cent of the mortgage applications that came his way were fraudulent.[1]

Once house prices started to fall in the USA all of this became clearer. The scale of losses made on lending in the USA came to be much greater than people had thought likely before house prices started to fall there. Because the ultimate losses on those loans were hard to judge – and were spread across the world's financial institutions – it triggered a problem of lack of faith in banks that became global. As asset prices (particularly of houses) fell in other countries, fears rose about the scale of losses from lending there – and the ability of banks to withstand them. They may have become excessive, but they also had the potential to become self-fulfilling as banks' lack of faith in each other made the flow or credit between them dry up with knock on effects for the cost and availability of credit in the wider economy.

How can we stop this from happening again? Here are four things I think are important. First, we need to fundamentally rethink the capital structure of banks. There has been an overwhelming consensus in financial institutions – and also in their regulators – that equity capital is expensive, that debt is cheap and that the more capital that is held the less profitable will be the institution. This belief has always puzzled me. A basic bit of finance theory – the Modigliani Miller theorem – says that it is false. There should be a link between the cost of debt for any institution and the amount of equity it has (and which acts as a cushion between losses to that institution and losses to the providers of debt). Once you take into account the fact that more equity makes the debt safer – and therefore should make it cheaper – then the apparent extra cost of raising equity is offset by the benefits it brings in terms of a lower cost of debt. Almost without exception, and over a period of about 20 years, when I have put this argument to people who work in the financial sector – including regulators – it has been greeted with some mixture of bemusement and pity (at my hopeless naivety). The usual response was polite – but conveyed a clear sense that someone who was so hopelessly out of touch with what everyone knew to be true (equity – expensive; debt – cheap) better get back to a university quickly and stay there.

But when we see financial firms which are perceived (rightly or wrongly) to be under-capitalised having difficulty raising debt and needing to pay a lot for it, it is a very powerful reminder of why the Modigliani Miller theorem is fundamentally right.

Now it is even clearer that there is a link between the cost of – indeed the very possibility of getting – debt and the amount of equity capital. Anyone who still firmly believes that equity capital is expensive and debt is cheap – so that minimising the amount of equity capital is the optimal strategy – does not really get this.

But once you get it, it is liberating. No longer do capital requirements set by regulators become an irksome burden where the goal is to minimise the extent to which they bite. And for regulators too it is liberating. Worrying endlessly that the complex system of weights, devised and refined over many years in various iterations of Basle capital rules, has set capital requirements slightly too high is not sensible. If the cost of having more capital is not great, then the cost of setting capital weights on assets higher than the minimum their risk characteristics might warrant is also not high.

Second, there needs to be a much more serious focus on whether those who take on credit can afford to do so. Some years ago I was asked by the UK government to undertake a review of the structure of mortgage lending in the UK. My report focused heavily on the importance of lenders and borrowers understanding and carefully assessing the risks of people not being able to service debt. We are in a world in which interest rates on mortgage debt can fluctuate substantially; people in the UK tend to take on variable rate debt (thereby subjecting themselves to that interest rate risk); and people borrow a great deal relative to their income. So understanding affordability is crucial. To some extent the system of regulation of mortgage lending in the UK reflects this – there is a responsibility on mortgage advisers to consider affordability, and information needs to be given showing the impact of a 1 per cent change in the interest rate on a mortgage. But in retrospect I believe the report I undertook for the government – and which appeared shortly before the rules on regulation on mortgage lending were introduced – failed in not stressing enough the importance of understanding and assessing risks to affordability.

Third, we need to get (back?) to a situation where there is a strong coincidence of mutual interest between lenders, intermediaries and borrowers in not having credit extended where there are high risks that it cannot be repaid. This is a question both of responsibility and incentives. Incentives matter a great deal. When intermediaries (which include advisers and brokers as well as lenders who then securitise the loans and no longer hold them on their balance sheets) have incentives to generate new lending they also need to have incentives in monitoring that the lending is sound. That seems obvious. Less frequently said is that borrowers – households – have responsibilities and also need to face good incentives. It would be a disastrous situation if people feel they are absolved of responsibilities over their debt by the very fact that someone else made the loan available.

Fourth, we need to do more to prevent huge run ups in asset prices – particularly in house prices. There is one thing that is now urgently required. Some element of housing costs should be introduced into the measure of inflation targeted by the monetary policy committee at the Bank of England. At the moment there is no link between changes in house prices – which themselves are a driver of the overall cost of housing – and the measure of the level of prices the Bank of England is asked to focus on (the consumer price index). If house prices did affect the measure of inflation – as they should if that inflation measure is to reflect movements in the cost of living of households – then an inflation-targeting central bank will tend to offset very sharp rises in house prices by tightening monetary policy. There are huge advantages in setting an inflation target for the central bank; and having more than one target when there is just one lever the central bank can pull (by changing the level of the short-term interest rate) is problematic. By putting a measure of house prices into the consumer price index we can preserve the clarity of having the central bank focus on inflation while also allowing it to respond to sharp rises in house prices in a way which will tend to be stabilising.

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Note

1 See R Bitner, *Confessions of a Subprime Lender: An insider's tale of greed, fraud and ignorance* (Hoboken, NJ: John Wiley and Sons, 2008).

the great wave

William Perraudin

Suppose a great wave swept across the south west of England deluging Cornwall and Devon. Would we blame the foolhardy individuals who had bought houses in the flooded areas? Would we write off the climate scientists and the oceanographers whose models had failed to predict what had happened? Would we hesitate about supporting the battered local economy on the argument that doing so would dilute the incentives of others to avoid areas prone to flooding? Looking forward, would we impose blanket bans on people moving back into the region affected? The analogy with the current financial turmoil may seem extreme but it helps to concentrate the mind as we consider how policy should now change.

First, on blame, generous expanses of newsprint have been devoted to the analysis of bad behaviour by the banks. It is true we have recently seen a period of historically low credit spreads in which investors have pursued yields by taking on increasingly leveraged investment strategies. In apparently benign periods, banks are tempted to offer loans on generous terms to mortgage borrowers, credit card holders or anyone else willing to take on debt. But apart from in the US sub-prime market, it beggars belief to suggest that lax credit is the source of the current crisis.

The recent turmoil has resulted from the sudden collapse in confidence in a fairly small part of the structured products market, namely the market in US sub-prime residential mortgage-backed securities. For most investors, the ratings agencies had been the source of all wisdom, guiding their investment decisions through the ratings assessments they provided of different deals. The only market participants who felt confident enough in their expertise to second-guess the ratings agencies were investment banks and a few specialist hedge funds.

When the sub-prime structured product market collapsed last summer, confidence in the ratings agencies evaporated. This left the banks and the hedge funds which rely on the banks for lending as the only possible investors in securities that had taken on pariah status. As the market fell apart, nobody knew how to value the sub-prime structured products. Banks began to distrust each other since each knew that the others faced the same doubts about the value of their portfolios. In turn this led prices in the wider structured products market to collapse and to runs against banks that were dependent on securitisation or that were thought to have major exposures in that area of the market.

The feedback from uncertainty about value to distrust of counter-parties and bank runs was a phenomenon that nobody understood or could have predicted. Blaming this on bad lending practices, high bonuses for bankers or generally on the greed of Wall Street or the City is the reaction of amateur commentators who have flocked to this crisis.

Second, on the failure of the models, financial engineers clearly have much to blush about. The banks' models omitted categories of risk that, as it has turned out, have thoroughly undermined their institutions. Too few attempted to take account of liquidity. In their trading portfolios, almost all banks ignored the possibility that assets would prove illiquid. So they looked at risk over very short horizons employing short runs of data. Bank risk managers concentrated overwhelmingly on the asset side of their balance sheets, presuming that they could always raise more money through issuing new liabilities at will. Again, the failure was one of not understanding feedback. A shock on the asset side can undermine a firm's standing making it costly or impossible to raise funds from the market.

But what is the alternative to models? Banking is too complex to measure and analyse in any other way. When the world turns out to work differently from how we thought, we should adjust and learn rather than retreat into unscientific analysis of the problem. So the priority is to make models more comprehensive in the sources of risk they allow for, to look at risk over longer horizons allowing for the fact that exposures may prove illiquid and, where possible, to include feedback from the asset to the liability side.

Third, on supporting the battered economy, right now the issue is how to get from A to B. Financial crises in which banks and other key institutions are rapidly recapitalised cost the broader economy far less than ones in which the banking sector is expected gradually to grow back into a healthy state. It is correct to compare the Swedish banking crisis of the early 1990s favourably with the Japanese crisis that endured throughout that decade and draw lessons.

Fourth and finally, looking forward, what actions can we take to ensure that these events do not happen again? Here there are two points of attack: policy actions that directly affect the banks and policy actions aimed at the structured products market.

On banks, for the last two decades banking regulation has revolved around capital. Supervisors have believed that if banks hold enough capital, the banks can be trusted to decide how they would use it. Of course, supervisors have also required banks to put in place elaborate systems to control risks of different kinds but they have otherwise placed few prescriptive limits on how banks can run their businesses.

Inevitably, this approach is now open to question. Banks' business models are more or less demanding in liquidity and more or less susceptible to funding difficulties in times of stress. Supervisors will have to face up to difficult judgements that explicitly assess the viability of business models. In this, supervisors will be assisted by market discipline. In a sense the whole crisis revolves around market discipline in that anyone with a slightly suspect business plan has been panned by the wholesale markets. Looking forward, one may expect that banking activities that demand liquidity will be prohibitively expensive to fund for a long time to come.

Capital itself will have to rise. The recently adopted Basel II rules were constructed to be neutral in their impact on capital in aggregate across the banking system. This was highly questionable as part of the impetus behind Basel II was the perception among regulators that bank capital had been eroded by banks' systematic efforts to circumvent regulatory capital requirements. In retrospect, it has proved a disastrous error of judgement. The higher capital levels will have to be risk-based just as those in Basel II aimed to be, but the level of conservatism will have to be much greater and more complex instruments should be subject to especially cautious treatment. Exposures to other banks' structured products should be strongly discouraged by penal capital treatment.

The crisis has exposed several weaknesses in banks' risk management practices. These include most notably: insufficient attention paid to the possibility that currently liquid markets might seize up; a failure to allow for funding risk; and inadequate attempts to aggregate risks across multiple business units. These have major implications for how supervisors and firms should proceed.

For example, the traditional accounting distinction banks make (and supervisors have accepted) between (illiquid) banking and (liquid) trading books is open to question. Many trading book exposures have proved to be completely illiquid as structured product markets have been closed for business over long periods.

Collectively, these measures should push the banking system towards a more conservative and more traditional set of business models without totally precluding innovation.

On the structured product market, securitisations will take a long time to make even a partial recovery after the experiences of the last two years. There is an interesting precedent to recent events in that in 2002, a sector of the US asset-backed securities market, namely the market for manufactured housing loan-backed securities, collapsed. New issue volumes in that market dried up and after a few years volumes of outstanding securities had fallen by 80 per cent.

Securitisations, if they were not excessively opaque and were not held by banks, would be a perfectly desirable and reasonable way of trading risks. So the direction of policy here should be in reducing opaqueness and limiting banks' exposure to the market. Right now the opacity is exacerbated by the lack of information about deals and their performance historically. Laborious and expensive collection of data permits specialists to analyse risk but it is very hard for the wider community of investors including pension funds and insurance companies to build expertise. To combat these problems, systematic data should be made available to the market through pressure on the securitisation industry bodies and through requirements on originators.

The role of the ratings agencies in the structured product market should also be reassessed. The agencies' methodologies in particular should be questioned. Currently, there is no requirement on them to explain or justify to any official body let alone to the broader market or to the public the criteria they adopt. Given their legally privileged position in the financial market (issuers are able to reveal information to ratings agencies without making public disclosures) and their crucial role in the credit markets, the past approach of leaving the rating agencies subject to no more than cursory regulation is very hard to justify.

The steps I advocate are nitty-gritty rather than involving the introduction of eye-catching new institutions, the prohibition of unfashionable activities like short-selling or (most ludicrously) the placing of limits on what banks can pay their employees. But the lesson of the crisis is that to avoid bank runs and credit market collapses, we must push all banks towards behaving like the more conservative, better diversified institutions (JPMorgan, HSBC) rather than try to retreat into the banking past.

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the mysterious balance sheet

Gillian Tett

Back in April 2007, the Bank of England published a striking chart on page nine of its Financial Stability Report (FSR). This graph showed that the balance sheets of major Western banks had more than doubled since 2001, since the assets held in banks' trading books had exploded.

At the time, the Bank noted this trend seemed a trifle odd; after all, financiers were extolling the rhetoric of the 'originate and distribute' model – which implied that banks were supposed to be shedding, not accumulating, assets. But while the FSR duly observed that the trend might leave the banks more vulnerable to future asset price swings, it did not ring alarm bells to a significant degree. And in subsequent months, this pattern appeared to go almost entirely ignored among other Western policy makers – not to mention investors and journalists too.

Future historians might read this and weep. For while the tale of that balance sheet chart certainly does not explain all of the current financial crisis, it does show the degree to which bank regulation has gone badly wrong in recent years – and urgently needs to be fixed. What is perhaps most depressing about the current crisis is not simply that many regulators and investors were previously blind to all the prior signs of financial excess; instead, it seems that even when policy makers were aware that something looked odd – as with the Bank's decision to publish that asset chart – decision makers were hopelessly ineffective in turning their vague concerns into tangible, remedial action.

Take another look at that mysterious balance sheet chart again. These days it is clear that a key reason for the explosion in assets highlighted in that graph was that many banks were stockpiling vast quantities of supposedly safe, AAA-rated credit securities on their books, much of which was linked to the mortgage world. Until 2007, this trend did not ring alarm bells since regulators and bankers alike tended to judge whether banks had enough capital to cope with risks by using the two Basel frameworks. These regimes essentially let banks post virtually no capital against assets held in the trading book, which were deemed to be very safe, according to their internal models. Thus the AAA securities often magically disappeared from view, because the banks' models labelled these 'ultra safe'.

However, when the crisis hit the sub-prime world in the summer of 2007, these assets produced big losses. Take a category of assets known as AAA-rated 'super-senior' tranches of collateralised debt obligations linked to asset-backed securities, which was a popular item to pile into the trading book. Since last summer, some $85 billion of these (or a third of the total) have been tipped into default as a result of the sub-prime crisis, according to JPMorgan. That has created a devastating capital hit, for which the banks and regulators alike were utterly unprepared.

There are multiple lessons to learn from this. First, regulators urgently need to develop a more integrated and holistic approach to thinking about risks. Back in the spring of 2007, for example, some senior officials at the Bank were becoming uneasy about the balance sheet growth of banks (which is why the chart even cropped up in the FSR in the first place, even though such data was often all but ignored back then). However, the Bank was in no position to force banks to amend their ways, since it was the FSA that was supervising the institutions. And the FSA had no reason to ask individual banks to raise their capital provisions, since they seemed well capitalised under the Basel regime. Worse still, there was a lack of information flow between Western policy makers. Hence the difficulty of spotting the sheer scale of regulatory tricks being used by the banks in relation to those collateralised debt obligations of asset-backed securities.

This suggests that the international coordination measures currently being spear-headed by groups such as the Financial Stability Forum urgently need to be intensified. It also suggests there is a case to give central banks more control of supervision again, since these are the only institutions sufficiently well placed to take a holistic, systemic view of financial flows. It is notable, for example, that the only regulators in Europe that sensibly forced their large banks to adhere to higher standards were in Spain – where supervision has remained in the hands of the Spanish central bank.

However, reform is also urgently needed in terms of the regulatory yardsticks used to assess risk. When the crisis first erupted in the summer of 2007, Western policy makers believed that major banks had ample capital, when measured by the standards of the Basel regulatory regimes.

However, that assumption was completely wrong. That is partly because the Basel regimes tended to ignore off-balance sheet risks, but also because there was an excessively heavy reliance on backward-looking models that tended to produce excessively flattering results in an era of low volatility.

Look at those offending super-senior collateralised debt obligations of asset-backed securities again. One reason why banks thought these instruments were so safe was because they carried high ratings. However, another was that many banks relied on value at risk models (or models that measure risk by tracking how market prices have recently moved). In the spring of 2007, these measures implied that super-senior assets were virtually risk-free, since the markets have been very calm in the previous years. Once mortgage defaults rose, however, the ratings crumbled – and the value at risk models proved a hopeless guide to market risk.

That suggests regulators must stop placing so much trust in banks' internal risk models to assess capital needs. For while such models should not be discarded, since they can be useful at times, they should be supplemented by checks and balances. The Swiss National Bank might offer one sensible precedent on how to do this: it is currently proposing that banks should both adhere to crude leverage ratios and risk-weighted, model-based measures, to offer regulators some form of 'reality check' (and make it harder for banks to exploit regulatory loopholes to make assets magically disappear). Another sensible idea would be to introduce some counter-cyclical capital ratios that essentially force banks to rein in their leverage at times of a boom.

Last, but not least, regulators also need to pay some attention to the matter of incentives – not just in terms of CEO pay, but also in a much wider social and cultural sense. Bankers need to be prevented from being given outsize incentives to take short-term, high-risk bets. However, regulators would also do well to demand frequent, detailed information on bankers' bonuses as a clue about which fields are turning into the hotspots for 'regulatory arbitrage' – and thus which merit more scrutiny. (It is no surprise, for example, that the area of collateralised debt obligations of asset-backed securities was producing some fat payouts in 2005 and 2006).

There should also be debate about regulators' pay – and incentives. In recent years many Western regulatory bodies have struggled to attract officials with enough acumen and self-confidence to challenge the fast-moving banking world. That might be countered if more countries copied Singapore by benchmarking the pay of their regulators to that of the banks. For sure, that would be likely to trigger political protest, given that there is currently pressure to cut pay across the financial world. But unless regulators can become empowered not just to spot warning signs but also to act on that evidence, there is little likelihood of ever building a truly effective financial regulatory framework.

After all, the current storm will not bring an end to regulatory arbitrage: as long as the banking industry is driven by a profit-centred, business ethos, rather than run as a public utility, bankers will try to exploit loopholes in the rules. Indeed, history shows that most financial crises were sparked by some form of regulatory arbitrage, usually in response to rules introduced by an earlier shock. Thus, what is needed now is not just a new set of banking rules, but also incentives to enable regulators to think creatively, and act. Even – or especially – when they are faced with data that seems to fly in the face of conventional financial rhetoric of the time, as with that balance sheet graph back on page 9 of the April 2007 UK Financial Stability Report.

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a Greek tragedy

Paul Wallace

In thinking about reforms to avoid another near-death banking emergency, accurate diagnosis of what went wrong is a vital precondition. Essentially there are two views. The first is that this was a wholly unexpected deadly financial virus concocted in the laboratories of investment banks. The second is that it was a predictable outbreak of a disease that has struck many times before.

Supporting the first diagnosis is the fact that the crisis was global in extent and hit at the nerve-centres of international finance – Wall Street and the City. At its heart lay complex innovations and a new array of interconnected markets that had comprehensively failed. Making matters worse, these products and their dispersion to investors through international wholesale markets had been fondly imagined to reduce risks to banks rather than to increase them. Hence the unexpectedness of an event that brought the world's most advanced banking systems to the brink of collapse.

Backing the second diagnosis is the fact that the crisis was preceded by a credit boom in which lending standards had become lax and in some instances fraudulent. The gush of extra borrowing had blown up a familiar bubble in property markets. Financial innovation, as often in the past, had proved to be more about avoiding onerous regulations than about genuinely making banks less risky. Hence the predictability of a crisis, for which there were many previous examples, if not on the same scale.

In fact, both diagnoses are true. The crisis was both new and old. It was new in the sense that it featured freshly minted products like collateralised debt obligations and credit default swaps, yet it was old in the sense that it involved excessive lending backed by insufficient capital. There was nothing new about a financial crisis featuring a property boom that had turned sour but this one was novel in that the housing bubble was international in extent. The crisis featured a host of exotic financial institutions, such as structured investment vehicles and conduits, but financial crises typically start at the fringe with new intruders, such as the secondary banks that spawned Britain's home-grown banking crisis of the 1970s.

The crisis was also both unexpected and predictable. It was unexpected in that bankers, regulators and central bankers had managed to convince themselves that securitisation reduced systemic risk, lauding it as an advance that would do away with old-style financial crises because it was supposed to spread credit risk away from bank balance-sheets. Standard measures of risk appeared to have fallen, although, crucially, unmeasured ones such as liquidity risk (or other dangers like that of mis-selling suits from America's sub-prime borrowers) had in fact soared. Yet the crisis was also predictable since other indicators, such as the proliferation of leveraged buy-outs and the extraordinarily high returns being made in the financial sector, not least in eyewatering bonuses, pointed to excessive risk-taking.

The ancient Greeks knew that nemesis followed hubris. The main lesson from the crisis in redesigning financial systems and their oversight is to relearn some historical humility. It was notable that in the run-up to the crisis, politicians and central bankers were parading the success of new policy frameworks, such as inflation targeting, in managing the economy. Although no central banker would have made as crude a boast as to have done away with boom and bust, both academic and official studies highlighted the 'great moderation' of the previous 15 or so years that had both lowered inflation and its variability and reduced output fluctuations.

Now that it is clear that inflation targeting did not mark the end of monetary history, policy makers should pay much more attention to past experience in their approach to economic and financial management. After all, the crash of 2008 in many ways followed the cyclical pattern identified by early political economists and latterly by Hyman Minsky and documented by Charles Kindleberger in his classic study of financial crises stretching back to the early 18th century. First comes a 'displacement', a new development such as railways in Britain in the mid-19th century that causes investors and financiers to become more confident. Then they overdo things as everything performs better in an upswing fuelled by a credit boom; as Kindleberger observed, nothing is more likely to unhinge people's judgement than seeing their friends get rich. Eventually there is an overdue reappraisal of risk, which spurs an unwinding of leverage. If things go badly wrong at this stage of 'revulsion'– probably because they went far too well before – this can lead to panics and banking runs.

The 'displacement' spurring the global financial boom was arguably the emergence of surplus savings in emerging Asian economies, which drove down long-term real interest rates round the world. Yet that does not absolve Western policy makers from their part in allowing things to get out of control. For example, the Bank of England went out of its way to deny the economic dangers of Britain's house-price boom despite sharply rising consumer indebtedness on the back of inflated housing collateral and household saving falling to its lowest for over 50 years. This misjudgement still seems perplexing but the most important error of judgement was that the Federal Reserve held short-term interest rates far too low after the dotcom recession. Ironically – and a useful warning that there are no simple lessons from history – this decision was in fact prompted by exaggerated fears that the USA might fall into the deflationary trap that had affected Japan in the 1990s.

Clearly, serious policy mistakes were made, which must be avoided in future. There was nothing historically inevitable about the crash of 2008, not least since it was the flawed decision by the US Treasury to let Lehman Brothers go bankrupt that turned a crisis into a full-blown panic. But mistakes are often made in the heat of war; what matters more is to keep the peace. Economic policy must have broader objectives than a narrow focus on consumer-price inflation targets. Central banks need to be given a broader goal of ensuring overall monetary and financial stability that enables them to 'lean against the wind' when asset-price bubbles and borrowing surges develop even if the inflation outlook on the usual horizon of around two years does not warrant such a tightening in monetary policy.

If financial stability is to be achieved, those responsible for oversight must understand what is happening. Perhaps the biggest misjudgement of all was both conceptual and institutional. Even though the financial system was undergoing tremendous change, no one was fully in charge either of monitoring what was happening or ensuring that systemic stability could be maintained in the new financial order. The world's central banks sit in the hearts of their financial districts, yet they failed to grasp how the new financial system being constructed around them worked, still less how it might cope when stressed.

This fault was most glaringly exposed in Britain's 'tripartite' arrangements between the Treasury, Financial Services Authority and Bank of England that proved so inadequate when tested by Northern Rock. But the euro area was even more vulnerable because of the half-finished nature of a monetary union whose member states reserve the fiscal authority needed to back up banking rescues. In the USA, the Federal Reserve's authority was far less diminished than the Bank of England's and the Fed welcomed its supervisory role whereas the Bank was strangely relieved to have lost it. Even so the remit of America's central bank was too circumscribed. The lesson is not that central banks should take on the job of detailed supervision, rather that they should be charged with ensuring systemic financial stability and given the powers to allow them to carry out that function, including the ability to counter the natural pro-cyclicality of the financial system by insisting on rising capital ratios during upswings. There must be a chief of staff in charge of systemic financial stability and that macro-prudential role lies naturally with the central bank rather than regulators.

Much of the work in avoiding a future financial crisis for many years to come has already been done owing to the scars of the crash of 2008. No banker who has survived the last year or so will want to expose themself to another such ordeal in their lifetime. Capital backing for banking assets would rise even if the regulators were not demanding it. The AAA ratings on asset-backed securities that gulled financiers and supervisors alike will not be trusted again. Indeed a big danger now is of seeking to fight the last banking war and not the next one, which will involve some new risks as yet unimagined. In this sense, the term financial architecture is unhelpful: what is needed is organic arrangements that can respond to what will remain a dynamic industry. And over-reaction must be avoided. Reforms must recognise that smart finance is on balance good for the economy. Those in charge just have to be smarter at ensuring that finance doesn't get too smart for its own and the wider good.

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the case for a twin-track response

Philip Whyte

The credit crunch has unleashed widespread anger outside the financial sector. And rightly so. Not only have taxpayers had to bail out an industry that is uncommonly well rewarded. But the effects of the credit crunch on the real economy are likely to be painful and prolonged – not least on the jobs market. Main Street, as Americans say, will pay dearly for the mistakes on Wall Street. Unsurprisingly, a fierce debate is now raging about how the world got itself into such a mess – and how it should avoid doing so again in the future.

In the UK and the USA, blame has been directed primarily at a profession – financiers. In both countries, politicians and the public have paid particular attention to the egregious asymmetry from which the financial sector benefits. High-flying bankers, critics point out, receive large salaries and bonuses when the times are good – while their employers can count on being bailed out by the state when the business cycle turns. This mismatch between private reward and public risk is not just unjust. It is destabilising, because it provides the financial sector with the closest thing to a one way bet: heads it wins, tails the taxpayer loses.

In much of continental Europe, criticism has tended to focus on a broader system – the Anglo-American model of capitalism. A common refrain across Europe is that the crisis is the product of Anglo-Saxon profligacy and the lightly regulated model of finance that fed it. On this view, light regulation, arm's length finance and incomprehensible financial innovation begat irresponsible lending – and the rest of the world is now suffering from the fall-out. The lesson seems clear: jettison 'neo-liberalism', re-embrace more traditional models of finance and tighten the regulatory screw to prevent such a crisis ever occurring again.

Each interpretation has something going for it. Compensation structures in the financial sector do seem to encourage risky short-term behaviour. And financial innovation has been a factor in the current crisis. Securitisation, for example, was supposed to have reduced risk by spreading it more widely. In practice, it ratcheted up the overall level of risk in the international financial system, because originators of loans had no incentive to assess the creditworthiness of borrowers, and credit rating agencies fell short. As Jagdish Bhagwati has remarked, financial innovation did not result in creative destruction, but in destructive creation.

Neither account, however, is completely satisfying. Numerous employees at Lehman Brothers had shares tied up in the firm – and consequently had a personal interest in the firm's survival. Yet it still went under. Nor are crises unique to Anglo-American capitalism. Since the early 1980s, crises have hit countries with systems as diverse as Mexico, Japan, Sweden, Finland, Thailand, Indonesia and South Korea. Each time, it has been common to explain the crisis by reference to country-specific factors. Many Western observers, for example, attributed the East Asian crisis in 1997 to local forms of 'crony capitalism'.

The financial sector is not crisis-prone because it is American, Japanese or Swedish. It is crisis prone – period. Why? The reason, as Hyman Minsky pointed out, is that prolonged periods of stability tend to breed instability. Financial crises usually germinate during periods of sustained prosperity when complacency sets in, lending standards weaken and risk aversion falls. In time, speculative euphoria develops. At some point, debt exceeds what borrowers can service with their incomes and the speculative bubble bursts. A crisis results in which lenders are forced to rein in credit – with grim repercussions for the real economy.

So the root cause of the current crisis was not Anglo-American capitalism (although securitisation magnified the subsequent debacle). It was the 'Great Moderation' – that is, the period of high growth, low inflation and exceptionally cheap money that the world economy enjoyed between 2003 and 2007. The extraordinary levels of leverage that developed in parts of the world during this period can only be understood against this backdrop. Interest rates remained persistently low because central banks in countries like the USA had to support domestic demand to accommodate surplus savings in Asia – or put up with much lower growth.

A comprehensive response to the crisis must therefore contain at least two strands. The first, which has received the least attention to date, needs to address the relationship between monetary policy and macroeconomic imbalances. One question is whether central banks that pursue inflation targets should be less 'pure' than they have been and 'lean against the wind' by raising interest rates when faced with sharp rises in asset prices. Another issue concerns how different monetary policy frameworks interact. Since one country's external surplus is another's deficit, the relentless accumulation of foreign exchange reserves by countries such as China is not conducive to international financial stability.

The second strand should focus on regulation. In the EU, the European Commission is proposing legislation that would regulate credit rating agencies and force originators to retain a 'material economic interest' in securitised assets. In essence, these proposals try to ensure that securitisation does not result in a systematic under-pricing of risk. Equally important, however, are discussions in the Basle Committee on Banking Supervision to try and reduce the pro-cyclicality of bank lending. Regulators need to ensure that banks hold more capital, or increase levels of provisioning, when lending and asset prices are growing strongly.

Few politically engaged commentators have pressed for a twin-track response to the financial crisis. Why? Because the left tends to blame the crisis on regulatory failures and to deny that excessively loose monetary policy played any role – unsurprisingly, as left-of-centre commentators are always castigating central banks for subordinating economic growth to the fight against inflation. The right, by contrast, is more inclined to argue that the crisis was the result of monetary, rather than regulatory, laxity – an interpretation that stems from the belief that there is always too much regulation and that governments are always culprits.

For the time being, the tide is with the political 'left'. In the Anglo-Saxon world, as well as continental Europe, the financial sector will emerge as a more regulated industry than before. But it is important that changes in regulation be well designed and not go over the top. There is no free lunch: tighter regulation will have costs. Take capital requirements. Requiring banks to hold more capital may look prudent, but it is a price that will be paid for by customers in the form of higher borrowing costs. So careful thought needs to be given to what the optimum level of capital should be – and the scale of the event it should withstand.

Regulatory reforms are desirable and politically inevitable. But financial services are already the most regulated sector in the economy (even in the Anglo-Saxon world). Regulatory reforms may mitigate against future crises, but they will not legislate them out of existence. Indeed, it is possible that regulatory rules are set to be tightened – but that the factors which contributed to surplus savings in Asia and huge levels of household debt in parts of the developed world will remain unaddressed. If this is the case, we are unlikely to emerge with an international financial system that is any more stable than the one we have had hitherto.

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biographies

Vince Cable, MP for Twickenham, is the Deputy Leader and Shadow Chancellor for the Liberal Democrats and their primary spokesperson on financial policy. His educational background is in economics, having graduated from Fitzwilliam College, Cambridge, in Economics and Natural Sciences and later completing a PhD in Economics from Glasgow University. Before entering politics, Cable spent time teaching within higher education at Glasgow University and the London School of Economics, and spent two years as chief economist at Shell International. He is a respected financial commentator and has recently contributed pieces on the current economic situation to the *Guardian* and *The Times*.

Philip Collins is Chair of Trustees at Demos and currently a senior visiting fellow in the Department of Government at the London School of Economics. As Tony Blair's chief speech writer he was involved in all of the Prime Minister's major speeches from April 2005 to July 2007, including major addresses on European policy, education, health, law and order and conference speeches. Prior to that, he was director of the Social Market Foundation (SMF), an independent think-tank and charity. During his time at the SMF he became a regular contributor to the main broadsheet newspapers and appeared regularly on political programmes on TV and radio.

Clive Cowdery founded Resolution Life as a closed-fund consolidator in 2003 and built it up to be a FTSE100 giant with over £60 billion under management by 2006. Resolution's holdings were taken over by the Pearl Group in 2008, and since then the business has been relaunched and was involved in an attempted take-over of Bradford and Bingley in summer 2008. He previously ran the European insurance division of GE, the US conglomerate, and co-founded Scottish Amicable International/J Rothschild International, a European cross-border insurance business based in Dublin. Cowdery is chairman of the Resolution

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Richard Dale is Emeritus Professor of International Banking at Southampton University. He held an executive position at NM Rothschild and Sons in 1973–7 and 1984–5 as well as holding visiting professorships at Reading University and Queen Mary and Westfield College, University of London. He is a board member of both the European Capital Markets Institute and the European Shadow Financial Regulatory Committee. Dale's books include *Risk and Regulation in Global Securities Markets*, *International Banking Regulation: The great banking experiment* and *The First Crash: Lessons from the South Sea bubble*. He is also a consultant to the *Financial Times*.

Professor Lord John Eatwell is president of Queens' College Cambridge and director of the Centre for Financial Analysis and Policy. Prior to entering the House of Lords in 2002, he was an economic adviser for Neil Kinnock and responsible for much of the work behind the re-alignment of Labour Party policy undertaken at that time. More recently, he was a member of both the Board of the Securities and Futures Authority and the Regulatory Decisions Committee of the Financial Services Authority. He has also served on the board of the Royal Opera House and as Chairman of the British Library.

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Philip Hammond is a Conservative MP who currently serves as the Shadow Chief Secretary to the Treasury. Elected to the Commons in 1997, he has also held the shadow Work and Pensions portfolio and been opposition spokesman on health. Prior to entering Parliament he had various commercial interests and also undertook consultancy work for the World Bank in Latin America, and for the Government of Malawi.

Will Hutton is Executive Vice-Chair of The Work Foundation and author of several best-selling economic books including *The State We're In* and *The World We're In*. After starting his career as a stockbroker and investment analyst, Hutton worked in TV and radio as a producer and reporter. He later spent four years as editor-in-chief at the *Observer* and continues to write regularly for that paper. In 2004 Hutton was invited by the EU commission to join a high-level group on the mid-term review of the Lisbon strategy. Hutton is also a member of the Scott Trust, a governor of the LSE, and a visiting professor at Manchester University Business School and Bristol University.

David Kern is economic adviser to the British Chambers of Commerce and prepares the organisation's quarterly economic forecast. He also runs his own macro-economic consultancy, Kern Consulting, and has served as NatWest Group's chief economist and as head of the Bank's Market Intelligence Department for over 17 years. Kern's focus is consulting on global and UK macro economic forecasts, country risk, the euro and other currency markets, and interest rate developments.

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Professor David Miles is Managing Director in Economic Research at Morgan Stanley and Visiting Professor of Finance at Imperial College, University of London. He has served as a non-executive board member at the Financial Services Authority since 2004. His research focuses on the interaction between financial markets and the wider economy and he has undertaken work on the impact of ageing and the implications of different types of pension reform. Previously, Miles has worked for the Bank of England, in the Economics Department at Birkbeck College, London, and as Chief UK Economist for Merrill Lynch. David's published work includes *Macroeconomics: Understanding the wealth of nations*, *Housing, Financial Markets and the Wider Economy* and *The Miles Report*, an analysis on longer-term fixed rate lending published by HM Treasury in spring 2004.

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