

## **John Gieve: Seven lessons from the last three years**

Speech by Sir John Gieve, Deputy Governor of the Bank of England, at the London School of Economics, London, 19 February 2009.

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### **Introduction**

As you know I am about to leave the Bank of England after three years as the Deputy Governor responsible for its work on financial stability and as a member of the Monetary Policy Committee.

It has been a game of two halves. The first 18 months from January 2006 to July 2007 were the tail end of the Great Stability, a period of nearly 15 years of continuous growth, low inflation, and falling unemployment. They were guided by and reinforced a wide consensus that economics had discovered the right way to manage the economy and that the UK was a good model of how to put it into effect.

The second 18 months have seen an extraordinary reversal: with turmoil in financial markets, the credit crunch, and the onset of a severe global recession calling into question nearly every part of that consensus.

The immediate challenge is to limit the depth and duration of the recession and bring the economy back onto a sustainable path with low but positive inflation. But we have just set out our analysis of the economy in our February Inflation Report and Charlie Bean explained the policy options we face in a speech earlier this week. So I will focus today on some wider implications of the last few years for the way we conduct economic and financial policy.

In doing so I am well aware that we are not yet at the end of the story. We don't know how deep and prolonged this recession will be or how soon and completely financial markets will recover. So it is too early to reach settled conclusions on causes or cures. So I offer this as an interim report: seven lessons I have drawn from my experience of the last three years.

### **A settled consensus**

But let me set out first the position as it appeared in 2006.

For much of my life, the design of economic policy has been at the centre of both political and academic contention. In the UK, over the twenty years following the breakdown of the Bretton Woods arrangements, we tried everything from prices and incomes policies to several varieties of monetary targets and finally fixed exchange rates and they all came to a sticky end. But the approach we adopted after our ejection from the ERM was guided by modern monetary economics and set us on a course which gathered growing support across the political spectrum and in markets.

### **Macroeconomic policy**

The new consensus was based in Britain on the experience of repeated bouts of inflation and the three painful recessions which had been required to bring it under control. That experience hammered home the lesson that there was no trade off between inflation and growth. The best that macro policy could aim for was stable and low inflation which would provide a platform for sustainable growth at a rate which would be determined in large part

by the microeconomic policies which could affect the productivity and dynamism of the economy.

The right instrument to maintain that low inflation environment was monetary policy. And to ensure that interest rates were used to that end, and thus to condition public and market expectations, the decisions should be taken by an independent Central Bank pursuing an explicit inflation target and informed by modern macroeconomics.

### **Fiscal policy**

In macro terms, fiscal policy was put on auto pilot. Discretionary changes in the government's tax and spending plans were thought to require too much time to agree and take their effect to be of any practical use in stabilising the economy. And economists worried that fiscal measures would prove largely impotent in any case – households and companies would “look through” any cut in taxes today, which they expected to be financed by an increase in taxes tomorrow.

So monetary and fiscal policy worked in tandem. Monetary policymakers relied on the government to balance the books over the cycle so that the inflation target would remain credible. And the government relied on monetary policymakers to stabilise the economy, so that fiscal policy could focus on other aims: encouraging innovation, growth and employment; redistributing income and investing in the public services.

### **A single regulator**

Alongside this macro framework, there was a consensus that industry and commerce was best left to the market with market failures and externalities controlled by independent regulators, like OFGEM, OFCOM and OFWAT, rather than through ownership. In the case of the financial services sector, responsibility was given to the FSA and banking supervision moved out of the Bank. The new FSA inherited from the Bank an approach to prudential supervision in particular which was based as far as possible on principles rather than a detailed rule book .

There were positive and negative reasons for that move. The positive were that a single financial regulator would be more effective at a time when the lines between banking, insurance and securities dealing were breaking down. It was efficient for the firms to have just one regulator to deal with and good for the regulator to be able to look at all aspects of their business. On the negative side there was a worry that responsibility for supervision even of banks could unbalance the Bank and distract it from its monetary role. So while the Bank retained a role in promoting financial stability and monitoring the vulnerabilities in the system as a whole, it was not given any statutory objectives or powers in the new legislation.

This piece of the UK system was controversial in some quarters but it definitely topped the international best buy tables in 2006. The IMF called it a model for others and a succession of governments visited London to learn from it. The Chairman of the FSA was invited by the US Treasury Secretary to address the heads of the US regulatory bodies. And the Mayor of New York City and a US Senator commissioned a report which concluded that the US needed to learn from London's approach to regulation if it was to arrest New York's decline as a global financial centre.<sup>1</sup> In short the separation of the three authorities, each with a clear remit and the independence to pursue it, was seen as a good model for a modern economy (Chart 1).

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<sup>1</sup> [http://www.nyc.gov/html/om/pdf/ny\\_report\\_final.pdf](http://www.nyc.gov/html/om/pdf/ny_report_final.pdf)

## Revisiting the Great Stability

And it worked! We should not underestimate the achievement of the next decade. As recently as fifteen years ago, low and stable inflation still seemed an unattainable goal. But, research published by the Bank around the time I joined found that:

“the post-1992 inflation-targeting regime has been characterised, to date, by the most stable macroeconomic environment in recorded UK history”<sup>2</sup>

As Chart 2 shows, volatility of both output and inflation hit new lows. Similar gains were achieved overseas, although the break in macroeconomic performance appears to have happened earlier in the United States.

In the UK we did indeed avoid the sort of cyclical booms in output, income and employment we had seen in the 70s, 80s and 90s (Chart 3). Even with the benefit of hindsight, it is hard to demonstrate that the economy was running significantly above capacity in the last few years. The flow of migrants eased capacity constraints in the labour market and the surveys of capacity utilisation rang no alarm bells (Chart 4). Indeed when I arrived on the MPC, some members were arguing that we needed to cut rates again following a year in which unemployment had increased and house prices appeared to have achieved the mythical “soft landing” after a relatively light touch on the interest rate tiller.

And while the expansion of low cost producers in Asia had been a helpful tailwind, the system seemed to have dealt with some big shocks, like the East Asian Crisis and the bursting of the Dotcom bubble. So most commentators concluded that a good policy framework had played its part.

The last 18 months have shown that the reduced volatility of growth and inflation did not tell the whole story. There may not have been a boom in activity in the West but there certainly was in many emerging markets. And rising savings there, channelled a huge flow of funds into the world's financial markets, depressing risk-free interest rates. After the post-millennium collapse in the world's stock markets this was compounded by a coordinated loosening of monetary policy. Cheap money supported an increase in leverage in the financial sector (Chart 5). And banks became increasingly dependent on funding from wholesale markets rather than their traditional deposit base. In the real economy, asset prices rose and household balance sheets in particular became stretched.

Fast forward to the present day and the neat separation of powers and responsibilities between policymakers has evaporated (Chart 6). Monetary policymakers are beginning to explore unconventional tools to arrest the economic decline as nominal interest rates approach the lower bound. Fiscal policy has returned as a major tool of macroeconomic management as well as an essential support to the banking sector. And the Bank and the Treasury have been drawn deeper into the financial stability realm. A substantial share of the British banking system is now owned by the UK taxpayer.

Are these just temporary changes to deal with an exceptional crisis or were there some more structural flaws in the original design and the consensus that underpinned it? I would draw out seven lessons. (Chart 6)

### Lesson 1: The limitations of private-sector risk management

One weakness in the system was the failure of banks and many other investors to appreciate, price and manage risk.<sup>3</sup>

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<sup>2</sup> <http://www.bankofengland.co.uk/publications/workingpapers/wp290.pdf>.

<sup>3</sup> For a comprehensive discussion of these issues see the recent speech by Andrew Haldane, the new Director of Financial Stability at the Bank, in *Why banks failed the stress test*.

It was not that banks were blind to the froth in financial markets. For example, we published analyses of the vulnerabilities in our Financial Stability Reviews in 2006 and 2007 and highlighted the declining price of risk, the build up of global imbalances, the growing dependence of banks on wholesale funding, and the risk that structured credit markets could seize up in a downturn. When we took that message to Chief Executives of banks in London and New York, they generally accepted the analysis and agreed that a correction was bound to come. However, almost to a man (and they were all men), they took comfort from the sophistication of their risk management systems and hedging strategies. They were confident they could ride out the storm.

But as it turned out their systems were preparing them for a shower not for a hurricane. The limitations of their risk models were cruelly exposed in August 2007. One CFO remarked last year “We were seeing things that were 25-standard deviation moves, several days in a row”, which in plain English means that according to their models, the outright impossible was happening on a daily basis. According to the Value at Risk (VaR) benchmark for example – which measures the amount an institution stands to lose on its portfolio given an abnormal movement in market prices – there shouldn’t have been a big problem. But that was partly because recent experience grossly underestimated what the truly abnormal really was. Updating these models to take account of the volatility in asset prices seen over the past 18 months suggests measured risk increases by a half and in some cases doubles (Chart 7).

Many of the models depended on relatively short runs of data – one year for many, ten years at most. So the long period of stability reduced the projected losses from a future downturn (Chart 8).

But the problem goes deeper than just choosing the right sample period to estimate these VaR models. Using a longer back-run of data to re-classify August 2007 as an extremely improbable 5 standard deviation event rather than an effectively impossible 25 standard deviation event rather misses the point. The longer the build up of imbalances went on, and the larger they became, the smaller the chance that the bubble could burst without a correction. The events of August 2007 were not a bolt from the blue, an unpredictable random disaster, but the culmination of several years of developments in financial markets.

But inadequate models are not the only reason for being wary of putting too much weight on risk management by individual firms. There is also the vital question of incentives.

Chuck Prince, the ex-chief of Citi, has been widely condemned for saying: “as long as the music is playing, you’ve got to get up and dance.” But in a provocative way he was doing little more than state the obvious. Firms are expected to maximise profits and if they won’t seize the opportunities someone else will. Sit out the dance, and you risk getting swallowed by a competitor.

In many ways the ideal risk management system for a single bank is one which lets it dance until the music stops but then to get to the exits before its competitors - to take the profits when they are available and to close out risks as near as possible to the downturn (or even better profit from their competitors’ remaining exposures). It is noticeable that the investment banks which did best in 2007 were not those which had stepped back from the new markets well in advance but those which reacted most quickly and cohesively when the trouble started in the summer of 07.

Of course other banks need to learn from their example and improve their own information and control systems. But in a competition someone always has to come last and what matters for the authorities is how much the weakest will be damaged and how far that damage will spread through the system. What we saw in the autumn was that even the most successful investment banks were put at risk by the failure of the weaker ones.

So one lesson we have learned from this crisis is that we cannot leave risk management to the banks. Not only may they get it wrong but their risk systems, like their marketing, are

directed at their competitive advantage and they are not motivated or in a position to look after the system as a whole.

## **Lesson 2: Establish more effective crisis management**

As Adair Turner set out very clearly in his recent speech, the events of the last year and a half have revealed a number of particular gaps in the international regulatory regime. For example, it gave too little weight to off-balance sheet exposures – the SIVs and conduits in the shadow banking system which were holding huge portfolios of what turned out to be toxic assets. The risks of losses on trading books were underestimated as were the risks in the growing dependence of many banks on brittle wholesale funding markets. I am confident that the G20 summit will endorse a practical set of measures agreed in the Financial Stability Forum and the Basel Committee to tackle these points.

But we need also to beware of the dangers of over regulation. Some commentators seem attracted to turning our banks into nationalised utilities. Certainly international capital markets have complicated policy making but that is not a sufficient reason for dismantling one of our most successful sectors. Moreover nationalisation has been tried in many countries and its record is poor. It may reduce the risk of shocks but generally only at a heavy cost in misallocation of resources (and usually a continuing drain on the public purse). In my view it should only be a very last resort. The aim of the game should be to manage the system so that society can enjoy the gains of a flourishing financial sector – the efficient allocation of resources and transfer of risk – whilst minimising the threats to economic stability. So we need to have effective systems not just for preventing crises but for dealing with bank failures if and when they happen.

The collapse of securitisation markets in August 2007 and the failure of Northern Rock revealed gaps in the UK's arrangements. With the benefit of hindsight, the main problem was not the handling of the initial rescue – although the tripartite's footwork may have owed more to John Sergeant than Fred Astaire. But I don't think anyone believes now that the business could have been saved. It was in terminal difficulties and it was right to rescue it and protect depositors. The bigger problem was that, having stepped in, the authorities were hamstrung by the inadequacy of the legal powers to resolve it quickly and cleanly.

We have learned from that autumn's experience. Since then we have found imaginative ways to provide the market with the liquidity it needs (through the Special Liquidity Scheme, long term repos, and now the discount window), we led the world in recapitalising banks in the autumn and we have resolved the banks which could not survive swiftly and effectively both through private sector solutions and through the use of statutory measures.

I am delighted that tomorrow the first parts of the new Banking Act come into effect and give the Bank of England new powers to resolve failing banks and protect depositors.

At the heart of the Act is the creation of a *Special Resolution Regime* for UK banks and building societies. The FSA will have the power to trigger this regime before an institution becomes insolvent. And once a bank is in the regime, the Bank will have the powers to arrange for it to be wound up, drawing on a new bank-specific insolvency-procedure, or to transfer the whole or part of the bank to a commercial purchaser, if necessary via a temporary bridge bank owned by the Bank. If none of these options is sufficient to protect financial stability, there will be the option of temporary public sector ownership. In the course of the legislative process, we have identified and enacted wide ranging protections for netting and set off and creditors generally to ensure that no one is made worse off by the resolution than they would have been if the bank had gone into a simple administration.

The Act also puts the Bank's financial stability objective onto a statutory footing and formalises the Bank's role in overseeing those payment systems that are essential to the smooth running of the economy.

Giving these responsibilities to the Bank is the right choice because they build on the role the Bank already has as LOLR in crisis handling (which nearly always involves a crisis of liquidity). More generally it provides a statutory basis for the Bank's second core purpose – financial stability – which was not mentioned in the 1998 Act and appeared something of an orphan in the Bank when supervision moved to the FSA. Over the last 18 months of course that has changed and the Bank is now closely involved with the FSA in monitoring and intervening in banks and markets facing stress, as well as reviewing the risks to financial stability more widely and playing a role in forming international policy through bodies like the G20 and the FSF.

In effect the Bank has become a second pair of eyes alongside the FSA watching the health of the financial system. The FSA, as the regulator, is informed by “bottom up” knowledge of the position of individual institutions; the Bank is informed by a top down view drawing on its own engagement in many markets and on its analysis of the wider economy. We come together to monitor institutions when they become vulnerable.

Some argue that we should go further and move prudential supervision – at least of the main banks - back into the Bank. That would certainly be workable – we have done something like it before – and there could be changes in the euro zone which might add to the attractions of a move in that direction.

However, it is important not to underestimate the costs of the transition and the new boundary issues it would create. The cultures and staffing of the Bank and the FSA have changed a great deal since 1997 and would not be easy to reshape. And there are genuine costs for firms and supervisors in split responsibilities for different parts of complex groups.

Personally, I am not convinced there is a clearly superior arrangement to the revised arrangements we have now put in place. It is not clear that any country has done much better than the others despite the differences in regulatory structure. Perhaps Canada has the best claim and that has a system similar in many respects to the UK's.

Whatever the boundaries, in a crisis like today's I am sure that cooperation between the regulator, Central Bank, and Finance Ministry would be essential. I am pleased therefore that the new legislation makes clear the duty of the Bank to cooperate with the FSA and Treasury.

### **Lesson 3: Tighten international coordination**

If the tripartite arrangements at home needed to be improved, cross border coordination needs to be transformed if we are to avoid a drift back into a network of national and regional financial enclaves.

The failure of Lehmans was a fully fledged disaster for the world economy. And a number of other cases, from the failure of the Icelandic banks to Fortis, Dexia and IKB, have shown how difficult it is to manage failures of international banks .

Yet the fact is that most of the key players in the world's financial markets have developed into large and complex multinational firms. Their business is not separated into national units. Some core functions – such as risk-management and liquidity management – will be centralised, and performed at the head-office. Activity at each hub cannot be viewed in isolation: a multinational may raise deposits in one country to fund loans in another. And the ultimate buffer against unexpected losses – capital – is fluid across borders in pursuit of profit.

One response is to call for global regulators to deal with global institutions. That of course means pooling national sovereignty over a key issue of economic policy. And it could also require a global fiscal authority with deep pockets to whom the regulator could turn should one of these institutions fall into distress. The task of persuading the US and China to hand

over the regulation of their largest banks to a supranational regulator would make even the greatest diplomat quail.

Another conclusion is that such multinationals pose too great a risk to stability and should be subject to greater control by host authorities in each jurisdiction with the creation of separate pools of capital and liquidity in each country. But that retreat from globalisation would also have a cost in inefficiency and restraints on the flows of capital between countries. We should not forget that the last decade of free financial markets has been a time of great progress across the developing world in Asia, Eastern Europe and South America.

But the process of building up national controls is already underway in many countries including even the UK which has long been one of the most open economies for capital and ownership. It will continue unless we can convince each other that much better structures for cooperation and coordination are in place. That is an acute problem within the EU where the single market is based on a common passport. But dealing with the European problem is not the main priority since most of the biggest banks in the world are based elsewhere.

I don't think we should give up on this international agenda. The package of economic measures that were rolled out late last year – from coordinated cuts in interest rates, to provision of dollar liquidity and measures to support banks – showed the power and possibility of coordinated action. The programme of work on the regulatory implications of the crisis which has been coordinated by the FSF and will go in April to the G20 Summit demonstrates a wide accord on the main regulatory issues.

But we need more progress on implementation as well as policy. In particular we need much stronger cross border crisis planning – a subject on which I have been chairing a group under the FSF. This has been bedevilled, in practice, by the sheer lack of information and time to consult widely in the heat of a crisis. That we can do something about.

I hope we will agree two things to put to the G20 summit – a statement of principles on how countries should cooperate in planning for and handling crises in cross border institutions and a programme to put in place better arrangements for information sharing and cross border dialogue on the largest banks in the world. Building on the core international colleges of supervisors we would aim in peacetime to establish a shared information base among the relevant authorities and jointly to think through the implications of failure for different countries. That would at least give us the basis for considering a coordinated solution in wartime. In time we should also try to establish greater harmony on national resolution regimes which is on the Basel Committee's agenda.

#### **Lesson 4: Develop a new generation of macroeconomic models**

So far I have concentrated on lessons for financial policy but this recession has also set some challenges for the economics profession and cast doubts on the macroeconomic modelling.

In truth, much of my critique of the models that financial institutions use to calibrate risk could equally be levelled at the workhorse DSGE models that most economists and central bankers use to describe and forecast macroeconomic developments.

These have a number of attractive features. It is built on sound economic principles of forward-looking optimising agents, which is useful for carrying out academic though experiments. Unfortunately, such models also have some big drawbacks.

First, having introduced uncertainty into the picture by making agents forward looking, they then assume the problem away. Risk doesn't matter: agents are assumed to make decisions today based on the path they believe the economy will take in the future, not the full range of possible paths it might take. And those beliefs about the future are based on absolute faith in the ability of the policymaker to stabilise inflation and the economy over the medium term.

They therefore beg some important questions for policy makers – how do we sustain and build confidence in our policy and what happens if it falters?

Second these models generally assume that the path of the economy is one of equilibrium disturbed by a sequence of more or less random shocks to which it responds in short order to return to the equilibrium path. For economists using these models a critical question is always what shocks have led to the starting position i.e. how far from equilibrium are we and for what reason. Those starting assumptions will then condition the path back to trend growth and target inflation over the medium term.

In truth, these “shocks” reflect not only events and surprises in the real world but the limitations of the model itself. In particular, the models cannot deal easily with self reinforcing movements away from equilibrium. What at first glance can look like a series of unrelated unexplained disturbances to the variables in the model, could actually reflect some common economic impulse that is not captured by the model. Whether those shocks die away, persist or even build – and therefore how misleading the forecasts that the model produces are – will depend on what’s missing from the model.

In fact the areas of the economy which the current generation of models do not cover well include the areas where the imbalances were building up in recent years. The treatment of financial markets and their interaction with the real economy is little more than a side-show. Banks are typically absent altogether. Yet experience has shown that financial markets are particularly prone to these self-reinforcing movements away from equilibrium. We have seen in the last few months alone many examples of that. For example we have seen coordinated sales of assets depressing prices, leading to write-downs on portfolios throughout the system, which in turn have triggered a further wave of selling.

These features generally prevented these models from “joining up the dots” in the last upswing and from capturing the impact of tightening credit conditions in the downswing.

I should emphasise that the MPC is not a slave to any one model. The current Governor reminds us frequently that:

“It is vital never to confuse the world with a model. The whole point of a model is to abstract from a wider range of factors in order to think clearly about one particular issue.”<sup>4</sup>

Over the last couple of years, for example, we have drawn on a range of models to capture the impact of credit markets. The MPC bases its forecasts on all the evidence. And most forecasts have a lot of added judgement in them. But our main macro model sets a baseline for our discussions and forces us to quantify and integrate different judgements. It is difficult to see how the committee could reach a consensus on a forecast (albeit with a probability distribution around the central projection) without a model of some sort.

All models are simplifications and all models have difficulty identifying turning points. But we badly need some new thinking to make them better. Putting banks into the models would be a good place to start. The model of the banking sector which is being developed in the Financial Stability wing of the Bank will make a good contribution to that.

## **Lesson 5: Mopping up after the bust is not a good strategy**

The world’s central banks have tended to follow similar strategies. So much so that an American economist, John Taylor, was able to neatly summarise how monetary policy is set with a very simple rule. He found that movements in interest rates around their long-run level could be explained by just the level of inflation relative to its target, and imbalances between the level of demand in the economy and the capacity of the economy to produce output.

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<sup>4</sup> <http://www.kc.frb.org/publicat/Sympos/2005/PDF/King2005.pdf>.



Asset prices and stock imbalances of the kind we have seen on the balance sheets of banks, households and companies are conspicuous by their absence in the Taylor Rule. Whether policymakers actually slavishly follow the Taylor Rule, or it simply represents a good description of how we behave is largely immaterial. Either way, the default position of policymakers has been that interest rates should not be used to choke off a boom in financial markets. That non-interventionist doctrine was based on two key judgements.

First, that the costs of leaning against imbalances in financial markets were high. It was believed that policymakers would find it difficult to differentiate between movements in asset prices that could be justified by fundamentals and those which reflected bubbles. The central bank which frequently responded to movements in asset prices would often as not be doing so mistakenly. By the time that the central bank was confident that asset prices were unsustainable it would typically be too late to act. An increase in interest rates late in the day could prove counter-productive: the bubble might well have burst by the time the change in policy had filtered into aggregate demand. Even when an imbalance could be identified early enough to do something about it, the increase in interest rates required to choke off the imbalance would have serious side-effects.

Much of this will be familiar to all policymakers, no matter what field they work in. It is a “counsel of despair”. Understanding how developments in financial markets pose risks to the system and the wider economy is a formidable task. But it is one we should embrace, rather than shy away from. It is the final leg of the argument that is key: how much higher would interest rates have had to have been in order to have contain the boom in financial markets.

Some commentators have made much of the Bank’s decision to cut interest rates by 25 basis points in the summer of 2005. But to pretend that all this could have been avoided had interest rates been 25 basis points higher over the last couple of years seems to me pure wishful thinking. Likewise, the idea that had rates been a little higher at the tail-end of the boom in late 2006 and early 2007 the crash could have been averted is a flight of fancy.

Interest rates would have had to have been significantly higher for an extended period of time, perhaps as far back as 2002/3. Growth would have been weaker. Inflation would have undershot the target by even more than it did. Sterling would likely have risen, putting our export sector under particular strain. Which leaves us with the question: is that a price worth paying in order to avoid the fall-out when a bubble eventually bursts? And that leads us to the second judgement that underpinned the non-intervention doctrine.

Prior to the latest crisis at least, many policymakers believed that the costs of allowing a bubble in financial markets to run its course were relatively small. Interest rates could always be cut after the event to “mop up” the damage. Blinder and Reis summarise the received wisdom beautifully in their review of the decision to loosen policy when the DotCom bubble burst:

“If the mopping up strategy worked this well after the mega-bubble burst in 2000, shouldn’t we assume that it will also work well after other, presumably smaller, bubbles burst in the future?”

The large and coordinated cut in interest rates at the start of this decade almost certainly contributed to the build-up of an ever larger bubble. So its not at all clear that the post-2000 mopping up strategy worked that well in retrospect – it just stored up more trouble for the future. And even if it did work well last time around, I hardly need to add that mopping up the fall-out from the latest crisis is stretching the world’s policymakers to the limit. It is evidently not safe to rely on being able to mop up after the crash.

## **Lesson 6: Inflation targeting is necessary but not sufficient**

A more fundamental question is whether the *Inflation Targeting* regime itself needs to be re-thought.

Some argue that the framework imposed a straightjacket on central banks including ours by setting too narrow a remit. Interest rates could only be changed when there was a clear and present danger to the near-term outlook for consumer inflation. So they could not be used to prevent imbalances building up. Action was almost bound to be too late.

This critique takes an unduly narrow interpretation of the framework. There is nothing in the MPC's remit which would prevent us from consciously allowing inflation to undershoot the target for some time, in order to avoid a significant overshoot at some point in the future. Or as my fellow Deputy Governor Charlie Bean put it:

“a central bank seeking to stabilize inflation and output over a sufficiently long time horizon, should necessarily aim to incorporate the possible adverse long-term consequences of an asset price bubble in its deliberations”

Intelligent inflation targeting on these lines run by independent central banks still seems to me the best foundation for macroeconomic policy. But that does not mean the current framework or the way we explain it is perfect.

First a point on communication. Inflation targeting was designed not just to control inflation but as the best policy framework for promoting wider economic prosperity and stability. It is crucial in a period of economic hardship – with companies going to the wall and people losing their jobs – that people do not think the Bank is focused on a narrow inflation target for its own sake. If they feel that we are not accepting responsibility for what happens to growth and jobs, they will look for someone else to do so. If we want to preserve the framework we have a job on our hands – now more than ever – to explain our strategy to the general public. The Bank and MPC need to convince them that the policy we are pursuing is the best way of restoring growth and full employment without reawakening inflation. Indeed it is by bringing output back to potential that we will bring inflation back to target.

Secondly, I share the view that setting a target for a measure of consumer price inflation which excludes the costs of home ownership has done us no favours. It is widely recognised as a flaw in the harmonised CPI across Europe but it is of particular significance in the UK given the critical role that home ownership plays here in household budgets and wealth. Something needs to be done to remedy that situation, and if progress can't be achieved at a European level I think we ought to consider going it alone.

More fundamentally, if inflation targeting by an independent central bank is an essential foundation of policy, it is pretty clearly not sufficient on its own. We are now learning a lesson that Japan learned a decade ago. As the Governor of the Bank of Japan recently remarked

“if inflation targeting regimes induce market participants to think of monetary policy decision-making process in terms of an inflation number, they tend to overlook the insidious build-up of unsustainable imbalances [...]. Inflation targeting works well if it is properly understood... (but this) can be difficult once an economy has attained and maintained a low inflation rate for a number of years.”

This is partly a matter of adopting the intelligent approach inflation targeting. We must be willing to “lean against the wind” of asset price booms and credit expansion and to tolerate somewhat weaker growth and lower employment in doing so.

But if we need to prevent asset price and credit booms as well as control consumer prices it would be better to have two instruments than one and that is the last lesson I want to discuss – the need to develop instruments which directly dampen the cycle of credit growth and asset prices.

## **Lesson 7: We need another instrument to stabilise the economy**

The first step must be to decide how ambitious we want to be and define the objective. Then we can design the instruments. I don't think we have all the answers yet. But the outlines of a scheme are beginning to emerge in the academic literature – not least in an impressive recent report by Charles Goodhart of this parish and friends – and they are being taken up vigorously ( especially by the British members) of the FSF and G20.

### **Preventing the regulatory system from exacerbating the cycle**

A minimum step is to remove as far as possible features of the regulatory system which exacerbate the cycle. This is not as easy as it sounds. Both accounting rules on provisions and regulatory capital requirements are based on estimated probabilities of default and estimates of losses given default. Both of these tend to rise sharply when an economy turns down, arrears mount and the value of collateral declines. So as trading conditions tighten, capital requirements are raised.

The FSA announced last month a series of measures which seek to address that pro cyclical by basing their capital requirements on average loss rates through the cycle rather than on estimates of loss which vary through the cycle. A similar approach is being ironed out internationally in the Basel Committee and FSF.

### **Protecting the banks from the cycle**

A more ambitious goal would be to use the regulatory system to dampen the impact of the economic cycle on banks and other financial institutions – to protect the banks from the cycle.

The Spanish system of dynamic provisioning is an example of this approach. This is based on the observable facts that arrears and defaults tend to emerge in downturns and that loans written at the top of the cycle tend to have higher losses. Banks are required therefore to set aside a general provision against likely future loss each time they write a loan on the basis of a formula which is sensitive to the cycle. This is an accounting provision so these provisions are deducted from profits when they are made, and reduce dividends and profit related bonuses. They are then drawn down automatically as losses appear. In effect this requires banks to build up reserves in the upswing of a cycle which can cushion their losses in the downswing. The system has not prevented a property boom and bust in Spain but it has put their banks in a much stronger position to survive it by calling on these general provisions which amounted to over 1% of total assets.

And in the process of protecting the banks from the cycle, this system has helped to some degree to dampen the cycle itself. Varying capital regulations in this way can act as a brake on the exuberant swings in lending we have seen in recent years. By requiring banks to hoard capital in the upswing, regulators make it more expensive for banks to lend money. And by dampening the credit cycle policy could help stabilise spending in the real economy.

### **Protecting the cycle from the banks**

In my view there is a case for taking this further and adopting the more ambitious goal to use regulatory requirements to smooth out the credit cycle. In other words, preventing the imbalances within financial markets destabilising the real economy.

This would involve varying the regulatory requirements to stabilise the supply of credit and the terms on which it was granted – for example by requiring banks to hold more capital when they would otherwise be loosening credit conditions, and allowing banks to run down capital when they would otherwise by restricting access to credit. This approach could offset

to some degree not just a domestic credit cycle but the impact of developments elsewhere in the global economy which affect the terms on which banks are able to raise funds in financial markets or the value of their assets.

To a limited degree this would allow the authorities to make the banking system a shock absorber. Policymakers would be raising capital requirements to preventing shocks that occur outside the banking system from destabilising the real economy. But I would limit the goal to smoothing the credit cycle and would not be inclined to go further and use it as a general stabiliser of the economy.

## **Weapons in the arsenal**

So what is the choice of instruments?

I see great attractions in “dynamic provisioning”, in other words amending the accounting system to recognise likely future losses. That seems to produce a better guide to the real financial strength of banks and to be properly conservative in not recognising profit before it is earned. I am aware that this runs counter to a powerful school of accounting theology but I have been encouraged by proposals circulated recently by Paul Boyle at the FRC for cyclical reserving and I hope that will be pursued.

An alternative approach would be to vary regulatory capital floors with the cycle and require banks to hold undistributed reserves in the upswing which could be drawn on in the downswing. This is a second best because the reserves are taken after profit is struck, with all the signals that sends investors and staff. But it could have much the same effect as dynamic provisioning and may be capable of implementation rather earlier.

But capital requirements are not the only approach. Counter cyclical limits could be introduced on the liquidity position of a bank. For example, banks might be required to invest a varying proportion of their assets in a war-chest of government bonds and highly liquid assets. Or they could face varying constraints on the extent to which they are allowed to tap short-term wholesale funds.

Finally we could introduce restraints on the terms on which banks can lend money to households and companies. Loan to income and loan to value ratios tend to rise in any credit boom as lending standards become lax and asset prices inflate. In theory, a ceiling on these ratios could have provided an effective brake on the excesses of the last boom. While this has obvious microeconomic disadvantages, the Hong Kong Monetary Authority showed how such an approach could work in practice in the 1990s: tightening the constraint on loan-to-value ratios as their property market threatened to overheat. Another possibility would be compulsory margin requirements on trading positions.

I am clear that counter cyclical capital requirements are a large part of the answer but I would be inclined to keep a number of other options open too. Having a large arsenal of policy instruments, which vary in their point of influence provides some welcome flexibility. It allows the policymaker to respond appropriately to a particular situation, rather than treating all shocks the same. For example, if problems are concentrated within the property market then caps on loan-to-income and loan-to-value ratios might be effective. If instead the problem lay in funding markets, with an unwarranted compression in risk premia, then the instruments of liquidity regulation would be more appropriate.

## **Who calls the shots?**

That leads on to the issue of *who* should have control over these policy instruments? The answer I think very much depends on the objective of policy and the way in which policy is set.

Clearly the application of the policy would be for the regulator. If policy is given the narrower goal of protecting the banks from the cycle and it proves possible to set clear rules in place (for example a simple leverage ratio) there would be no need for a further policy maker to be involved.

However if policy is given the broader macroeconomic goals of stabilising credit – protecting the cycle from banks if you will – and judgement is required on the state of the cycle and whether and when to vary the rules, then it would be essential for the Central Bank to play a leading role, albeit in close consultation with the regulator. In my view that is the more likely outcome.

## Conclusion

One theme you may have noticed in these reflections is the need for policy makers to be willing to back their judgements – whether in identifying asset bubbles or identifying firms or markets which threaten financial stability – and to take pre-emptive action.

For example, if most macro-models were not giving us warning signals in recent years, our analysis of the financial sector certainly was. As I mentioned earlier, successive Financial Stability Reports did set these dangers out in 2006 and 2007 and indeed earlier. One of the lessons we have acted on already is to make more of such warnings. We now send the summary reports to every board member of British banks, to the rating agencies and to the banking analysts and we are more forthright in emphasising the dangers through the press in order to try to change the atmosphere in markets.

But more broadly, we must not let a proper starting assumption that markets should be allowed to work unless there are good reasons for intervention to become a belief that markets are not to be touched unless their failure and the effectiveness of intervention is proved beyond all reasonable doubt. Of course there are risks that some interventions will be proved with hindsight to be too costly or unnecessary. But the economy is not an area, to paraphrase Blackstone, where

“it is better for ten guilty markets to escape than for one innocent to suffer”

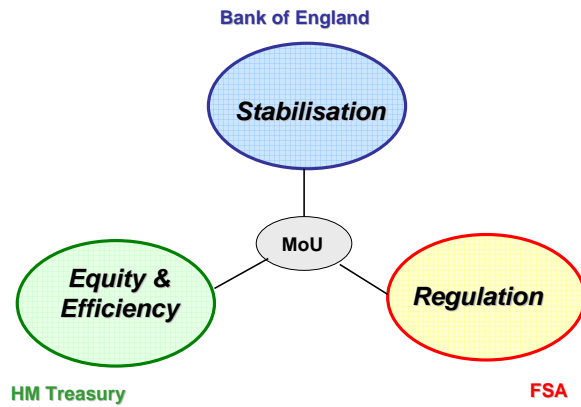
As Alan Greenspan recently observed to the House Oversight Committee,<sup>5</sup> rather than assuming that the system is capable of self-regulating itself, our default position should be one of cautious scepticism. The burden of proof for the authorities should be the balance of probabilities.

## Charts

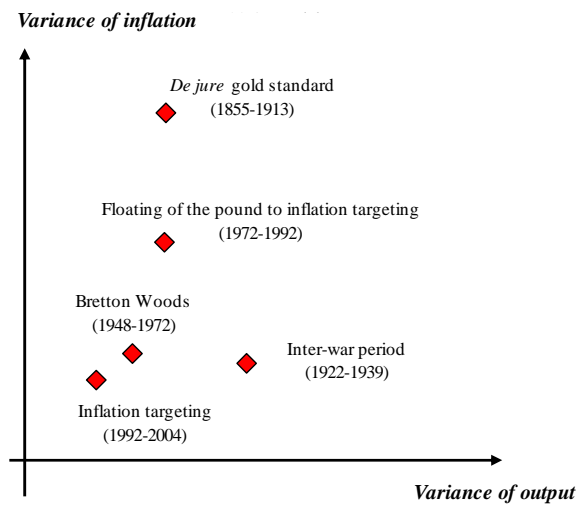
### Chart 1 : The Separation of Powers

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<sup>5</sup> ‘I made a mistake in presuming that the self-interest of organizations, specifically banks and others, were such is that they were best capable of protecting their own shareholders and their equity in the firms. And it’s been my experience, having worked both as a regulator for 18 years and similar quantities, in the private sector, especially, 10 years at a major international bank, that the loan officers of those institutions knew far more about the risks involved and the people to whom they lent money, than I saw even our best regulators at the Fed capable of doing. So the problem here is something which looked to be a very solid edifice, and indeed, a critical pillar to market competition and free markets, did break down.’ See the preliminary transcript of the 23 October 2008 meeting of the House Oversight and Government Reform Committee on *The Role of Federal Regulators in the Financial Crisis*.

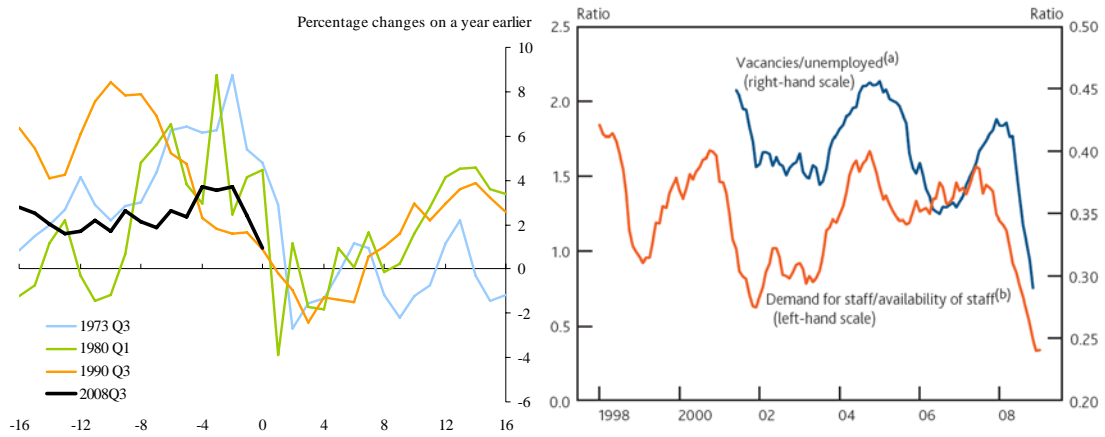


**Chart 2 : The Great Stability**



**Chart 3: Consumption Growth**

**Chart 4: Indicators of labour market tightness**

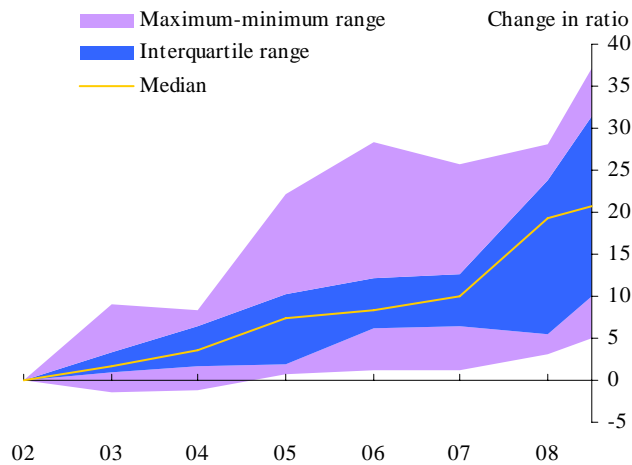


Sources: KPMG/REC and ONS (including Labour Force Survey).

(a) Number of vacancies divided by LFS unemployment. Vacancies exclude agriculture, forestry and fishing.

(b) The KPMG/REC demand for staff index divided by the KPMG/REC availability of staff index.

**Chart 5 : Change in leverage ratios of the major UK banks<sup>(a),(b),(c)</sup>**



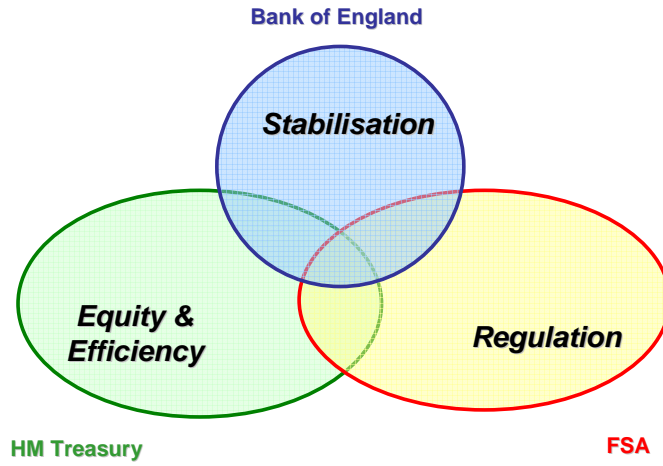
Source: Published accounts and Bank calculations.

(a) Leverage ratio defined as total assets divided by total equity excluding minority interest.

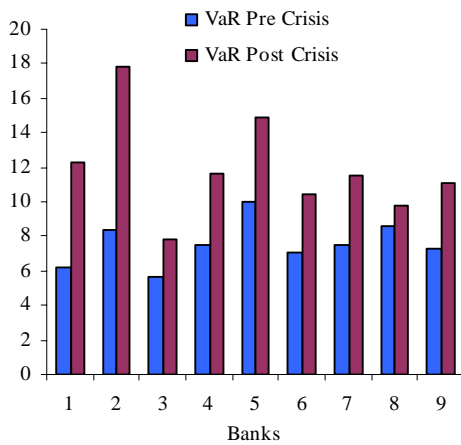
(b) Due to data limitations, the chart only presents information on A&L, B&B, Barclays, HBOS, HSBC, Lloyds, Northern Rock and RBS.

(c) There is a break in the series due to the introduction of IFRS in 2004.

**Chart 6 : All hands to the pump**



**Chart 7 : Stylised Value at Risk calculations, pre and post crisis**



**Chart 8: The Great Stability in historical context**

