Fixing regulation

By Clive Briault

CSFI

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Foreword

We at the CSFI have been busy bees… This is the third paper that we have published within a month on the post-crisis structure of financial regulation.

The first – *Narrow banking*, by John Kay – was a plea for radical change. It argued that the conflicts of interest and agency problems inherent in the current universal banking model are so egregious and ingrained that the only solution is to take a butcher's knife to the banks – hacking off the so-called "utility" function (which Kay defined, perhaps too narrowly, as accepting retail deposits and access to the payments system) from the "casino". The former would be regulated like any utility; the latter would take its lumps in the market.

The second paper – "*Twin Peaks" revisited*, by Michael Taylor – accepted as an implied premise that the radical restructuring of the industry advocated by Prof. Kay is probably politically unfeasible, particularly as the banks start to flex their lobbying muscle again. His approach was, therefore, more modest. He advocated a specialist regulatory agency (established as a subsidiary of the central bank) for systemically-important institutions and market conduct regulation through a Consumer Protection Commission (the successor organisation to the FSA). There would also be a very hefty capital penalty for big banks – a sort of 'size tax' or insurance premium for potential systemic disruption. In many ways, this looks like a more workable version of the Tory party's plans for regulatory reform – a sort of "Osborne-lite".

Clive Briault's paper brings the debate over regulatory reform further down to earth.

Clive (as I am sure you all remember) was the FSA's managing director for retail business at the time of the Northern Rock collapse – for which, rightly or wrongly, he was held to some degree responsible in parts of the press. Whether or not that was fair, his position at the FSA gave him a unique vantage point as the crisis snowballed. This paper is the product of the lessons learned at that time, put into a broader context thanks to Clive's unparalleled national and international experience.

I think it is a formidable piece of work. But Clive is neither as radical as John Kay, nor as dismissive of the current structures of regulation as Michael Taylor. His message, as I read it, is:

- that regulators weren't stupid (to the contrary, they were, and are, hard-working, thoughtful and sophisticated - albeit working under difficult political constraints);
- that regulation and supervision are not free goods (therefore, we should beware of simply cranking up the regulatory machine and beating the bankers harder);
- that we should be aware that those who are regulated will (if they find the regulation unduly onerous) do their damnedest to undermine it;
- that it is all too easy to pontificate on wider political and social considerations – and very hard to put them into practise;
- that there are emerging problems (like the dilemma over the treatment of branches within Europe) that we haven't really begun to address, but that might well push regulators back towards a narrower national focus; and
- that macroeconomic policy needs to play its full part as well - this is not just about regulation.

This is the practical regulator speaking – but no less important for that.

Andrew Hilton

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Contents

1. Introduction

There has been a deluge of excellent post-event analysis of the causes and evolution of the current financial crisis[1]. These analyses have been characterised by a remarkable uniformity of view, which has focused on:

- global imbalances;
- low real interest rates;
- loose monetary policy;
- the "search for yield" by investors whose risk management and due diligence were badly flawed;
- careless lending and poor underwriting standards, with an over-reliance on collateral rather than on the ability of borrowers to repay;
- excessive debt and leverage;
- house and other asset price inflation;
- a general expectation of continuing asset price growth and low volatility of real growth and inflation rates; and
- financial innovation, in particular securitisation and credit derivatives.

What caused the crisis?

All these factors contributed to the under-pricing of risk, the over-valuation of assets and the over-extension of credit. Meanwhile, there was a "failure – shared by bankers, regulators, central banks, finance ministers and academics across the world – to identify that the whole system was fraught with market-wide, systemic risk".[2]

However, we should not be entirely reassured by this shift from the earlier collective intellectual failure to foresee the crisis to a well-crafted post-event explanation. As Niall Ferguson has commented:

> "Human beings are as good at devising *ex post facto* explanations for big disasters as they are bad at forecasting those disasters. It is indeed impressive how rapidly the economists who failed to predict this crisis – or predicted the wrong crisis – have been able to produce such a satisfying story about its origins."[3]

This uniformity of post-event analysis has, in turn, been reflected in a high degree of agreement – at least at the level of high-level principles - on the regulatory reforms required to prevent a similar crisis from recurring, culminating in the April 2009 Group of Twenty proposals.

1. Bank for International Settlements (2008), Financial Services Authority (2009a), and International Monetary Fund (2008).

2. Turner (2009a).

3. Ferguson (2009).

Six key challenges...

This paper takes the G20 proposals as a starting point from which to address six challenges that lurk beneath the surface of the high-level agreement on "what needs to be done". They all need to be addressed as the proposals for reform move from high-level principles to detailed implementation. These challenges are:

- More of (almost) everything: Attempting to address every possible regulatory cause of the current crisis risks either an excessive amount of new regulation, or a loss of focus and momentum on the key issues. And while "market discipline" certainly failed, it would be unwise to replace it entirely with "regulatory discipline", given the importance of improved corporate governance and risk management as a first line of defence against future problems and the inclusion of regulators as part of the collective intellectual failure.

- Lack of vision: In contrast to the broad agreement on regulatory reforms, there is no agreement on the wider macroeconomic framework - including the future of free-market capitalism, monetary and fiscal policy, and the structure of the housing market. It remains unclear whether or not this framework will support or complement regulatory policy. There also needs to be a clearer vision of what the banking system should look like, including how "safe" it should be, how far it should be concentrated in a small number of very large institutions insulated from the forces of competition, and how innovative it should be.

- Unintended consequences: The stricter regulation of banks will undoubtedly generate opportunities for regulatory arbitrage, from which a new "shadow banking sector" may emerge. This may pose a threat to financial stability that is difficult to control.

- Macro-prudential oversight: Considerable faith is being placed in the ability of macro-prudential oversight to identify and prioritise the risks to financial stability, to decide what actions should be taken to address these risks, and for these actions to be implemented. History and other considerations suggest that this will not be easy to deliver.

- Host country supervision: The proposals for greater international cooperation and coordination may not provide sufficient assurance to address the concerns of countries hosting branches of foreign banks. These countries have good reason to impose stricter controls on those branches.

- Supervision: Both the financial crisis and the regulatory response to it have implications for the way in which regulated firms should be supervised, and therefore for the quantity and quality of supervisors.

Let's look at each of these in turn.

"More of (almost) everything…"

The current financial crisis has generated many proposals for more regulation.

In April 2008, for instance, the Financial Stability Forum (FSF), an international group of senior regulators, central bankers and ministries of finance, made sixty-seven recommendations for regulatory reform. The FSF then added four additional recommendations in October 2008. These two sets of FSF recommendations formed the basis of the G20's proposals in April 2009. Meanwhile, there have also been proposals for regulatory reform from the International Monetary Fund, the European Union, many national authorities (including the Financial Services Authority and the US Treasury), and a wide range of academics and other commentators.

Regulatory overkill?

These sets of regulatory proposals are mostly very similar to each other, and can be summarised as "more of everything". More capital; more liquidity; more stress testing; more principles for remuneration; more regulation of credit rating agencies, hedge funds, private equity funds, derivatives, securitisations[4], mortgages and other financial products; more improvements to infrastructure, such as central clearing of credit derivatives[5]; more cross-border supervision; more deposit insurance[6]; more powers to resolve problem banks; more crisis management; more accountability for non-executive directors of banks; more active intervention by institutional investors; more changes to international accounting standards. And so the list goes on.

Many of these proposals remain high-level, and there is already evidence that agreement on the details will be considerably more difficult to achieve than agreement on the high-level principles.

These proposals also raise three issues that warrant further consideration.

First, is too much new regulation being proposed? All the individual proposals may be rational and justifiable, because they each address a problem that contributed to the current financial crisis. However, it may not make sense to implement all of them, because their collective impact may be over-bearing, or may introduce too many distortions through the unintended consequences of regulatory interventions. A "fallacy of composition" may be at work here.

The justification for "more of everything" is twofold. One justification is that "X contributed to the financial crisis, therefore we have to impose stricter standards

4. This has developed into proposals that the originator of a securitization should retain 5% of the credit risk of securitized exposures.

5. See, for example, Bernanke (2009a) and the statement by the US Treasury (2009a).

6. For example, the European Union proposes to increase deposit protection to 100% of the first €50,000 in 2009, and of the first €100,000 by the end of 2010.

on X". As the Risk and Regulation Advisory Council has observed, this pressure to "do something" has been reinforced by a "political and media mindset that seeks to assign blame in the event of any failure", which in turn has lowered society's tolerance of risk. <u>There is a danger here that governments and their agencies will promise too much</u> – and thereby create unrealistic expectations about the degree of safety that their actions will produce.

A more traditional justification for regulatory intervention is based on cost/benefit analysis, where the current argument is that, since the cost of financial instability has been so high, then taking almost any individual precaution against a recurrence seems to be justified. This is similar to the cost/benefit analysis for imposing additional standards on nuclear power stations, namely that any safety measure is justified to avoid a nuclear accident. But, as was recognized some years ago in the case of nuclear power stations in the UK, this runs the risk of unintended consequences and the emergence of "new" risks from alternative sources of energy, such as damage to the climate resulting from coal-fired power stations. The notion of a "tolerable" – but not zero tolerance - level of risk[7] was therefore introduced in relation to nuclear power stations by the Health and Safety Executive. <u>We need an equivalent to this for the financial sector</u>.

What risk is "tolerable"?

The multiplicity of proposals for regulatory reform applies not only to the wide range of proposals, but even to specific elements of regulatory reform. For example, there are at least nine mutually reinforcing proposals for achieving higher standards of capital adequacy:

- More high quality capital, with the focus on "tier one" capital (common equity, preference shares, retained earnings, and "hybrid" capital instruments that are issued as debt but have the loss-absorbing characteristics of equity), or even on "core tier one" capital (common equity and retained earnings)[8].

- Higher minimum levels of capital[9].

- Higher capital requirements for trading book risks[10].

- A reduction in the pro-cyclical elements of the Basel 2 Capital Accord, in particular the impact of risk measures that improve during benign economic conditions.

- Counter-cyclical capital requirements, so that banks build up capital during "good times" and run down this "capital buffer" during "bad times"[11]. Such

7. "Tolerable" in the sense of being willing to live with a risk in order to secure certain benefits and in the confidence that the risk is being properly controlled. This does not mean that the risk is negligible or something we might ignore, but rather is a risk that should be kept under review and reduced still further when it is possible and sensible to do so.

8. G20 Working Group 1 (2009) and Financial Services Authority (2009a).

9. Again, G20 Working Group 1 (2009) and Financial Services Authority (2009a).

10. Basel Committee (2009a).

11. G20 Working Group 1 (2009).

counter-cyclical requirements might also restrain the growth of bank lending during the "good times". Counter-cyclical requirements could reduce the vulnerability of banks to economic downturns and/or dampen cycles in bank lending. There are many proposals for how such counter-cyclical requirements might be implemented[12], with the key differences being the extent to which the requirements are automatic rather than discretionary, and the extent to which they are based on firm-specific, sector-specific, country-specific or international measures of cyclicality.

- Additional capital requirements (firm-specific or more generally) as a result of "macro-prudential oversight", over and above any automatic counter-cyclical requirements.

- Additional capital requirements as a result of running stringent stress tests and demanding that banks hold sufficient capital to be able not only to meet these tests but also to continue "normal" lending even if the scenarios materialised[13].

- Higher capital requirements on systemically significant financial institutions to reflect their risk to financial stability (this is discussed further below).

- Supplements to risk-based measures of capital, including a maximum gross leverage ratio[14].

There are trade-offs...

There must be trade-offs across these proposals for higher capital. For example, if a very high minimum level of capital is set, based on high quality capital and "through the cycle" measures of risk, and with some flexibility to allow banks to hold a lower level of capital during periods of economic weakness[15], then more elaborate counter-cyclical requirements or additional requirements based on macro-prudential oversight and stress tests may not add significant protection. Alternatively, if stringent stress tests are set on a more demanding basis than the minimum tier one capital requirements, then there is a case for relying primarily on these stress tests to determine the regulatory capital requirement. Multiple different capital requirements will be costly to operate and confusing to interpret.

At a higher level, a balance also needs to be struck between *prevention* of failure (more regulation) and *response* to failure (crisis management, special resolution schemes for banks, the orderly winding down of financial institutions, and deposit insurance arrangements). In the literature on organisational resilience, Wildavsky

12. The most developed proposals are to be found in Brunnermeier et al (2009).

13. Bernanke (2009d) and Financial Services Authority (2009d) provide details of the stress tests imposed by the US and UK authorities. It is not yet clear whether the authorities will make such stringent stress tests a regular requirement.

14. Hildebrand (2008), US Treasury (2009b) and Financial Services Authority (2009a).

15. In practice, the market will also play a role in determining what minimum level of capital is acceptable, just as before 2007 the market imposed in effect a minimum 6% tier one ratio for large banks even when the regulatory minimum was 4%.

(1998) highlights a choice between anticipation (attempting to predict risks and to prevent them arising or to insure against adverse outcomes) and resilience (building a capacity to cope quickly and effectively with dangers once they have arisen). Wildavsky recommends a greater reliance on building resilience, since it is usually not possible to anticipate all risks, and it is expensive (in terms of both direct costs and the adverse impact on competition and innovation) to prevent or insure against all the risks that can be anticipated. This is reflected in the proposals for improved crisis management and for the ability to wind down large and complex financial institutions in a reasonably orderly manner[16], although as yet there is no clear trade-off between prevention and response.

Prevention vs response...

There is also the more practical consideration that if too many proposals are pursued simultaneously, then almost inevitably some will be watered down or disappear entirely under the weight of trying to achieve multi-national agreement in the face of national disagreements and strong interest group pressures. Establishing a shorter agreed list of priorities would reduce the risk that some of the more important proposals might fall on to the cutting room floor. A related consideration is the choice between taking a long time to introduce a carefully constructed and calibrated package of measures and moving swiftly to implement the most critical improvements in a more rough and ready form. One difficulty with choosing the longer term option is that the impetus and enthusiasm for reform may have ebbed away by the time the package of measures has been designed, and the opposition to reform will be stronger from financial institutions that have begun to recover their profitability and panache. In the phrase attributed to the economist Paul Romer, "a crisis is a terrible thing to waste".

One area that certainly does demand greater attention and needs to be prioritised is liquidity.

Liquidity is crucial

A combination of the international regulatory resources devoted to the construction of the Basel 2 Capital Accord, and the general failure of regulators, central banks and other commentators to anticipate the drying up of market liquidity as a major and primary risk (as opposed to a possible consequence of a major deterioration in credit conditions), meant that liquidity policy was neglected by regulators over the last two decades[17]. With the benefit of hindsight, we now understand better both the vulnerabilities of banks that relied for their liquidity on selling or borrowing against assets that other market participants may no longer want to buy (for example, a wide range of asset-backed securities), and the sudden and unexpected ways in which confidence in financial institutions and in financial instruments can evaporate.

The Basel Committee has published a set of principles for sound liquidity management, and some national regulators (for example the UK's Financial

16. King (2009), HM Treasury (2009) and US Treasury (2009b).

17. Liquidity was also downplayed by academics. Finance courses typically focused on asset allocation and asset prices, while assuming that counterparties would always be prepared to buy assets at a price.

Services Authority) have set out their own proposals. It is possible to tighten up the quantitative requirements:

- on holdings of high quality reserve assets (in particular, assets which the central bank stands ready to provide liquidity against on a routine basis);

- on maturity mismatches (through either direct limits or capital requirements that increase with larger maturity mismatches);

- on deposit to loan ratios; and

- on sources of funding (for example, by imposing minimum requirements for retail deposits and longer term wholesale funding as a proportion of total funding).

But these "stock" requirements for liquidity may not be well directed towards the risk that the "flow" of liquidity will dry up, as occurred in August 2007. And retail deposits may not prove to be a more reliable source of liquidity than wholesale deposits[18], especially if banks compete more aggressively for retail deposits to satisfy new regulatory requirements. Consumers will chase attractive offers on deposit rates and are becoming increasingly skilled at moving their deposits around at short notice, making retail deposits increasingly "flighty". The substantial switch of retail internet deposits out of Northern Rock in September 2007[19] may prove to be the first of many similar episodes.

It is also difficult to impose an effective "one size fits all" quantitative approach on a diverse range of banks. Banks and their supervisors will, therefore, need to understand and make judgments on banks' funding strategies, stress testing and the contingency plans they put in place to meet unexpected interruptions to liquidity. A good starting point here would be for the boards and senior managements of banks to devote more attention, at a strategic level, to the liquidity of their firm, the firm-specific and market-wide vulnerabilities they face, and the robustness of their defences to such vulnerabilities.

A new "Maginot Line"?

Second, <u>do the G20 proposals focus too much on the last problem</u>? A "more of everything" approach may prevent a repeat of the current financial crisis, but how well will this protect against future crises that take a different form? As a former MPC member, David Blanchflower has commented:

> "If we close, bolt and lock the door shut we may find it harder to get the horse back into the stable. Are we in danger of constructing a new Maginot Line to fight the last battle but not the next one?"[20]

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18. The Discussion Paper accompanying the Turner Review refers to "stable funding sources, such as retail deposits" (Financial Services Authority 2009b, page 9).

19. As described in Treasury Committee (2008).

20. Blanchflower (2009).

Equally, however, the wide-ranging nature of the regulatory proposals, and the "catch-all" nature of macro-prudential oversight in identifying risks to financial stability, suggest a more comprehensive response than simply fighting the last battle. So – as discussed below – even if the scope of macro-prudential oversight is sufficiently wide, the crucial question may be about its effectiveness.

Third, do the G20 proposals represent too great a shift from *market* discipline to *regulatory* discipline?

Before the current financial crisis, the prevailing supervisory mantra had been that "the primary responsibility rests with the senior management of the regulated firm". As noted in the Turner Review, the prevailing philosophy of supervision had increasingly been based on the assumptions that market forces and market discipline keep both the economy and individual regulated firms broadly on track, and that senior management and boards of regulated firms have a strong and long-term interest in firms performing well. But the current financial crisis undermined both of these assumptions. Market forces and senior management did not prevent large write-downs and losses at many banks (and other financial institutions), inadequate risk management and other internal controls, or poor corporate governance. Similarly, as former Fed chairman Greenspan commented:

> "All of the sophisticated mathematics and computer wizardry essentially rested on one central premise: that enlightened self-interest of owners and managers of financial institutions would lead them to maintain a sufficient buffer against insolvency by actively monitoring and managing their firms' capital and risk positions. When in the summer of 2007 that premise failed, I was deeply dismayed."[21]

Don't abandon the discipline of the market

The G20 proposals shift the emphasis to "the regulator/supervisor knows best". Apart from the focus on remuneration[22], there is relatively little in the proposals on improving either the external (shareholders, and the equity, debt, credit default swap and other markets that "price" financial institutions) or the internal (boards, senior management and internal systems and controls) aspects of "market discipline". The Working Group 1 Report to the G20 in March 2009 states that "The first line of defence in preventing instability in the financial system is sound regulation". Similarly in the Turner Review and the accompanying Discussion Paper, the emphasis is very much on regulation, supervisory assessment of business models and macro-prudential oversight, rather than on corporate governance and internal controls [23].

21. Greenspan (2009).

22. Financial Stability Forum (2009a), Committee of European Banking Supervisors (2009) and Financial Services Authority (2009c). These guidelines emphasise that remuneration should be consistent with, and promote, good risk management, not least by linking remuneration to long-term performance, on a risk-adjusted basis.

23. It is also not clear to what extent the shift to greater "regulatory discipline" will translate across from prudential banking regulation and supervision to insurance (where countries are moving towards a prudential regime that is modelled in part on the "Basel 2" capital accord for banks, including a reliance on firms' internal models), fund management, securities and retail conduct of business.

Focusing on the internal aspects of market discipline, this reflects a justifiable lack of trust in financial institutions' boards, senior management, and systems and controls. Failings in these areas certainly contributed significantly to the current financial crisis. Financial institutions were very much part of the collective intellectual failure, and to date there has been a disappointing lack of evidence that they have taken decisive action to address these failings. There is, however, considerable scope for them to improve. The boards and senior managements of financial institutions need to understand the risks their firms are taking, to establish a clear risk appetite, to monitor and control these risks effectively, and to ensure that remuneration policies are fully aligned with risk management. They need to recognise that risks are difficult to measure, control and anticipate, that their firms may be subject to system-wide risks arising from the collective impact of the actions taken by individual firms (for example, the impact on the price and availability of liquidity), and that they need to run stress tests and scenarios to help them to make good judgments about their capacity (including capital and liquidity) to absorb shocks. Indeed, financial institutions ought themselves to be concerned about system-wide risks, because ultimately a substantial portion of the costs of these risks materialising will fall on financial institutions themselves. These improvements require changes in attitude, culture and behaviour, and in the support and information available to non-executive directors[24].

Good governance, good management, good systems and controls, and properly aligned incentive structures must remain the first layer of protection against problems in individual firms, against financial instability, and against wherever the next problem may lie, even if additional layers of regulatory protection are also clearly required. Ultimately, as US Treasury Secretary Geithner has pointed out:

> "Regulation cannot produce integrity, foresight or judgement in those responsible for managing these institutions. That is up to the boards and shareholders of those institutions."[25]

Moreover, although regulators – and the authorities more generally – appear to be responding more actively to the current financial crisis than are most financial institutions, the regulators were also part of the collective intellectual failure leading up to the current financial crisis, and they may fail again in the future. We should not rely too heavily on regulation (the rules, regulations and guidelines) and supervision (the way that compliance is monitored, and actions taken in the event of non-compliance), or on the as yet unproven ability of macro-prudential oversight to identify and control risks.

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24. Walker (2009) covers some of these issues, but his initial focus on non-executive directors exercising "effective challenge" and "independence of mind" is swamped by 39 recommendations that are mostly for additional process and procedure.

25. Geithner (2008).

I draw two main conclusions here:

- First, rapid and substantial progress on regulatory reform will only be achieved if the G20 proposals are rigorously prioritised. My focus would be on (a) stricter quantitative and tougher qualitative liquidity requirements; (b) significantly higher minimum core (in the region of 4-6%) and total (8-10%) tier one capital ratios (based on "through the cycle" risk measures), supplemented by counter-cyclical capital requirements and stringent stress tests; and – as discussed below – (c) regulatory (and fiscal) taxes on, and measures to achieve the rapid and orderly winding down of, financial institutions that pose significant risks to financial stability.

- Second, it would be dangerous to rely too heavily on "regulatory discipline" and to downplay the responsibilities of the boards and senior managements of financial institutions and of their risk management systems. Significant improvements are required here, but it would be wrong to conclude that they can never be delivered.

"Lack of vision" …

…of the wider macroeconomic framework

The causes of the current financial crisis were not limited to regulatory failings, or to the reckless behaviour of many financial institutions. The common wisdom on the causes of the crisis also points to over-reliance on market forces, global trade imbalances, monetary policy, the encouragement of home ownership, and the over-optimistic and herd-like behaviour of borrowers and investors. But the uniformity of view on regulatory responses to the crisis is not mirrored by any uniformity of view on how the macroeconomic framework should be improved. This is unfortunate and dangerous, because these contributors to the current financial crisis must be properly addressed in order to reduce the risks they pose to financial stability. Moreover, in the absence of progress on the macroeconomic framework too much of the burden of maintaining financial stability will fall on regulatory requirements, and these regulatory requirements will have to offset any adverse impact on financial stability of weaknesses in the macroeconomic framework. Such an over-reliance on regulatory requirements will almost certainly lead to excessive regulation, with consequences for the effectiveness and efficiency of the financial system.

Three elements of the macroeconomic framework are discussed here – the free market system, tax incentives for home ownership, and monetary policy.

The shift to a free market ideology[26] reached its pinnacle in political terms with Margaret Thatcher in the UK (Prime Minister from 1979 to 1990) and Ronald Reagan in the US (President from 1981 to1989), based on the promotion of home ownership, deregulation in the financial and other sectors, and faith in markets. However, although the current financial crisis has dealt a severe blow to this reliance on free markets, there is no unanimity around what should replace it. Instead, both politicians and economic commentators seem stuck in the trap of claiming the end of capitalism as we know it, but then being very vague about what should replace it[27].

The free market ideology also gave strong support to the benefits of a property-owning democracy, a theme that has continued more or less unscathed through successive US and UK governments ever since[28]. In part, this has been based on empirical evidence (especially in the US) that home ownership encourages more stable and more law-abiding neighbourhoods, better educational attainment by children, and higher rates of participation in local democracy[29]. And in part the attraction of a home-owning democracy lies in the "feel-good factor" of rising house prices[30].

A number of countries have therefore granted tax relief on the interest paid on borrowing for house purchase (for example, the US, Ireland, Spain and Sweden), or on the capital gains from the sale of a main residence (for example, the UK). But despite the concerns about house and other asset price instability as a contributory factor to the current financial crisis, there have been no proposals from governments to remove fiscal incentives for house purchase. Indeed, in the US and the UK, the main government initiatives in the housing market during the current financial crisis have been attempts to restore the flow of lending for house purchase and to cushion the impact of falls in house prices on home owners.

Another key aspect of the macroeconomic framework is the role of monetary policy. There has been considerable discussion of the failure of central banks to "lean against the wind" during the run-up to the current financial crisis by tightening monetary policy in response to indicators such as house and other asset prices, and the growth in bank lending to the private sector[31]. The "purist" response to this has been to note the "one instrument, one target" constraint[32], and that since the inflation

26. Elliott and Atkinson (2008) provide an entertaining account of this shift.

27. In the UK, this was illustrated by a series of articles on "The end of capitalism" in the *Financial Times*.

28. Ferguson (2008) provides an historical overview of the political attractions of home ownership and the consequences of this for financial instability.

29. See *The Economist*, London, April 18, 2009 for a survey of this evidence.

30. The housing market is also a good illustration of the important role of human behaviour in creating and reinforcing cycles in house and other asset prices and in the economy more generally, as discussed by Akerlof and Schiller (2009).

31. See Kohn (2008) for a good survey of the key issues here.

32. Tinbergen (1952) and King (2009).

target (or its equivalent) was generally met in the US, the eurozone and the UK over the years leading up to the financial crisis, then monetary policy must have been neither too loose nor too tight.

However, this success in meeting inflation targets has masked some important tensions and inadequacies in monetary policy.

First, in the US in particular, monetary policy was actively used to offset negative shocks in financial and asset markets, such as the fall in equity prices in 1987, the Asian crisis in 1997, the collapse of LTCM and the Russian debt default in 1998, the bursting of the "dotcom bubble" in 2000, and the 9/11 terrorist attack in 2001. This asymmetry was often referred to as the "Greenspan put". The apparently successful use of monetary policy in response to these shocks contributed to a belief that monetary policy could deliver not only low and stable inflation, but also a more stable growth of real output. This may have created a degree of over-optimism and complacency among both policy-makers and market participants[33].

The role of monetary policy

Second, the downward pressure on inflation in the US and Europe arising from the low cost of imported goods from China and other emerging economies during the first half of the decade made it possible for monetary policy-makers to meet an inflation target while pursuing a relatively loose monetary policy. Indicators of monetary policy looseness over this period include the "Taylor rule"[34] and the "output gap" (actual output running above the long-run sustainable level of output) in the US[35] and the UK[36]. This looseness in monetary policy was then reflected in the rapid growth of credit, and of house and other asset prices. The alternative policy approach would have been for a tighter monetary policy, which would have resulted in a temporary undershooting of the inflation target during this period of falling costs of imported goods, just as monetary policy would typically allow a temporary overshooting of an inflation target in response to an upward shift in commodity prices.

It is difficult to assess what the cost of a tighter monetary policy over this period might have been, in terms of lower growth and higher unemployment, or indeed how far monetary policy – in combination with regulatory and fiscal instruments – would have needed to be tightened in order to "prick the bubble" of credit and of house and other asset prices. Blanchflower (2009) suggests that "less expansionary monetary policies in the first half of the decade might have led to falling consumer prices, but without large contractions in output and employment and large increases in debt, house and asset prices". Even if a tighter monetary policy had resulted in

33. Hume and Sentance (2009).

34. Figure 1.9 in the October 2008 IMF World Economic Outlook shows that policy interest rates in the US – and to a lesser extent in the euro area and Japan – were set well below the level implied by the Taylor rule between 2001 and 2006 (International Monetary Fund 2008).

35. See figure 1.10 in International Monetary Fund (2008).

36. Chote (2009).

weaker growth, this is not in itself an argument against the use of monetary policy as one element in a coordinated response to excessive credit growth and asset price inflation. The use of regulatory tools to constrain credit growth and asset price inflation would also have had an impact on the real economy. And if monetary policy had then been loosened still further in an attempt to preserve demand and to prevent an under-shooting of the inflation target, the end result would have been a conflict between monetary policy and the regulatory tools. Moreover, some reduction in economic growth would have been a reasonable price to pay if it could have prevented the financial instability which eventually occurred.

Shortcomings of inflation measurement

Third, both the measures of inflation used in many countries and the economic models used to predict future inflation contained no role for house or other asset prices, for bank lending or for the financial sector more generally. Gieve (2009) observes that:

> "Our modern macro models had little place for the long build up of global imbalances, and the credit and asset price bubbles that were to burst with such devastating consequences. Some models were still pointing to a tightening of policy right up to the summer of 2008, while the global financial system seized up."

Similarly, Blanchflower (2009) notes that:

> "With no financial sector within macro models, there was little room to assess the macroeconomic implications of financial instability … It could be that there is no one target or tool that is optimal for monetary policymakers to consider at all times. Rather, a more nuanced approach may be necessary to achieve balanced growth, stable inflation and at the same time avoid financial crises."

It is important to clarify the macroeconomic framework so that it supports and supplements regulatory reform, rather than undermines it. For monetary policy, this may require a role for financial variables and asset prices in informing the setting of monetary policy, the inclusion of housing costs in the price index for which an inflation target is set, and the use of monetary policy to "lean against the wind" as part of the set of tools that could be used to reduce the risk of financial instability. Similar conclusions apply equally to fiscal policy.

…of the financial sector

Turning to the vision for the banking sector, there is general agreement that banks should become more boring, safer, more like utilities, and that they should go "back to basics". As Acharya, Richardson and Roubini (2009) neatly put it, we should replace a "Concorde" approach by "a somewhat slower but more stable engine that is less prone to very costly hard landings". Turner (2009b) has similarly stated that "We need to design a banking system and credit intermediation system focused on its core and essential functions in the real economy and better able to be a shock absorber rather than itself a source of instability". Greenspan (2001) once said that he could deliver a safe banking system, by restricting banks to holding only US Treasury bills as assets. But he added: "A completely safe bank, holding a portfolio of Treasury bills, is not doing the economy or its shareholders any good."

There is a difficult balance to be struck here, and the desired outcomes need to be specified with greater precision. Indeed, one thing missing in a more outcomes-focused approach to regulation (Financial Services Authority 2007) is the outcome that it is intended to deliver, other than a general intention to promote and maintain financial stability.

Narrow(er) banking?

An additional aspect of the balance to be struck is to maintain a level of new lending that is prudent and enables consumption and investment to grow at rates consistent with sustainable economic growth. Excessive restrictions on the banks risk harming economic growth through the unavailability of credit, leading to a potentially lengthy period of slow growth.

There is also disagreement about the appropriate size and nature of individual financial institutions.

In practice, consolidation has been positively encouraged during the current financial crisis as a means of finding a reasonably safe and larger home for struggling firms. Hence the acquisitions of Bear Stearns by JP Morgan Chase, Alliance & Leicester by Santander, Merrill Lynch by Bank of America, HBOS by Lloyds TSB, Wachovia by Wells Fargo, and Dresdner Bank by Commerzbank. However, some have called for either:

- restricting the size of banks so that they do not become too big to be allowed to fail; or

- creating heavily regulated "narrow banks" (some of which might also be explicitly recognised to be "too big to fail") to undertake basic deposit-taking and lending, while leaving position-taking and market-making to "investment banks".

Others have argued that large financial institutions, undertaking a range of activities, are necessary to service the complex and global needs of large international customers, and that it is efficient for at least some financial institutions to be large and multi-faceted because of the economies of scale and scope that this can generate. "Narrow" banks can fail for old-fashioned reasons such as poor lending decisions, and they can also be highly interconnected and thus pose systemic risks[37] (although they may be easier to wind down). It is also true that "investment banks" can still pose systemic risks and therefore cannot be left entirely to "market discipline". So, can we limit and control the risks from large and complex financial institutions, other than by cutting them into separate pieces?

If we have "too big to fail" financial institutions, then there is a need to offset the funding and competitive advantages that they gain from the implicit or explicit guarantee that they will receive government support if they need it – and to address the risks these institutions pose to financial stability.

Bernanke (2009a), Geithner (2009) and the US Treasury (2009b) argue for a combination of more intensive supervision, stricter capital requirements (to "internalize the costs they could impose on society in the event of failure"), a robust framework of consolidated supervision, and improved tools to allow the orderly resolution of these institutions (see also King 2009)[38]. Acharya, Richardson and Roubini (2009), Borio (2009) and Haldane (2009) go further in suggesting that these institutions should be subject to higher capital and liquidity requirements that are calibrated to reflect their contributions to systemic risk, albeit without offering any precise definitions of how this contribution could be measured and priced in practice. Indeed, if we think of this as the authorities acting like an insurance company then there is an argument that the authorities should not only seek to limit the risks being run by these institutions but should also impose insurance premiums (taxes) on these institutions that are commensurate with the risks they pose, so that the insurance company (the government) builds up reserves to meet future claims. The test of these stricter requirements on "too big to fail" financial institutions is whether they limit the size of these institutions and the range of activities that they choose to undertake, and thereby deliver at least some of the same results as a more direct ban on financial institutions exceeding a certain size or undertaking a wide range of activities. Will we see the likes of JP Morgan Chase, Bank of America, Citigroup and Barclays reducing their size or restructuring in response to such stricter regulation?

The flip-side of consolidation is a lack of competition in the banking sector.

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37. Identifying which financial institutions pose a threat to systemic stability is difficult, since this depends in part on the degree of market fragility (and thus the type and extent of any contagion effects) at the time the institution runs into difficulty. For example, in the UK in August and September 2007, the potential contagion to other banks specialising in mortgage lending and heavily dependent on wholesale funding (Alliance and Leicester, Bradford and Bingley and HBOS were all highlighted by market analysts and the media at the time) increased significantly the potential systemic impact of a failure of Northern Rock.

38. There is, however, a possibility that ever-stricter regulation of these financial institutions simply increases the extent to which their counterparties view them as being "safe" and thereby increases their competitive and funding advantages.

Competition issues will re-emerge

Competition issues are being pushed to one side during the current attempts to strengthen the banking system[39]. As the head of the Office of Fair Trading, John Fingleton (2009), has commented, "History tells us that restricting competition can look attractive to policymakers faced with a distressed business in a recession". It is also likely that some policy-makers view competition as one of the factors that contributed to the current financial crisis. But a lack of competition among banks (or more generally among financial institutions) may stifle competitive market dynamics, which in turn might become one source of tomorrow's problems.

Similarly, a debate is emerging on the advantages and disadvantages of innovation in the financial sector. Some innovations may not have been useful, or may even have been harmful, as has become clearer with the benefit of hindsight. Thus, Turner (2009a) has commented that:

> "Not all innovation is equally useful. If by some terrible accident the world lost the knowledge required to manufacture one of our major drugs or vaccines, human welfare would be seriously harmed. If the instructions for creating a CDO squared have now been mislaid, we will I think get along quite well without. And in the years running up to 2007, too much of the developed world's intellectual talent was devoted to ever more complex financial innovations, whose maximum possible benefit in terms of allocative efficiency was at best marginal, and which in their complexity and opacity created large financial stability risks."

Equally, Volcker (2008) has observed:

> "It is hard to argue that the new system has brought exceptional benefits to the economy generally. Economic growth and productivity in the last 25 years has been comparable to that of the 1950s and 1960s, but in the earlier years the prosperity was more widely shared … Simply stated, the bright new financial system – for all its talented participants, for all its rich rewards – has failed the test of the market place."

But as Bernanke (2009b) has reminded us, some innovations have been beneficial and have helped the financial sector to support and even to boost economic growth, and to make the financial sector more inclusive. There are, therefore, some difficult trade-offs to be made here. There is a risk of harming economic growth through bearing down too heavily on innovation by banks and through a less competitive banking sector – just as there are risks from inappropriate innovation. It is difficult to draw the line - without the benefit of hindsight - between "good" innovation and "bad" innovation.

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39. For example, the UK government allowed the take-over of HBOS by Lloyds TSB by overriding competition considerations. But the EU may force state-supported financial institutions to sell off assets and parts of their business.

The final aspect of the (lack of) vision is the exit strategy from government and central bank support for financial institutions, which has progressed from “lender of last resort” to “capital of last resort”.

Part of this relates to the repayment and unwinding of capital and liquidity support. But the more interesting questions relate to moral hazard. Recent events have created a strong expectation that governments will rescue failing financial institutions. It is not clear how governments could credibly lower this expectation, at least over the medium term. Meanwhile, the move to a world in which the expectation of government intervention is (even) stronger than it used to be, and in which deposit insurance schemes have become more generous than they used to be (higher amounts covered and no co-insurance), itself represents an argument for stricter regulation, not just to prevent financial instability but also to protect governments and deposit protection schemes from being called upon to meet the losses of failing banks.

"Unintended consequences"...

The "shadow" banks...

Regulation will almost always create distortions, even while fixing (to varying extents) the problem to which it is directed. The previous sections have already touched upon some of the possible unintended consequences of stricter regulation - including its impact on the stability of retail deposits and on competition and innovation.

A different set of unintended consequences may emerge from regulatory arbitrage.

In a world where stricter regulation is bearing down more heavily on banks (and on other regulated financial institutions), then it is possible that bank lending and other banking activities will grow at some “optimal” rate which sustains balanced and non-cyclical economic growth. But it is more likely that there will be strong incentives – in the form of attractive risk and reward opportunities - for “non-banks” to intermediate, funding themselves through some form of collateralized borrowing.

In the US, “non-banks” (both regulated and unregulated) have taken large positions and become systemically significant in the past - as LTCM, Fannie Mae, Freddie Mac, the US investment banks, asset-backed conduits, structured investment vehicles and AIG have demonstrated. Geithner (2008) cites data showing that this non-bank sector had grown to a similar size as the US commercial banking system by 2007.

The G20 statement (2009a) talked bravely of the need to “extend regulation and oversight to all systemically important financial institutions, instruments and markets. This will include, for the first time, systemically important hedge funds.” But it is not clear what this will mean in practice. The accompanying G20 Declaration (2009b) describes this extended regulation in terms of reporting requirements, but with the prospect of this escalating to "oversight" if "non-banks" are deemed (individually or collectively) to be sufficiently large to contribute to systemic risk. The International Organization of Securities Commissions (IOSCO 2009) has proposed that all hedge fund managers should "register" with, and provide information to, the relevant national securities regulator. The US Treasury (2009b) proposals for regulatory reform similarly call for advisers to hedge funds and other private pools of capital to be registered with, and provide information to, the SEC, and for funds to be subject to prudential standards if they are deemed to be of systemic importance. Draft European Union legislation on alternative investment managers (European Commission 2009b) goes further than this, proposing that funds above a minimum size should be authorised, meet risk management standards, provide information to supervisors, and be subject to minimum capital requirements; and that national authorities should have powers to impose maximum leverage ratios on these funds.

But this is far from becoming a workable mechanism for restraining - rather than simply observing - the growth of systemic risk outside the financial institutions that are currently subject to prudential regulation.

... difficult to get a handle on

First, the proposals for registration and reporting may not apply to all types of "shadow" financial institutions that may emerge. Second, legislative reach remains essentially national, while the business (and location) of the potential "shadow banking sector" is global. The G20 Declaration (2009b) includes references to "take action against non-cooperative jurisdictions", and to being "committed to strengthened adherence to international prudential regulatory and supervisory standards". But it is not clear how this could or will be enforced. While it is easy to talk about shifting up a gear from reporting to prudential requirements, most relevant jurisdictions are not even planning to put the necessary reserve powers in place to enable this shift to occur rapidly if and when it is required. The real test here is whether it would be possible to put in place at least reserve powers to impose capital, liquidity and other regulatory requirements (not just reporting requirements) on systemically-important "shadow banks" in whatever corporate form and jurisdiction they might emerge. The tools and collective will may prove to be lacking when they need to be implemented.

An alternative approach would be to widen the boundary of regulation now, to introduce prudential requirements for a wider range of position-taking firms – not because they caused the current financial crisis, but because they might pose a threat to financial stability in the future. Since the purpose of this would be purely to mitigate systemic risk, not to protect consumers or to fight financial crime, it should be possible to restrict the number of firms caught in this wider regulatory net by imposing a high minimum size of business, and by allowing established corporations (for example, oil companies) with ancillary treasury and trading businesses to undertake their "normal course of business" activities without additional regulation. However, it is still not clear how this would "capture" firms that establish themselves in jurisdictions that do not introduce prudential requirements.

Stricter regulation will always generate some unintended consequences. This is not in itself an argument against stricter regulation. But it does imply that a difficult balance needs to be struck. The greater the burden that is placed on regulation to mitigate risks to financial stability, the more pronounced the unintended consequences of regulation will be - including the incentives for the (re)emergence of a shadow banking sector.

"Macro-prudential oversight"...

One of the lessons of the financial crisis is that supervision focused too much on individual firms, and not sufficiently on system-wide developments and risks.

How to handle systemic risk...

It was difficult for supervisors to identify - and to respond effectively to - problems that might arise across the system as a whole, such as an excessive growth in credit, an asset price bubble, or a sharp dislocation in financial markets (Financial Services Authority 2009a). The G20 (2009a) proposals, therefore, placed considerable emphasis on "macro-prudential" oversight, as a means of identifying risks to financial stability, deciding what needs to be done, and ensuring that appropriate action is taken. This sounds fine in principle. But in practice it will be difficult to identify problems building up at a sufficiently early stage; to reach agreement nationally and internationally on what actions should be taken to deal with the problems; and to implement the agreed actions in a consistent and timely manner. History does not provide a very encouraging picture here: indeed, the FSF was itself created in 1999 specifically "to assess vulnerabilities affecting the international financial system" and "to identify and oversee action needed to address these". But in practice the first part of this mandate was not fully achieved, and the second part was conspicuous by its absence.

Macro-prudential oversight is not a new concept. Borio (2009) describes how the term was invented at the Bank for International Settlements in the 1970s, to denote "a systemic or system-wide orientation of regulatory and supervisory frameworks and their link to the macro-economy". The macro-prudential approach focuses on the financial system as a whole, and treats aggregate risk as depending on the collective actions of financial institutions (whereas each individual institution might regard the macro environment as being independent of its individual actions). Borio also notes that this approach can be used to analyse both how risk is distributed in the financial system at a particular point in time and how risk in the financial system evolves over time.

Some authorities – the IMF, the BIS, central banks and regulators - have been undertaking some aspects of this macro-prudential approach for many years, as reflected in the identification and analysis of system-wide and macro-economic risks in their various financial stability reports. But this has seldom resulted in a translation of the analysis into action. The new challenge is to find a way of taking action as a result of that analysis.

Supervisors have in some cases undertaken a system-wide analysis, and have uncovered systemic risks as a result. The work of the Joint Forum (bringing together the Basel Committee, IOSCO and the International Association of Insurance Supervisors) on credit risk transfers[40] identified (correctly) that much of the risk was being transferred from banks to US insurance companies. But it is not clear that any action was then taken by the relevant supervisors to establish whether these insurance companies – including AIG - understood fully the risks they were taking on, or had sufficient capital to support these risks.

As Borio (2009) stresses, a more explicit and active implementation of a macro-prudential approach will not be easy:

> "…the challenges involved in implementing a macro-prudential approach to regulation and supervision should not be underestimated. Some of these are analytical. Both measuring and calibrating policy tools are far from straightforward. …. Other challenges are of a more institutional and political economy nature. For instance, it is essential to align authorities' objectives with control over instruments and the know-how to use them."

Some important issues therefore arise. None of these is an argument for not undertaking macro-prudential oversight, but it is important to recognise the reasons why such oversight may be less effective than recent official statements might suggest.

First, <u>what is macro-prudential oversight intended to achieve?</u> There is no clear definition of financial stability, or agreement on how much financial stability should be achieved. An entirely safe financial system will not be optimal, because a degree of financial instability is inevitable if the financial system is to take the risks associated with economic development (for example, banks borrowing short and lending long). But it is difficult to determine the optimal level of financial stability, or to measure whether it is being achieved. Similarly, there is no agreement on what macro-prudential oversight should cover and exactly what outcomes it is seeking to deliver. As noted by King (2009), one objective would be to make individual financial institutions more resilient to system-wide shocks (for example, through higher capital and liquidity requirements), while another objective would be to protect the economy from financial institutions (for example by restricting credit growth, the activities that financial institutions are allowed to undertake and the extent to which they are interconnected).

A recent Bank of England Working Paper (Aikman *et al* 2009), on liquidity risk in a quantitative model of systemic stability, illustrates the difficulties here. Detailed balance sheets of the ten largest UK banks are used to construct an interconnected system that is subject to a range of external shocks. In most cases, these shocks are absorbed by the banks without any bank running into significant difficulties. However, in a small number of cases, one or more banks run into difficulties, and in some of

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40. Bank for International Settlements (2005).

these cases there is also a contagion effect on other banks. This produces a cluster of outcomes that represent financial instability. This raises two policy questions. One is to decide whether the cluster of financial instability outcomes is too large a risk for the banking system to be running. If the answer is yes, then the other policy question is what actions should be taken to reduce this risk – higher capital ratios, lower funding from wholesale markets, smaller maturity mismatches and so on.

Second, what should macro-prudential oversight focus on? Some descriptions of macro-prudential oversight have confined themselves rather narrowly to a combination of aggregating data across financial institutions to create the "wider picture" resulting from the collective actions of these institutions, and then using the results of this aggregation to determine the discretionary element of counter-cyclical capital requirements, primarily to bear down on excessive credit growth.

Others go much wider than this. For example, Bernanke (2009c) lists the elements of a "macro-prudential agenda" as:

- monitoring large or rapidly increasing exposures across markets and firms;
- assessing the potential systemic risks implied by evolving risk management practices, increases in financial leverage and changes in financial markets or products, including innovations;
- analysing financial networks of interconnected firms;
- ensuring that the oversight of each systemically important firm is commensurate with the risks its failure would pose to the financial system;
- providing a resolution mechanism for the winding down of systemically important financial institutions;
- ensuring a robust financial infrastructure;
- mitigating the procyclical features of capital regulation; and
- identifying regulatory gaps that pose risks for the system as a whole.

Other commentators have mentioned additional factors, including interaction between the financial sector and the real economy, maturity transformation, systems of remuneration and other incentives that might influence the behaviour of the financial sector, and political instability. Bini Smaghi (2009) describes a suite of analytical tools and models that could support macro-prudential analysis, while admitting that "a comprehensive framework for policy analysis is still lacking".

At a more detailed level, the IMF's *Global Financial Stability Review* (2009b) included two lengthy chapters setting out its work in progress on systemic risk. One strand of this work focused on linkages among financial institutions, presenting four complementary approaches:

- tracking networks through lending and other exposures between financial institutions;
- using securities prices to capture common movements between financial institutions that may reflect common business models or other similarities that may leave these institutions similarly exposed to shocks;
- using the multivariate distribution of asset returns to estimate the probability of a financial institution being in distress conditional on another financial institution being in distress; and
- a default intensity model linking financial institutions to default rates in the real economy.

Haldane (2009) also discusses financial networks, noting that financial networks have become progressively more dense and complex (in part because of the use of derivatives and securitisations), but also less diverse (as financial institutions have followed similar strategies for trading, diversification and laying off risks). As a result, financial networks can absorb small shocks, but not large shocks: when hit by a large shock, these networks cease to be self-regulating and self-repairing and instead act as amplifiers and transmitters of the initial shock.

Very hard to predict systemic risk

The other strand of the IMF's work assessed a range of possible predictive indicators of systemic risk. Financial institutions needing government support during the current economic crisis were found to have had higher ratios of debt to common equity, higher ratios of short-term to long-term debt, higher returns on assets and higher price-to-earnings ratios during the period 1998-2008 than financial institutions that have not needed government support. However, the IMF found no evidence of predictive value in market data (including equity options, equity price volatility and credit default spreads) until February 2007, which is perhaps not surprising since the market was part of the "collective intellectual failure" to predict the current financial crisis.

Third, who will undertake macro-prudential oversight? The April 2009 G20 statement announced that "the Financial Stability Board[41] should collaborate with the IMF to provide early warning of macroeconomic and financial risks and the actions needed to address them". In addition, many other authorities are positioning themselves to undertake macro-prudential oversight, including the European Central Bank, the European Systemic Risk Board (as proposed in the de Larosiere Report 2009), every national central bank and many supervisory agencies[42]. This in turn reflects the multi-layered nature of macro-prudential oversight, which can be undertaken at global,

41. The Financial Stability Board is the new name for the expanded Financial Stability Forum.

42. In the US, the US Treasury (2009b) proposes the creation of a Financial Services Oversight Council.

regional and national levels. The end result is likely to be an even wider proliferation of worthy reports which identify many risks to financial stability but then struggle to reach any conclusions on which risks are the most important and on what actions need to be taken – and by whom – to address them.

Fourth, will macro-prudential oversight be able to identify and prioritise the "correct" and most important risks to financial stability? The existing financial stability reports currently produced by the IMF, the BIS and by many central banks (and even some supervisory agencies) are very strong in identifying multiple risks to financial stability. But they have not always been successful in identifying the "correct" risks (in the sense of predicting which risks will crystallize). In effect, these reports have been another part of the collective intellectual failure to predict the current financial crisis. Greenspan (2008) has warned that:

> "Regulators, to be effective, have to be forward-looking to anticipate the next financial malfunction. This has not proved to be feasible. Regulators confronting real time uncertainty have rarely, if ever, been able to achieve the level of future clarity required to act preemptively. New problems are by their nature incapable of being anticipated with any degree of confidence."

Which systemic risk?

Moreover, financial stability reports have rarely attempted to prioritise and highlight which risks are regarded as being both the most important (in the sense of leading to significant financial instability if they materialised) and likely to materialise; or then to identify and promote specific actions that could be taken to mitigate these risks. Indeed, a useful "rule" for macro-prudential analysis would be to insist that each financial stability report identifies the three most important risks to financial stability, and puts forward concrete suggestions for mitigating those risks[43].

Fifth, will macro-prudential oversight produce agreement on the actions to mitigate risks to financial stability, and will those actions then be undertaken? Again, history is not encouraging here. It has proved difficult to translate the long lists of risk identified in financial stability reports into the actions necessary to mitigate those risks. And looking ahead, there are already disagreements and concerns surfacing about which tools should be in the macro-prudential toolkit, possible conflicts among tools, which agencies should control which tools, and political pressures that might constrain actions from being undertaken. Indeed, it is particularly discouraging to witness so much posturing on who should undertake macro-prudential analysis and who should decide on the use of macro-prudential tools at a time when progress on the design and calibration of those tools remains so limited.

Beginning with the choice of tools, the regulatory toolkit will have to be wide-ranging.

To the extent that macro-prudential oversight leads predominantly to actions to constrain credit growth, then the obvious candidates include higher capital

43. The UK Government is moving in this direction (HM Treasury 2009).

requirements (be they counter-cyclical or more institution and situation-specific), lower leverage ratios, limits on lending, and limits on loan-to-value and loan-to-income ratios. But as macro-prudential oversight broadens its scope, the regulatory toolkit could include a much wider range of actions, covering liquidity, the interconnectedness of financial institutions, infrastructure, constraints on the use of particular financial instruments, and moves to close any "gaps" in regulation.

Beyond regulation, some authorities seem to want to exclude monetary and fiscal policy from the toolkit, for reasons that are not entirely clear. For example, Gertrud Tumpell-Gugerell (2009), an executive director of the European Central Bank, has stated that any macro-prudential recommendations from the proposed European Systemic Risk Board "should not address either monetary policy … or fiscal policy". Similarly, Bini Smaghi (2009) lists the available macro-prudential tools as including only communication to market participants, supervision and regulation. But this would place all the burden on regulatory tools, and could easily lead to a situation in which regulation was not the best tool to use or was being used in an attempt to hold back the adverse impact on financial stability of loose or inappropriate monetary and fiscal policy.

Even with an agreed toolkit, there is also considerably more work to be done on exactly how these tools should be used to reduce the risk of financial instability. Blanchflower (2009) notes that:

> "…we are largely starting from scratch. We do not possess a coherent intellectual framework to describe how such macro-prudential instruments might operate and how they would interact with more traditional instruments …. Providing such a framework will be a challenge."

Blanchflower also observes that new macro-prudential tools (for example counter-cyclical capital requirements affecting the quantity of bank lending) could potentially conflict with inflation-targeting tools implemented through changes in the price of bank lending. He envisages a situation in which monetary policy is loosened to avoid under-shooting an inflation target, with a presumption that this would work in part through stimulating bank lending, at a time when counter-cyclical capital requirements are restraining bank lending.

On who should control the macro-prudential tools, some central banks[44] have argued that they should be given control of some macro-prudential tools to support their responsibilities for financial stability, but without any clear analysis of what exactly these tools should be or how they would interact with the "micro-prudential" tools that would remain with regulatory agencies. For example, banks might find themselves subject to both micro-prudential and macro-prudential capital requirements, imposed by two different agencies, without any clear view of how conflicts between these requirements should be resolved. Meanwhile, some

44. For example, King (2009) and Bini Smaghi (2009).

supervisory agencies have objected to the notion that their role would be confined to providing data to the "macro-prudential" agency, and then being told what actions they should take as a result of the macro-prudential agency's analysis. They have proposed that they should also be part of the analytical and decision-making process[45].

As Gieve (2009) has pointed out, regulatory, monetary and fiscal policies have become increasingly interrelated, with central banks and finance ministries drawn into decisions about the appropriate levels of banks' capital and liquidity, regulatory requirements becoming increasingly important drivers of bank lending, and fiscal policy returning to a more central place in macroeconomic policy – including through the recapitalisation of banks and underwriting the provision of liquidity by central banks. It is important that monetary and fiscal policy support and supplement regulatory policy. Decisions about macro-prudential actions therefore need to be taken jointly by finance ministries, central banks and regulatory agencies[46].

Agreement on actions may also be subject to political pressures. There is a long history of countries ignoring warnings from the IMF about the build-up of economic imbalances. For example, it is not evident that the US or China has ever changed its economic policies in response to IMF warnings about current account imbalances. Moreover, it will be politically difficult for governments to take decisive action – or to support regulatory or monetary policy actions - to address risks to financial stability during the "good times", especially ahead of elections. It is unlikely that governments would have been prepared to take away the proverbial punch bowl just as the party was warming up in 2003 and 2004. Perhaps governments already recognise this. Whereas the April 2009 G20 statement (2009a) is elsewhere full of the phrase "we commit to ….", there is no mention of any commitment by governments to undertake actions identified through macro-prudential oversight as being necessary to maintain financial stability.

There may also be political pressure on the identification and prioritisation of risks: there is a long history of countries influencing the conclusions of official reports, including those of the IMF. Indeed, shortly after the April G20 statement, the UK Government was reported (Peston 2009) to have objected to estimates presented in the IMF's Global Financial Stability Review of possible costs to governments of their provision of support to the banking sector.

A greater emphasis on macro-prudential oversight must be the right direction to take, given the past failures of regulators to look far enough beyond individual financial institutions and the failure of those producing financial stability reports to extend their analysis to the prioritisation of risks and to recommendations for actions to mitigate these risks. Equally, however, it would be unwise to expect too much from

45. Wellink (2009) rightly stresses the importance of a "real dialogue between central bankers and active supervisors". See also Turner (2009c).

46. There may also be roles here for the competition and capital markets authorities.

macro-prudential oversight, for all the reasons discussed above. The difficulties in foreseeing all risks, the unwillingness to use monetary and fiscal tools, and the political pressures to delay taking decisive action are the most important of these reasons. Bernanke (2009a) and Dickson (2009) both comment wisely on the need for further discussion of what can reasonably be expected from a macro-prudential regime, and how these expectations can best be communicated and managed to avoid any complacency that macro-prudential oversight will solve everything.

"International cooperation and host country supervision"...

Problems of coordination and cooperation on a cross-border basis

Concerns about fragmented supervision, and about the ability to resolve problems in international financial groups, are reflected in the April 2009 proposals from the G20 (2009b) to introduce supervisory "colleges" for all major cross-border financial institutions, and to improve the quality and effectiveness of these colleges. The proposals cover the identification of a lead regulator, the harmonisation of information and reporting, coordination and cooperation, clarity of responsibilities, crisis management, and the availability of powers to act if necessary. The intention is that supervisors will become more proactive in participating in supervisory colleges and in their relations more generally with supervisors in other countries.

This all sounds fine - except that much the same language has been used ever since the 1975 Basel Concordat, the objective of which was "to set out certain guidelines for co-operation between national authorities in the supervision of banks' foreign establishments, and to suggest ways of improving its efficacy" (Basel Committee 1975). Moreover, there is an even more pressing need to address the fragmentation of regulatory and supervisory responsibilities within countries such as the US. It is still not clear that the latest proposals (US Treasury 2009b) will lead to an effective solution within the US to the lack of consolidated supervision of insurance groups with banking operations (such as AIG).

Meanwhile, in the European Union, the de Larosiere Report (2009) on greater consistency of regulation and of its application has proposed that the three "level 3" committees[47] for banking, securities and insurance should be upgraded to become "authorities":

- to make binding decisions to solve disputes among national supervisory authorities (for example on the group-wide use by a pan-European banking group of its own internal models to calculate capital requirements);

47. So named because the original committees were created in 2001 to reach agreement among EU supervisors on how EU Directives in the financial sector (which contained the "level 1" high-level principles and the "level 2" detailed rules) should be implemented by supervisors ("level 3").

- to ensure a true level playing field for cross-border institutions;

- to take a more decisive role in the interpretation of EU Directives; and

- to introduce common supervisory practices through a system of peer review based on robust challenge and with an enforcement mechanism of some form.

However, another consequence of the financial crisis has been a clear shift in the stance of some supervisors of branches of foreign banks (and of subsidiaries to a lesser extent). This shift has occurred across a range of countries – including the UK, some smaller European Union countries with banking systems that are heavily dominated by foreign banks, and many countries elsewhere in the world. Supervisors in these countries have been seeking greater assurance on:

- the financial soundness of the foreign bank;

- the willingness of the foreign bank to stand behind its branches (and subsidiaries) in other countries;

- the adequacy of the liquidity and other resources being held locally by the branch/subsidiary;

- the standards of regulation and supervision in the home country of the foreign bank; and, in some cases,

- the adequacy of the deposit protection arrangements that would apply to depositors in the local branch.

The problem of branches...

Moreover, macro-prudential oversight may lead to "host" country authorities becoming more concerned about the potential contribution of the branches and subsidiaries of foreign banks to risks in the "host" country. Such risks might arise from the activities of foreign banks in lending to specific sectors, aggressive funding activities, or the introduction of risky products to the local market. The resulting risks to financial stability in the "host" country may be particularly pronounced where foreign banks represent a large proportion of the local banking market.

There is, therefore, a tension here. "Host" country supervisors may not be able to rely on moves towards greater cooperation among supervisors to provide them with the information they need from the "home" country supervisor, or to satisfy them that a foreign firm will control its branches so that they do not pose a threat to financial stability in the "host" country. "Host" country supervisors would then need to introduce tougher requirements on foreign banks operating in their countries. These requirements could include:

- the ring-fencing of liquidity;

- the provision of guarantees from the parent bank that it will stand behind its branches;

- insisting that foreign banks operate through subsidiaries rather than branches; and

- imposing restrictions on the activities of foreign firms.

As Turner (2009b) has commented:

> "The direction of change is therefore inevitably going to be towards national authorities demanding that the local operations of global banks are separately and strongly capitalised, and that ring-fenced liquidity is held at national entity level. Pursued to the limit, this would make global banks increasingly like holding groups of individual national banks, rather than single integrated businesses."

In the UK, concerns about home country standards of supervision, the liquidity of branches of foreign banks, and the capacity of the home country to provide depositor protection were set out clearly in the Turner Review (Financial Services Authority 2009a). This called for a move to either "less Europe" (so a tougher host country approach and possibly an insistence on foreign banks entering the UK only through the creation of subsidiaries) or "more Europe". The Turner Review set out a view of "more Europe", including more intense coordination and cooperation among supervisors, peer review of supervision (similar to the de Larosiere (2009) proposals), European Union-level macro-prudential oversight, and pan-European Union arrangements for deposit insurance for cross-border branches (pre-funded to avoid any fiscal burden). However, the delivery of this vision of "more Europe" might not meet all of the concerns set out in the Turner Review, in particular in terms of standards of "home" country regulation and supervision and the capacity of deposit protection schemes (since a pre-funded scheme would take a long time to build up and even once established may not be set at a level that would be able to meet an unexpectedly high rate of claims). Indeed, in the absence of any agreement on fiscal burden-sharing across the European Union, it is not clear that any "halfway house" approach will succeed[48].

A further possible consequence of a more interventionist approach by "host" country authorities is a weakening – rather than the required strengthening – in coordination and coordination in the event of problems in a cross-border financial institution. <u>National authorities who do not need to cooperate so closely during normal times are likely to be less well prepared to cooperate for crisis management</u>.

48. Wellink (2009) has described this as the "Achilles' heel" of the de Larosiere report. Buiter (2009) regards any halfway house without at least a rudimentary fiscal Europe and a single European regulator for European cross-border banks as "unsustainable".

"Intensity and style of supervision"...

As I argue in more detail elsewhere (Briault 2009), supervision – the people and processes that monitor compliance with regulatory requirements, and intervene when they are not being met – needs to change as a result of the financial crisis and the regulatory responses to it.

Although there are significant differences across countries, there had until recently been a general shift in supervisory approach over time from detailed examination by supervisors of bank loan books to greater emphasis by supervisors on the policies and practices of banks, on the adequacy of banks' internal systems and controls, on the senior managements and boards of directors of banks, and most recently on banks' internal models for the calculation of capital requirements for market, credit and operational risks. The main focus of supervision in many countries had therefore become the quality of a firm's senior management, the strength of its systems and controls, and the adequacy of its financial resources (capital and liquidity). Moreover, the senior management of regulated firms had generally been trusted to correct compliance failures.

This shift had reflected changing perceptions about the effectiveness of different supervisory approaches, changes in the activities undertaken by banks, and the increased complexity and size of the financial sector. As discussed earlier in this paper, the prevailing philosophy of supervision had relied increasingly on the effectiveness of "market discipline". These developments were documented in the principles and other guidance issued by the Basel Committee on Banking Supervision over the last twenty years.

However, one lesson from the failures of the senior management, boards of directors and internal systems and controls in many banks is that supervisors need to rely less on market discipline and more on regulatory and supervisory discipline. The death of "light touch" supervision has been announced many times. There needs to be a shift from "trust but verify" to "trust less, verify more", including:

- testing outcomes (for example, the quality of a bank's loan book and the value of its financial assets), rather than relying on a firm's internal systems and controls and on reports produced by the firm;
- developing a more comprehensive understanding of the business of a firm and how it operates;
- being more challenging of firms' business models, and of the ability of firms to survive stresses and alternative scenarios; and
- focusing more on system-wide risks and the ability of individual firms to withstand them.

In addition – and reflecting the argument earlier in this paper of the importance of, and scope for, better internal discipline within financial institutions – greater emphasis needs to be placed on the performance of boards in fulfilling their duties, including the approach and culture of non-executive directors, and how the board sets the firm's risk appetite, links business strategy to risk and monitors and controls the firm's risks.

The end of "principles-based" regulation?

Does this also mean the end of "principles-based regulation"? No. Regulators have always used a mixture of high-level rules (principles) and of more detailed rules to express regulatory requirements, and will continue to do so. Although the two terms have sometimes been used interchangeably, principles-based regulation was never intended to be synonymous with a light-touch approach. Instead, it was supposed to signify a greater reliance on high-level rules to state desired regulatory outcomes while leaving financial institutions with greater flexibility to choose how to deliver those outcomes. Principles-based regulation can therefore represent a tough approach to regulation and supervision if it imposes a demanding set of outcomes, insists that financial institutions deliver these outcomes, and takes decisive action against non-compliance.

Moreover, many of the proposals for stricter regulation emerging from the current financial crisis will require supervisors to exercise even more judgment on whether financial institutions are meeting high-level rules (principles describing outcomes) rather than detailed rules, across a wide range of areas – including liquidity, stress testing, the competence of the senior management, and remuneration (a new area for most supervisors)[49].

Even those supervisors who currently operate a more judgmental and more principles-based approach will find this broader exercise of judgment challenging, especially when combined with a more challenging and less trusting supervisory approach, the need for supervisors to engage actively with the increased emphasis on macro-prudential oversight, and some supervisors being given increased powers to intervene earlier and more decisively to deal with a problem bank - for example by moving it into a "special resolution regime". This will place considerable pressure on both the quantity and quality of supervisory resources.

In many countries, the legal and administrative framework makes it difficult for supervisors to enforce anything other than detailed and prescriptive rules. So these countries, in particular, will need to convert the higher-level principles as far as possible into more detailed rules. This will be difficult in areas such as remuneration systems, stress testing and liquidity, since supervisors will need to take account of the individual circumstances of each firm, and detailed and prescriptive rules are unlikely to capture the full range of judgments required under the Basel and Financial Stability Forum principles. This may lead to tensions in reaching international agreement on both the content and the practical implementation of new regulatory requirements.

49. See, for example, the principles on liquidity, stress testing and remuneration set out in Basel Committee (2008 and 2009b) and Financial Stability Forum (2009a and 2009b).

2. Conclusions

Stricter regulatory requirements on financial institutions are necessary. They are needed:

Stricter regulation...

- to correct the failings in regulation, supervision and "market discipline" that were exposed by the current financial crisis;
- to counter the risks to financial stability posed by systemically important financial institutions, and the impact of implicit or explicit government guarantees of bank deposits and of "too big to fail" institutions; and
- to mitigate the risks to financial stability identified through macro-prudential oversight.

However, there is a danger that too great a burden is being placed on regulatory requirements. This danger arises from the indiscriminate "more of (almost) everything" approach to the reform of regulation, from shifting the balance too far from market discipline to regulatory discipline, and from the absence of any commitment or clarity on the use of monetary policy, fiscal policy or other macroeconomic tools to complement stricter regulation of the financial sector.

An over-reliance on regulation to maintain financial stability will have undesirable consequences. Excessive regulation will have an adverse impact on the ability of the regulated financial sector to support sustainable economic growth, and on competition and innovation. This will in turn stimulate the growth of a "shadow" banking sector which may be less efficient, less transparent, more difficult to regulate and a greater threat to financial stability than the mainstream banking sector.

To prevent this undesirable outcome, we need to do six things:

...but don't over-estimate the power of regulation

- Establish a clearer vision of how safe the banking system should be, and assess the collective impact of regulatory proposals against this vision.
- Prioritise regulatory reform - concentrating on liquidity, on significantly higher minimum tier one capital ratios, on fine-tuning the regulatory requirements for systemically important institutions to reflect their potential contributions to financial instability, and on measures to achieve the rapid and orderly winding down of complex financial institutions.
- Improve governance, management, internal controls and incentive structures within financial institutions to provide a stronger defence against future problems.

- Ensure that the macroeconomic framework – including monetary policy, fiscal policy and the housing market – is not itself a source of financial instability, and that it complements regulatory policy in tackling the risks identified through macro-prudential oversight.

- Require those responsible for macro-prudential oversight to prioritise rigorously the risks they identify, and to recommend actions to mitigate these risks. But although macro-prudential oversight should play a useful role, it would be unwise to rely too much on it, because it will not always identify the most important risks, and the political will required to drive actions may be lacking.

- Ensure that at least reserve powers are in place, effective across all jurisdictions, to enable a rapid response to threats to financial stability arising from the "shadow" banking sector.

The current financial crisis is also likely to lead to tougher "host" country controls over the branches of foreign banks, and to require a significant upgrading of the quantity and quality of supervisory resources.

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Clive Briault currently runs his own consultancy company, Risk and Regulation Consulting Limited, advising financial services firms and overseas regulators. He is also a principal consultant with Financial Services Compliance (EU) Limited; a non-executive director of The On-Line Partnership Limited (an independent financial adviser); a program leader for the Toronto Centre for Leadership in Supervision; and chair of the West Ham and Plaistow New Deal Partnership Limited (a community charity).

Previously, Clive held senior positions in the Bank of England and the UK Financial Services Authority. He was Managing Director, Retail Markets at the FSA, responsible for the prudential and conduct of business supervision of all the predominantly retail banks, insurers, asset managers and financial advisers in the UK; for conduct of business policy; and for the FSA's ambitious programme to improve financial capability. Prior to that he was responsible at the FSA for prudential policy for banks, insurers and other regulated firms, while at the Bank of England he held a number of senior positions in banking and wholesale market supervision and in monetary policy.

Clive has published articles on a range of regulatory and monetary policy issues, including the costs of inflation, the independence and accountability of central banks, the rationale for a single financial services regulator, derivatives and systemic risk, and the impact of the financial crisis on supervision.

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