Panel Discussion

1. William C Dudley

The US financial system: where we have been, where we are and where we need to go

Today, my remarks will focus on the United States and global financial systems:

1. What went wrong to produce the worst financial crisis in the past 70 years?
2. Where are we now?
3. What should be our top priorities to ensure that this never happens again?

As always, my views are my own and do not necessarily reflect those of the Federal Open Market Committee or the Federal Reserve System.

With respect to what went wrong, it is important to recognise that the financial crisis occurred for a host of reasons and, thus, there is no single silver bullet to avoid such crises in the future. At the heart of the crisis was a tremendous build-up in leverage, which our regulatory framework failed to prevent. Large amounts of opaque, illiquid, long-term assets were financed by short-term liabilities, and much of this financing occurred in the shadow banking system.

When the housing bubble burst, financial asset prices fell and exposed the deep linkages and overall fragility of our system. Interbank funding markets seized up, the shadow banking system crumpled and several major financial firms – banks and non-banks alike – collapsed or approached the brink of collapse. Extraordinary interventions of governments and central banks around the world were necessary to prevent a complete collapse of the financial system and the broader economy. As a general matter, regulators did not appreciate beforehand how vulnerable the system was to shocks. In particular, there was a failure to appreciate the important interconnections between the banking system, capital markets, and payment and settlement systems. For example, the disruption of the securitisation markets caused by the poor performance of highly rated debt securities led to significant problems for major financial institutions. These banks had to take assets back on their books, contingent lines of credit were triggered, and banks could no longer securitise loans, thus increasing the pressure on their balance sheets. This reduced credit availability, which increased the downward pressure on economic activity, which caused asset values to decline further, and in turn, increased the degree of stress in the financial system.

Moreover, regulators did not adequately understand how the dynamics of the system tended to exacerbate shocks, rather than dampen their impact. For example, with respect to capital, firms under stress had incentives to continue to pay dividends to show that they were strong. These dividend payments actually depleted capital, making the firms weaker and vulnerable to credit rating downgrades. When credit ratings were indeed cut, that increased collateral calls, which intensified the pressure on scarce liquidity resources.

Regulatory gaps were another important factor in causing the crisis. American International Group, Inc. (AIG) is a case in point. AIG Financial Products, a subsidiary of the AIG parent company, provided guarantees against default on complex collateralised debt obligations, leveraging the AAA rating of the AIG parent company in the process. This activity was conducted with inadequate regulatory oversight, poor risk management and insufficient capital.

Finally, many of the incentives built into the system ultimately undermined its stability. The problems with incentives were evident in a number of areas, including faulty compensation schemes and risk management that was too narrowly focused on one business area without regard for the broader entity. These incentives created important externalities in which participants did not bear the full costs of their actions.

Turning to where we are now, the US financial system is in much better shape today than it was a year ago. The capital markets are generally open for business – with the important exception of some securitisation markets – and the major securities dealers that survived the crisis have seen a sharp recovery in profitability. The largest US bank holding companies, which went through the Supervisory Capital Assessment Program exercise,[1] have more and better quality capital, having raised more than US$100 billion of common equity over the past year in the capital markets and generated nearly as much common equity via preferred stock conversions and from gains on asset sales.

However, many smaller and medium-sized banks remain under significant pressure. This reflects several factors. First, such institutions hold assets that are carried mainly on the books on an accrual basis. Compared with mark-to-market assets, such assets adjust much more slowly to changes in market conditions and the economic environment. Second, many of these banks have a much more concentrated exposure to commercial real estate, a sector that remains under considerable pressure. Not only have capitalisation rates risen sharply – meaning the investors will pay much less for a dollar of rental income than before – but the rental income streams on these properties also have declined as the performance of the US economy has declined. Together, these two factors have pushed US commercial real estate prices down by around 40 to 50 per cent from the peak reached in 2006. Loan losses in commercial real estate and consumer and mortgage loans seem likely to continue to pressure smaller banks for some time to come. This in turn means that credit availability to households and small businesses will still be curtailed.

The improvement in the overall health of the financial system and in market function has allowed the Federal Reserve to phase out many of the special liquidity facilities that were enacted in response to the crisis. These facilities were generally successful in achieving their objectives – helping to restore confidence and rebuild market liquidity in a way that safeguarded the taxpayers' interests. When a full accounting of the special liquidity facilities is complete, it seems likely that the facilities will have generated substantial incremental earnings that the Federal Reserve will remit to the US Treasury. Although these incremental earnings were not the objective of these facilities, they are a pleasant outcome relative to the alternative.

1 For details see <http://www.federalreserve.gov/bankinforeg/scap.htm>.

As the crisis has abated, our attention has shifted to what we need to do to prevent another crisis in the future. We need to take the necessary steps to build a strong and resilient financial system. In my opinion, three broad sets of actions are needed:

i. Effective macro-prudential supervision. By this, I mean conducting supervision not just vertically institution by institution, but also horizontally across institutions and markets. We need to better understand how the system operates as a whole and how problems in one area can affect financial stability elsewhere. This includes both how the overall system affects individual firms and how the activities of a single firm or market affect the entire financial system.

ii. Make financial institutions and market infrastructures more robust to withstand shocks and become less prone to failure.

iii. Change the system so that no financial firm is 'too big to fail'.

Macro-prudential supervision is essential for two reasons. First, it addresses the problem of gaps in the regulatory regime, and the regulatory arbitrage that such gaps can encourage. Second, macro-prudential supervision is needed because the financial system is interconnected. Siloed regulatory oversight is not sufficient. Supervisory practices must be revamped so that supervision is also horizontal – looking broadly across banks, non-banks, markets and geographies. This also means that regulatory standards need to be harmonised across different regions. Without harmonisation, there will inevitably be a 'race to the bottom' and regulatory arbitrage will be encouraged, rather than inhibited.

Many steps are needed to make financial institutions and infrastructure more robust. For example, we need to strengthen bank capital requirements, improve liquidity buffers and make financial market infrastructures more resilient to shocks when individual firms get into trouble.

In terms of capital requirements, many changes are needed, including global capital standards that put more emphasis on common equity, establish an overall leverage limit and better capture all of the sources of risk in the capital assessment process. Improved risk capture, for example, includes the trading accounts of banks. Some institutions had clearly not set aside adequate levels of capital given the risks that were embedded in their trading positions.

It would also be very desirable to develop a mechanism to bolster the amount of common equity available to absorb losses in adverse economic environments. This might be done most efficiently by allowing the issuance of debt instruments that would automatically convert to common equity in stressful environments, under certain pre-specified conditions. Such 'contingent capital' instruments might have proven very helpful had they been in place before and during this crisis. Investors would have anticipated that common equity would be replenished automatically if a firm came under stress, and this knowledge might have tempered anxieties about counterparty risk. At a minimum, contingent capital instruments might have enabled common equity buffers at the weaker firms to be replenished earlier and automatically, thereby reducing uncertainty and the risk of failure.

On the liquidity front, there are a host of initiatives under way. The Basel Committee on Banking Supervision is working on establishing international standards for liquidity requirements. There are two parts to this. The first is a requirement for a short-term liquidity buffer of sufficient size, so that an institution that was shut out of the market for several weeks would still have sufficient liquidity to continue its operations unimpaired. The second is a liquidity standard that limits the degree of permissible maturity transformation – that is, the amount of short-term borrowing allowed to be used in the funding of long-term illiquid assets. Under these standards, a firm's holdings of long-term illiquid assets would need to be funded mainly by equity or long-term debt.

With respect to financial market infrastructures, the Federal Reserve is working with a broad range of private-sector participants, including dealers, clearing banks and tri-party repo investors, to dramatically reduce the structural instability of the tri-party repo system. Similarly, over-the-counter (OTC) derivatives clearance activity is being pushed toward central counterparties and exchanges. In addition, the Federal Reserve and others are evaluating how greater transparency with respect to OTC derivatives prices would improve financial stability. The Committee on Payment and Settlement Systems and the Technical Committee of the International Organization of Securities Commissions are doing a review of standards for payment, clearing and settlement systems. This work will inform the efforts of the Financial Stability Board to strengthen such standards.

There is also work under way on the problem of how to ensure that financial institutions have compensation structures that curb rather than encourage excessive risk-taking.

Finally, it is critical that we ensure that no firm is too big to fail. This is about both fairness and having proper incentives in the financial system. Having some firms that are too big to fail creates moral hazard. These firms are able to obtain funding on more attractive terms because debt holders expect that the government will intervene rather than allow failure. In addition, being too big to fail creates perverse incentives. In a too-big-to-fail regime, firms have an incentive to get large, not because it facilitates greater efficiency, but instead because the implicit government guarantee enables the too-big-to-fail firm to achieve lower funding costs.

To solve the too-big-to-fail problem, we need to do two things. First, we need to develop a truly robust resolution mechanism that allows for the orderly wind-down of a failing institution and that limits the contagion to the broader financial system. This will require not only domestic legislation, but also intensive work internationally to address a range of legal issues involved in winding down a major global firm.

Second, we need to reduce the likelihood that systemically important institutions will come close to failure in the first place. This can be done by mandating higher capital requirements, improving the capture of risks by those requirements, and by requiring greater liquidity buffers for such firms.

2. Mohamed A El-Erian

It is a huge pleasure and honour for me to be here. I would like to thank Governor Stevens and his RBA colleagues for inviting me to this important event. I am delighted to serve on this panel.

I would like to join the many Symposium participants that have congratulated the RBA on its 50th Anniversary. Like others, my PIMCO colleagues and I admire the Bank for the skillful way it has conducted policies over the years, including in helping to navigate Australia very well through the landmines of the recent global financial crisis.

I can also tell you that every quarter – in February, May, August and November – my colleagues and I await with anticipation the publication by the RBA of its *Statement on Monetary Policy*. We have consistently found this document to provide deep and insightful analyses of both the domestic situation and that of the rest of the world.

This Symposium also provides me with the opportunity to meet up with some old friends from the official sector. Jaime Caruana is among them. So it's an even greater pleasure for me to be asked to act as a discussant for his interesting and well-written paper.

My comments on Jaime's paper will be organised around three themes:

- first, supporting some important points made in the paper;
- second, and with a view to provoking further discussion, attempting to supplement some of his insights and analyses; and
- third, identifying some related questions that, based on our work at PIMCO, we believe are consequential for the topic at hand and, as yet, have not attracted sufficient attention and analysis in policy circles and in the academic community. (Some of these questions also relate to the discussion in the first session of this Symposium.)

I can be very brief on the first theme as I agree with many of the points made by Jaime, including those pertaining to more robust capital cushions, better resolution mechanisms and the importance of maintaining the integrity of key institutions. These are among the necessary conditions for reducing the instability of the financial sector and for limiting the risk of adverse contagion to the real economy, employment and the welfare of current and future generations.

Where I would place even greater emphasis is on the implementation challenges that policy-makers have faced, and are facing, in transitioning from 'urgent and important' responses to the 'important but not urgent'. History warns us that this critical transition, from crisis management to crisis prevention, is tricky when it comes to both design and implementation.

There is a risk that this already tricky transition will be made even more challenging by what seems to be a shift, over the past few months, in the balance between a globally coordinated approach and nationally driven ones. As Jaime correctly argues in his paper, international coordination is key – and I would argue essential. This speaks not only to effective regulation and supervision; it also relates to managing the fat tails for the system, including Jaime's important point that resolution regimes must allow institutional failures to be managed across borders.

Today, there is increasing evidence of a clear and present danger in the shift of emphasis away from international coordination and harmonisation. We are particularly worried that some of the national mindsets and approaches recently in evidence could result in consequential cross-border inconsistencies which, in turn, would contaminate the national effectiveness of the reform measures.

We should all be reminded of the extent to which the G-20 process – especially in its April 2009 gathering in London – succeeded in signalling to markets meaningful and self-reinforcing policies among key countries around the world. Any erosion of this process – real or perceived – will serve to increase the already significant headwinds to a sustained and meaningful recovery in economic growth, employment creation and global welfare.

Turning to the second topic – what I would attempt to add to Jaime's important insights in an effort to stimulate further discussion – allow me to expand the points relating to firm behaviours.

Jaime makes the correct and important observation that the history of the global financial crisis shows that it was easier to recognise vulnerabilities than to do anything about them. This speaks directly to the question of how well firms' internal risk management processes, and more generally firm management and planning, can respond to the 'known unknowns' (let alone the much more difficult 'unknown unknowns').

Governance and incentive systems are critical here, as Jaime correctly points out. There is still a lot of analytical work to be done to understand better the micro influences that operate at the level of the firm. There are also the insights that the behavioural literature sheds on aspects that reduce the responsiveness of firms – such as inappropriate anchoring, active inertia and an unwieldy set of internal commitments. As Don Sull of the London Business School has documented well in his detailed research, it is also important to remember that history is full of examples of successful firms that recognised paradigm shifts, tried to do something about them, but ended up doing the wrong thing.

Regulators would be well advised to explicitly take into account the elements of firms' responsiveness in thinking about the nature and fatness of the left tail. To date, this seems to have featured little, if at all, in the deliberations. Specifically, there is a basis for arguing that it may prove much harder to alter behaviour than commonly assumed, given the set of internal commitments on Wall Street and in the City of London.

Allow me now to turn to the third and final issue – namely, some related questions that we, at PIMCO, believe are consequential for the topic at hand.

Jaime modestly notes that his paper scores a 70 per cent answers-to-questions ratio, below the count achieved by Alan Blinder in his 2006 presentation to the Bank of Spain (and during Jaime's successful tenure as Governor) (Blinder 2007). But, especially in this extremely fluid global environment, Jaime's 70 per cent may well be better than what we would record when it comes to some big global macroeconomic questions.

In our opinion, there are a number of issues out there that warrant further research and that will likely impact both the design and effectiveness of the upcoming regulatory response. Several of these questions speak directly to the linkages from the macroeconomy to the financial system, and related feedback loops that can prove (and have proved) so destabilising and unpredictable.

We have spent a lot of time identifying what we believe are consequential 'known unknowns'. And the list is quite long at a time when the global economy is gradually resetting after the global financial crisis. For example, there are significant questions as to how a number of 'unusual' factors will play out in the months and years ahead, including:

- the simultaneous shocks to public finances in a meaningful number of advanced economies (shocks which some countries, such as Greece, are particularly ill-equipped to handle smoothly);
- the erosion of the standing of the global public goods supplied by the United States (including a reserve currency, the deepest and most predictable financial markets, and the consumers of first and last resort) and for which there are no readily available alternatives;
- large and persistent unemployment in economies, especially in the United States, notwithstanding the fact that the labour market there is assumed to be highly flexible and responsive;
- headwinds to a much-needed shift in policy mindset from cyclical responses with immediate impact to more structurally oriented ones with longer gestation periods;
- the exit from unconventional measures in circumstances where warranted intervention by national authorities have materially changed market dynamics;
- an attack on the institutional integrity of both public and private sector entities;
- the multi-year political reaction to a system that has resulted in the privatisation of massive gains and the socialisation of massive losses; and
- the natural multilateral desire to manage to the middle an increasingly bar-belled global economy.

This is a long list. Yet these are just some of the questions that remain open – indeed, under-researched and under-discussed – as the world economy looks to reset after the global financial crisis. And yet they are critical to the design of a sustainable regulatory response that seeks to reduce global financial instability without unduly undermining economic growth and efficiency. They reflect an 'inconvenient reality' of systemic crises: these crises tend to expose deep structural weaknesses that cannot be sustainably addressed by just cyclical policy responses.

So, where does all this leave us?

Jaime's paper correctly identifies important lessons for financial stability, and with direct policy implications. The design and implementation of the appropriate policy response will face headwinds, many of which reflect structural weaknesses that have been visibly exposed by the global financial crisis. The longer it takes for the policy response to shift from cyclical to structural, the greater the risk that Jaime's unanswered questions may be resolved in a less-than-pleasant manner for global growth, employment, welfare and financial stability.

Thank you.

Reference

Blinder AS (2007), 'Monetary Policy Today: Sixteen Questions and about Twelve Answers', in S Fernández de Lis and F Restoy (eds), *Central Banks in the 21st Century: An International Conference Sponsored by the Banco de España,* Banco de España, Madrid, pp 31–72.

3. Charles Goodhart

Thank you very much Ian. Australia is known, in my country at least, as the lucky country and I am sure that we all feel very lucky to be privileged to be here on this occasion.

Another fortunate outcome is that macroeconomists and financial regulators share a condition, which is that the worse we do, in terms of forecasts and outcomes, the more people are interested in what we have to say, which is an advantage. In addition, financial regulators – I am not so sure about macroeconomists – are remarkably reactive. Financial regulation is usually a matter of shutting the stable door after the horses have bolted – 'that shall not be allowed to happen again'. There is rarely sufficient introspection about what is the true purpose of the regulatory structure that we are trying to introduce.

At the moment there is a likelihood that we are sliding imperceptibly from one basic paradigm into another. The basic regulatory paradigm we are leaving is the old banking, Bagehot paradigm, which is that when trouble occurs in your financial system you protect the institutions that are illiquid but solvent, and you allow the institutions that are insolvent to go to the wall. That really began in 1866 with Overend, Gurney & Company, which was at that time the largest financial institution in the United Kingdom, being allowed to go under.

I think that paradigm effectively came to an end with the Lehman failure, when the outcome was regarded as so awful that in virtually every major economy the authorities have effectively taken a vow that they will not allow any similar really large, interconnected systemic institution to be closed. What we now have reached is a world in which the reality is that the authorities actually insure both the liquidity and, in terms of the continuing operation (at least in a rather restricted sense), the solvency of our systemic institutions. We need to consider what are the implications of moving from a banking to an insurance paradigm. One of them, I feel, is that the kind of tax on banks that President Obama recently proposed is likely to sweep the world. This will be introduced as an insurance premium on risk-taking systemic institutions.

One of the reasons why the Bagehot paradigm failed is that liquidity and solvency were always, in practice, inseparable. The reason why institutions become illiquid, other than from mechanical failure, is that people ultimately have doubts about their solvency. In a world in which no-one ever defaults – such as in the standard DSGE models in which you do not need banks, you do not need financial institutions, you do not actually need money – anyone can just raise funds simply by issuing an IOU. The problem is that if liquidity and solvency are intimately connected, as they always are, the only institution that can effectively deal with solvency problems is not the central bank, it is the government. That means that in this particular area, this particular field, central banks and governments *have* to work together, like it or not, particularly when it comes to dealing with the resolution of solvency problems.

In my view there has been excessive concern about what the implications of all this might be for the independence of central banks. I have never understood why it is not possible for a central bank to operate independently of government in the monetary policy field but to act conjointly with government and the other supervisory institutions in the financial stability field. Indeed, out of concern to try and keep central banks 'Simon Pure' in their monetary policy independence, there are even suggestions in some quarters that central banks should be kept out of macro-prudential issues altogether. That strikes me as both undesirable and impossible so long as the central bank operates the lender-of-last-resort instrument, which is the major mechanism for dealing with the liquidity aspects of this particular joint problem.

The real problems, however, that we face – as Jaime, Bill and Mohamed have emphasised – is that we cannot do all this within the nation state because most systemic institutions are also going to be cross-border institutions. They virtually all are. Now what are we going to do about cross-border issues? Could we get an internationally agreed special resolution system organised so that the mechanisms for dealing with failing systemic institutions are the same the world around, irrespective of where they are headquartered and have their subsidiaries? Perhaps an analogy can be drawn with the International Swaps and Derivatives Association master agreement for financial contracts. If we cannot get a common special resolution regime, how far could we develop the proposals for living wills? I would also add, if we are thinking about countercyclical policy, that cycles, such as housing cycles, differ from country to country. That means that if we are going to be countercyclical, the heaviness, the strictness of the regulation will at any time have to differ from country to country. How then are the regulators and supervisors going to face down the standard argument (that all financial intermediaries use to bring about a lowest common denominator) about the need for a level-playing field? If you are going to want to be countercyclical, you are going to have to face up to saying that we are not going to worry so much about the level-playing-field argument.

Now I am coming to the last part of what I have got to say, and that is that any fool can make our banking systems safer. All you have got to do is just toughen up the regulation – more capital, more liquidity, more of that, more of the other. But the question is how safe and how small do we actually want our banking systems to be?

In the 19th century in the United Kingdom, our main mechanism for keeping the banks safe was unlimited liability. We dropped that because the banks were not big enough and not able to take sufficient risks to finance the large corporate institutions that were growing up in Europe and we had to get more capital into our banking systems. So, as we move now towards making our banks much smaller and much safer, are we actually going to constrain the provision of credit through our banking systems unduly? The large corporations and governments can go to the capital markets; we do not need to worry about them. But are we going to provide sufficient banking to finance credit to small and medium-sized enterprises and to our household sector? Indeed, how much competition within our banking systems do we actually want? Remember that the measures taken after the Great Depression in the United States were primarily and intentionally anti-competitive – regulating interest rates, limiting what banks could do, etc, etc.

Jaime suggested that one of the reasons why the Australian and Canadian banking systems have done so much better was that the regulation there has been better, which may be so. But it could also have been in part because the Australian and Canadian banking systems (at least domestically) were in some part protected from competition from a wide range of alternative foreign banks. So how competitive do we actually want our banking systems to be?

Finally, the choice of the appropriate ratio for capital and liquidity is always totally arbitrary. One of the problems has been that people have spent a lot of time worrying about that number and not worrying about how that number should be enforced. So the number that they have adopted is frequently taken to be the minimum. If it is the minimum, it is useless because it can not be infringed upon. The only buffer that our banking system had was the margin that they kept above the minimum required capital and the minimum required liquidity ratio. What we have to think about, instead of worrying excessively about an appropriate ratio, is the appropriate ladder of sanctions, which for a variety of reasons the BIS very rarely did, though at last the Basel Committee in December began to approach that, discussing how you might undertake measures such as cutting back on dividend payments as capital fell below a certain level. The only mechanism for dealing with a proper ladder of sanctions is the *Federal Deposit Insurance Corporation Improvement Act of 1991* and that is the template that the Basel Committee and other international regulators need to apply much more.

Thank you very much.

4. General Discussion

The discussion in this session focused on two key areas of the regulatory debate: the challenges involved in formulating and implementing regulatory reforms; and the viability of a number of suggested reforms, including resolution mechanisms, local incorporation and narrow banking. The transfer of risk from the private to the public sphere, and the implications of this for regulation, was also touched on.

There was a general consensus among Symposium participants on the need for regulatory reform, but less agreement on the appropriate scope and nature of reform. One panellist argued that the critical role of government intervention in reducing the severity of the crisis meant that comprehensive regulatory overhaul was now required to minimise the need for such intervention in the future. On a cautionary note, another panellist said that dramatic re-regulation would be a mistake because the prosperity of the past 30 years, particularly in developed economies, could be attributed in part to financial deregulation that has occurred over that period. Along these same lines, some participants expressed concern that the appetite for immediate action has made imperfect, quick responses more likely than carefully considered actions.

The role of the existing regulatory framework in propagating the crisis was raised by a number of participants. It was argued that the concessional risk-weighting scheme used to determine required regulatory capital under Basel II encouraged many financial institutions to build up large exposures to securities with questionable liquidity (in a crisis), and residential mortgages for which risks were often underestimated given the potential for housing prices to fall. Also, it was argued that the adoption of internal risk assessments under Basel II had helped to mask the extent of risk-taking in the financial system. With all of this in mind, it was recommended that reforms address the potential for the regulatory framework itself to contribute to the build-up of risks. In response, one panellist suggested that a number of the proposed regulatory improvements were intended to make the recognition of risk more forward-looking.

Still on the factors underpinning the financial crisis, the central role of the 'originate-to-distribute' model of financing was raised. One panellist argued that the problem here was a lack of supporting infrastructure, both public (for example, in some countries, lax regulation and poor supervision allowed lending standards to deteriorate substantially) and private (for example, insufficient due diligence on the part of credit rating agencies). It was suggested that in reforming the system, it will be important to keep the good parts of this model of financing while preventing the excessive risk-taking that it enabled.

Turning to some more specific reforms that have been proposed, one participant noted the lack of attention being given to resolution mechanisms for distressed financial firms. Opinion among the panellists differed somewhat on this issue. One suggested that instruments such as living wills for financial institutions could be helpful but said that there was a need for more robust resolution powers for supervisory authorities. Another panellist argued that something along these lines was needed but commented that to be credible, any such mechanism must be accompanied by the financial backing of other financial institutions, the fiscal authorities or by contingent debt instruments. In contrast, a third panellist echoed earlier comments, saying that we have entered a new paradigm in which systemically important institutions will not be allowed to be liquidated, and that this has rendered mechanisms for comprehensive resolution redundant.

Given that the recent crisis was a global phenomenon spread in part by large global financial institutions, the potential for local incorporation as a protective measure was debated. One panellist argued that the implementation of such measures was an issue for local supervisors but agreed that increased simplicity in the financial sector could be beneficial. Others commented on the limitations of local incorporation, suggesting that it may be suitable for some business models but would not be viable for global banks catering to the needs of multinational corporations because it would lead to a loss of synergies from cross-border activities. The difficulty of pursuing local incorporation within the euro area was also raised.

The potential for narrow banking to mitigate systemic risk was also discussed. However, the panel argued against this for a number of reasons. One panellist suggested that such an approach was promoted on the basis of extreme cases, such as the large investment banks that played such a central role in the recent crisis, and noted that it may be viable for some types of institutions but not as a general rule. Another panellist commented that historical experience has demonstrated that narrow banks are not viable, with restrictions on the type of assets held resulting in uncompetitive interest rates and poor service. It was also argued that massive shifts of funds between narrow banks and other financial institutions, particularly in the early stages of a crisis, would serve to heighten panics when they occur. Similarly, it was argued that such an approach would simply increase regulatory arbitrage, pushing risks into the shadow banking sector and weakening the core of the banking sector during good times.

The difficulties of developing and implementing regulations that responded to cyclical developments were raised by a number of participants. The usefulness of forward-looking provisioning was mentioned, with one panellist commenting that the application of such provisioning schemes in Spain was a step forward. It was noted, however, that international accounting standards required modification given that they are currently inconsistent with such provisioning schemes. It was suggested that, unlike monetary authorities, prudential supervisors lacked the political support to use discretionary means to tighten regulation in times of prosperity. One panellist acknowledged this difficulty and argued that a set of international standards could make the task of regulators easier. In a similar vein, another panellist argued that prudential regulation could overcome the opposition to intervention during good times by embracing a rules-based regime implemented on a 'comply or explain' basis, under which deviations from any specified policy rule would need to be clearly justified in a public manner. However, other panellists commented that the difficulties here were unlikely to be overcome and that the focus of prudential policy should shift towards addressing the incentive structures underpinning the financial system and combating the factors that amplify localised shocks.

There was a suggestion that some regulatory responses to the crisis being proposed may unduly impinge upon smaller institutions that played only a limited role in the crisis. However, one panellist pointed out that it was not only large institutions at the centre of the financial crisis; some small institutions, such as Northern Rock, had played a pivotal role. Another panellist noted that many smaller institutions would probably already meet the tighter capital and liquidity requirements that are being proposed. More generally, it was argued that regulation and risk premia need to be related to the risks taken by individual institutions, large or small, in order to ensure that those with safer practices are not penalised.

Participants remarked that much of the risk accumulated by the private sector in the lead-up to the crisis had now effectively been transferred to the public sector and, accordingly, the state of public finances had become a source of concern for some countries. If the public sector was the new epicentre of risk, it was argued, the policy response in the wake of this crisis must acknowledge this. In reply, one panellist suggested that the management of overall risks in the private and public sectors had common shortcomings, and that both need to make more of an effort to prepare for future downturns during good times. In this context, the potential for the monetisation of public debt was raised. One panellist suggested that monetary authorities must make it clear to fiscal authorities that this was not an option.