Paul Tucker: The crisis management menu

Speech by Mr Paul Tucker, Deputy Governor for Financial Stability at the Bank of England, at the SUERF, CEPS and Belgian Financial Forum Conference: "Crisis Management at the Cross-Roads", Brussels, 16 November 2009.

* * *

It is a great pleasure to be here today. The current crisis has thrown up so many lessons in so many dimensions of the "rules of the game" for the financial system, that I congratulate the organisers on devoting a whole conference to crisis management. That in itself is a meaty enterprise. But a vital one.

By way of setting the scene for today's conference, I will offer the Bank of England's perspective on the various components of a crisis management package: central bank liquidity insurance for viable firms and markets; firm recovery plans, and contingent capital; resolution plans for winding down failed businesses, including payouts from deposit-insurance regimes; and official-sector support operations, including emergency liquidity assistance and Capital of Last Resort. Every country's authorities need a policy on each of these components, because some day in the future our successors will find that, however good, the improvements our generation makes in the structure, regulation and supervision of the financial system will let them down.

A thread that runs through the discussion is how to preserve the core financial services provided to the economy through periods of extreme stress <u>without</u> bailing out banks' equity holders or uninsured wholesale creditors. That is the essence of the "Too Big/Important To Fail" debate. It is not so much that the top management of banks consciously swing for the fences, but rather that wholesale credit may be systematically too cheap for banks, and perhaps other intermediaries too, unless the usual market disciplines of failure can apply. The international community is, rightly, increasingly focused on this. And, in particular, it is good news that the G20 Finance Ministers and Governors have asked the Financial Stability Board to pursue it. To quote the theme of this conference, "TBTF" is probably the definitive Cross-Roads issue.

Central bank liquidity insurance: discount window lending against wide collateral

I shall begin with the central banker's role as lender of last resort, the one area where there was quite a lot of thinking ahead of this current crisis.

Even so, one of the things many central banks, including the Bank of England, confronted over the past two years or so was that, when conditions are bad enough, the central bank will inevitably lend to solvent and viable firms <u>against a very wide range of collateral</u>. Since we will end up doing so, it is wise to acknowledge that in advance. But, crucially, it is also wise to set the terms so as to avoid subsidising or encouraging imprudent liquidity management by firms in normal circumstances. That is one of the principles which underpin the Bank of England's own new, permanent liquidity facilities introduced just over a year ago. The other principles are that:

- Our liquidity insurance should absolutely not cut across monetary policy.
- In lending against a wide class of collateral, the central bank must apply appropriate haircuts, and must be capable of valuing the assets and of managing them in the event of a counterparty default. Our haircuts are published and include various add-ons for particular risks. And the underlying assets accepted as collateral should have a viable underlying market.

- As a means of effecting the delivery of insurance, secured loans (repo or collateral swaps) are preferable in most circumstances to outright purchases, as during the life of a loan central banks can update the value of the security, the collateral margins and other terms that control the risk to them.
- Such lending against wider collateral should routinely be for sufficiently long maturities to help forestall panic by avoiding rollover risk for the firms without exposing central banks to risk by tying them in for unduly long periods.
- Permanent facilities providing bilateral liquidity insurance should routinely be made available only to commercial banks (and other authorised deposit takers). They unavoidably need such insurance because their deposit liabilities are money, giving them a vital role, as monetary institutions, in the economy and financial system.
- But such public facilities should not be available to banks where in the judgment of the central bank there are serious question-marks over their viability or solvency. (As I shall discuss later, that need not exhaust our menu for providing liquidity to individual firms in support operations.[1])

But the most vital principle is to avoid creating perverse incentives for banks to take excessive liquidity risk. There are two elements to this. One is the importance of the regulatory regime: making banks hold a minimum stock of truly high-quality liquidity. Internationally, the Basel Committee on Banking Supervision and, in the EU, the Committee of European Banking Supervisors are working on that. In the UK, the FSA is committed to defining core liquidity as just that: inalienably liquid. Defining core liquidity in terms of assets that are eligible for rediscount at the central bank, as some have argued, is in our view a dangerous course to take. It could have the unhelpful effect of making central banks lenders of first rather than of last resort.

The second element in avoiding perverse incentives is the terms on which liquidity insurance is available from the central bank. Setting the right pricing is not easy. Two approaches could, in principle, be adopted. One would be to charge an *ex ante* fee, say annually, for access to the liquidity facilities, perhaps based on how much liquidity risk individual banks had been taking. So far as I know, no central bank has done that yet, but it should not be ruled out as an idea. The other approach is, of course, to charge a premium interest rate upon the facilities being drawn on. The Bank of England has adopted a schedule for our Discount Window Facility under which the rate charged increases with the size of a drawing relative to the bank's size, and also with the illiquidity and riskiness of the collateral provided. We want to underline that banks will end up paying more to draw on the insurance line if they are overly reliant on illiquid, risky collateral – implying that their balance sheet was overly exposed to liquidity risk. These considerations have to be taken into account if central banks are to lend against very broad asset classes; for example, as we flagged earlier in the year, the Bank of England will be deciding over the coming months whether to extend the collateral eligible in our Discount Window to portfolios of loans to companies and households and of equities. The Bank of England also charges a premium rate if a bank borrows from us against assets comprising securitisations of loans they originated themselves. This is because there needs to be an incentive to make such securities marketable; and, more important, it can help to protect us against one of the most basic risks in banking – the correlation between the quality of a bank's underwriting standards and its solvency.

Although central banks need to be ready to lend against a wide range of collateral, we do still need to be careful about precisely what we take. To that end, my colleagues Paul Fisher and Sarah Breeden will be developing criteria for the structure and disclosures around the

[1] In the UK, support operations can be effected under the Tripartite Memorandum of Understanding between the UK's Tripartite authorities (HMT, FSA and Bank).

securitisations that will be acceptable to us in steady state. The ECB is conducting a similar exercise. Since that may have some read across to the development of the market itself, I hope we can count on active industry collaboration as we undertake that work.

Before moving on, I should pause for a moment on the Bank's principle that our routinely available liquidity insurance facilities should be available only to commercial banks. Now, we do of course realise that, especially in the US, a number of other kinds of financial firm or vehicle have been given access to special liquidity assistance during this crisis: finance companies, money funds, securities dealers. But in terms of the reform agenda, to our mind this underlines the importance of ensuring that a shadow banking system, running big maturity mismatches but offering capital certainty and instant liquidity to savers, does not grow just beyond the perimeter of bank regulation. This is not an issue just in the US. It was, after all, the suspension of redemptions by European enhanced-return money funds that triggered the money market crisis in August 2007. This part of the reform agenda – the restructuring of the continuing shadow banking system – must not be neglected.

Market maker of last resort?

The purpose of providing liquidity insurance to banks is well known – having been developed since Bagehot's day and before. It serves us well to put a finger in the dyke, with a view to preventing a liquidity panic developing unnecessarily into a solvency problem through the forced-sale of assets.

But this crisis has reminded everyone that it is not only firms that can suffer liquidity runs. Markets can too.

Liquidity insurance facilities that underpin banks' funding are obviously helpful to preserving market liquidity, as they increase the probability of bank-dealers being able to finance unwanted inventory.

But arguments have been advanced during the crisis that the authorities should be able to act more directly to preserve market liquidity, especially if bank-dealers withdraw from market-making because they become capital constrained. That is, essentially, the origin of suggestion that central banks should stand ready to act as Market Makers of Last Resort.[2] As the amount of credit that gets intermediated via markets rather than via institutions grows, the need for a MMLR grows too.

This is by no means straightforward, and not only because it is not central to our inheritance. Whereas lending to a bank does with certainty give that bank more liquidity, entering a market as a buyer does not automatically enhance the liquidity of that market in a sustainable way. Also, whereas central banks protect themselves against risk in secured loans by requiring more collateral if conditions deteriorate, an outright purchase is a one-off transaction; there's no going back to renegotiate the price afterwards.

By analogy with the more familiar "LOLR" function, the following thoughts suggest themselves for debate in our community.

- As with LOLR, central banks should only engage in MMLR operations that do not interfere with monetary policy.
- A MMLR should aim to buy at a discount to the fundamental value of a risky asset, with the implicit bid-ask spreads unattractive relative to peacetime conditions in private markets but impliedly better than those available during the crisis itself. The

[2] For example see, Buiter W and Sibert A (2007), "The Central Bank as Market Maker of Last Resort", *Maverecon – Willem Buiter's Blog* (http://maverecon.blogspot.com/2007/08/central-bank-as-market-maker-of-last.html).

purchase mechanism should be designed to reveal information about the state of the market and the fairness of prices paid.

- While the risk inherent in outright purchases cannot be avoided, the MMLR absolutely must stay within the capacity determined by its capital resources.
- And crucially, the MMLR should aim to be catalytic, helping ideally to kick-start a market rather than replace it. And it should avoid propping up markets that would not be fundamentally viable once the liquidity crisis subsided. The underlying objective is, as elsewhere, to help to maintain continuity of the crucial services that the financial system provides to the economy.

In big picture terms, the Bank of England's programme of auctions to purchase small amounts of a fairly wide range of sterling corporate bonds can be viewed as one manifestation of that broad approach to MMLR. The aim has been to aid improvements in the liquidity of the market, including by reducing the inventory risk to "market makers".

But our community is some distance from thinking through the extent to which this kind of thing should feature as a permanent part of our armoury. While not an urgent issue, it is an important one given the increasing role of capital markets in our financial system.

Recovery plans, and contingent capital

Whether provided to individual firms or to markets, routine liquidity insurance will not always suffice. Sometimes a liquidity problem is triggered by <u>fundamental</u> problems. Sometimes a liquidity crisis creates credit problems through the effects of a fire sale of assets. Firms must plan for distress. Not only is that in the interests of the financial system and, indeed, of the economy more widely, it is in the interests of firms themselves. At not a few distressed firms around the world, at times over the past three years the leadership "lost it" under the pressure of events. Contingency planning is essential. Regulators must make firms do it – properly. And that means for really disagreeable scenarios.

As the UK's FSA has recently explained,[3] the clear recommendation of the G20-sponsored Financial Stability Board is that these contingency plans need two, distinct components. A <u>recovery plan</u> for maintaining a going concern. And a <u>resolution plan</u> for firms that, however regrettably, need to be laid to rest. The objective in each case is to maintain the financial system's provision of essential services to the economy.

Firms themselves need to play a leading role in drawing up "recovery plans". At least two components are needed, roughly corresponding to liquidity and capital. First, a <u>contingency funding plan</u> (CFP). Too few banks of any size seem to have had one in any serious way. There was, for example, too little focus on the effects of ratings downgrades on collateral calls and on the availability of lines of credit. And too little attention was paid to core liquidity holdings: a treasury portfolio comprising the FRNs issued by other banks does not leave a distressed bank with many options in the face of system-wide stress. Banks need to know exactly what assets they hold in which securities-depository systems; how long it would take to deploy them; and which are eligible in which central banks' routine facilities. Too few banks had that information readily to hand. Maybe they do now. They should.

The FSA has very kindly agreed to share with the Bank of England the CFPs of banks (and building societies) where relevant to our functions. As well as helping us to discharge our financial stability responsibilities more broadly, this will be useful in making sense of requests to draw from our Discount Window Facility.

---

[3] FSA DP09/4: Turner Review Conference Discussion Paper, "A regulatory response to the global banking crisis: systemically important banks and assessing the cumulative impact".

Second and beyond liquidity planning, recovery can involve derisking. This might mean laying off risk, shedding positions or even selling businesses. Once in distress, banks absolutely must be prepared to shrink their franchise in order to sustain themselves. That may entail having businesses set up within groups in a way that would facilitate sale, if necessary. Sometimes what a group regards as its core franchise will not map exactly into what the authorities think of as the essential economic services it provides. That is obviously for discussion between firms and their regulators, who need to be ready to exercise powers to force risk-reduction and recapitalisation where necessary to preserve the soundness of the enterprise and the stability of the system.

"Derisking" is all about the capital resources of banks in the face of idiosyncratic or widespread stress. There is, therefore, a read across from the "Living Wills" exercise to the question of how much capital banks should hold. Almost no amount of capital is enough if things are bad enough. Which is why contingent capital might potentially be an important element in banks' recovery plans, as the Governor set out recently in Edinburgh.[4]

This would not be the kind of hybrid capital that mushroomed in the decade or so leading up to the crisis. The familiar types of subordinated debt can absorb losses only if a bank is put into liquidation, and so really has no place in regulatory capital requirements as we cannot rely on liquidation as the only resolution tool. It has been a faultline in the design of the financial system as a whole that banks issued securities that counted as capital for regulatory purposes, and on which they could therefore leverage up, but with institutional investors treating them as very low risk investments backing household pension and annuity savings.

By contrast, contingent capital would be debt that converted into common, loss-absorbing equity if a bank hit turbulence. It is, in effect, a form of catastrophe insurance provided by the private sector.

Why should long-term savings institutions and asset managers be prepared to provide such insurance? One possible reason is that if enough of them were to do so for enough banks, it might well help to protect the value of their investment portfolios more generally. If ever it needed to be demonstrated, the current crisis has surely put it beyond doubt – not only for our generation but for the next one too – that serious distress in the banking system deepens an economic downturn and so impairs pretty well all asset values. By taking a hit in one part of their portfolio by providing equity protection to banks, institutions might well be able to support the value of their investments more widely. And the trigger for conversion from debt into equity could be at a margin of comfort away from true catastrophe; say, a percentage point or so above the minimum regulatory capital ratio.

Of course, this would entail a structural shift over time in investment portfolios. But the system might be able to manage that adjustment. After all, it managed the all together less desirable adjustment to the development of the existing hybrid capital markets. But demand for contingent capital is, inevitably, uncertain at this stage. As are the terms on which it will be provided. We welcome the growing private sector focus on this.

---

4 King Mervyn A. (2009), "Speech by Mervyn King, Governor" to Scottish Business Organisations, Edinburgh, October 2009. See also Tucker P M W (2009a), "Remarks by Paul Tucker", Panel session at the Turner Review Conference, London, March 2009 (pp. 5) and Tucker P M W (2009b), "The repertoire of official sector interventions in the financial system: last resort lending, market-making, and capital", Bank of Japan's 2009 International Conference, Tokyo, May 2009 (pp. 19). In the academic community, the idea was aired in "An Expedited Resolution Mechanism for Distressed Financial Firms: Regulatory Hybrid Securities", Squam Lake Working Group on Financial Regulation, April 2009, Council on Foreign Relations. Dudley, William C. (2009) "Remarks by William Dudley" at the Institute of International Bankers Membership Luncheon, New York City, October 2009.

Resolution of bank failures

If recovery plans prove wanting, then distressed banks need to be "resolved" – laid to rest, but without undermining crucial economic services. Sometimes the best course will be a straightforward, whole-bank liquidation, with retail depositors receiving a payout from the insurance fund. But, alternatively, resolution can involve selling the deposit book – and so the vital payments services – to another bank. Good assets might go with the deposits, or be transferred elsewhere. Bad (or at least unsaleable) assets go into run off. Choosing the best course is central to effective resolution planning.

To split up and transfer the different parts of a bank, the authorities obviously need specific and extensive powers. The broad model is provided by the Deposit Insurance Corporations of the USA and Canada. The UK has recently introduced such powers, having learnt the hard way that we needed them. A number of other countries in the EU adapt their normal corporate insolvency regime for the special structure of banks, but do not all have the option to break up and transfer different parts of the business. This is the subject of the recent consultation paper published by the European Commission.[5]

In the UK, the Bank of England has become the Special Resolution Authority. We have been helped by the hands-on operational expertise necessary for our market operations and for running the wholesale payments system. This new responsibility has given us an interesting vantage point on the preconditions for effective resolution. In the first place, let me tell you that it is very information-intensive. It requires a lot of detail on how a bank's business is structured and run. And that information needs to be available at an early stage. Amongst many things, it includes details of netting and derivative contracts, and I am struck that, in the US, the FDIC now requires troubled banks to demonstrate that they could report each day the relevant details of derivative portfolios. The Bank of England plans to consider whether or not something like that might be warranted in the UK. More generally, the UK FSA has said that the authorities will need to be assured that firms are able to provide the necessary data to assess resolution options and to execute the authorities' chosen strategy.

But it is not just the resolution authority which needs lots of information. Potential bidders for all or parts of an ailing bank do too – of the kind typically offered to bidders in a "friendly" M&A transaction. Banks probably need routinely to maintain such "Data Rooms" as part of their contingency plans – something which the FSA is examining.

As will be abundantly clear from this brief review, the "recovery and resolution plan" enterprise requires the regulators to work closely with the resolution authorities, and with central banks as liquidity providers. In the UK, wearing our "resolution authority" hat, the Bank hopes to be able to work closely with individual banks and the FSA in helping to specify and guide what is needed in practice. My colleague Andrew Bailey will be discussing in more detail tomorrow one of the issues raised by past cases.

The enterprise also entails thinking beyond the resolution of modest-sized domestic banks. Both the US and UK authorities are exploring how to extend resolution regimes to bank holding companies and to other types of firm that could prove systemically significant in some circumstances. As present, no one thinks that Large and Complex Financial Institutions could be resolved at all smoothly, as the rescues of the past twelve months show.

Cross-border resolutions and the international "living wills" exercise

There is, therefore, a substantial international dimension to this work, which is being facilitated by the Financial Stability Board. Over the next few months, the top 25 or so banks

---

5 Communication from the European Commission, *An EU Framework for Cross-Border Crisis Management in the Banking Sector*, 20 October 2009. http://ec.europa.eu/internal_market/bank/crisis_management/index_en.htm#overview

and dealers in the world will be working with the authorities to produce recovery and resolution plans. The effort will involve not only line supervisors but also resolution authorities and central banks. Firms are expected to produce recovery plans. For obvious reasons, resolution plans need to be produced by the authorities, while still drawing on inputs from the firms. In the UK, the FSA has recently published how they will approach this international effort.[6]

It is a formidable task. Working with the FSB secretariat, my role, as chairman to the Cross-Border Crisis Management Working Group, will be to help colleagues to flush out the issues, so that they can be properly debated and reviewed by G20 Ministers and Governors later next year. With the European Commission on the FSB and also the resolution working group, I hope that will also help to inform work at the European level.

There will quite probably be hard questions. They could include whether something needs to be done about the complex structures and organisation of some banks. Another big issue might be which services truly need to be maintained. Whether there are conflicts between the insolvency laws and special resolution regimes of different countries that would materially impede effective resolution for some groups. And another would be whether losses can in the future credibly be made to fall on wholesale creditors. Maybe even about burden sharing amongst national authorities if fiscal support proves unavoidable when an internationally active bank fails. In all this the objective, of course, is to get to a place where taxpayers' resources are not needed, implicitly or explicitly, to underpin the national and international credit systems. And some of those operational questions, therefore, shade into the broader debates about the structure and regulation of the financial system.[7]

Of that list of issues, I should highlight two today.

The first is the entanglements and conflicts that can exist between home and host insolvency and resolution laws. There is, for example, a first-order difference between, on the one hand, countries whose regime effectively permits a de facto ring-fencing of locally domiciled assets for local depositors and, on the other hand, those that treat liquidation as a joined-up, global exercise, with all unencumbered assets shared pro rata across senior unsecured creditors.

These issues are not new. They were highlighted nearly twenty years ago by the closure of BCCI's operations around the world.[8] Subsequently, in Europe, insolvency law for banks <u>was</u> improved through the Credit Institutions Reorganisation and Winding-Up Directive. There is a single-entity insolvency regime for any bank incorporated in the EEA, applying to the parent bank and also to all its branches throughout the EEA. We also have, in the Settlement Finality Directive, a sound legal basis for the integrity of wholesale payments transfers in the event of a default, without which the effects of failure could be truly devastating. And in the Financial Collateral Directive, we have an assurance that national insolvency or reorganisation measures cannot be applied to prevent or delay counterparties of a failed institution from exercising their rights to close out, net and/or enforce their security interests

6 Financial Services Authority Turner Review Conference Discussion Paper, "A regulatory response to the global banking crisis: systemically important banks and assessing the cumulative impact", FSA DP 09/4.

7 King Mervyn A. (2009), "Speech by Mervyn King, Governor" to Scottish Business Organisations, Edinburgh, October 2009.

8 Basel Committee on Banking Supervision (1992). "The insolvency liquidation of a multinational bank", Bank for International Settlements. Its key conclusions were: (1) when closing a multinational bank, supervisors should pay attention to the nature and timing of communications among themselves and of their communications with creditors, shareholders and management; (2) the nature of liquidation rules may be relevant to the manner in which multinational banks are supervised; (3) differences in liquidation rules across jurisdictions in a winding-up can affect returns to depositors and other creditors and the operations of deposit protection schemes; and 4) coordination and cooperation between liquidators can affect the returns to creditors in a liquidation and can be affected by the role of supervisors in a liquidation.

in order to realise financial collateral. But we do not yet have compatible bank resolution regimes, and some existing Directives were designed without resolution in mind.

We now have another chance. The Basel Committee on Banking Supervision has published an extensive review of impediments to the resolution of cross-border banks arising from national insolvency laws, resolution regimes, or supervisory practices. And the European Commission has recently launched a consultation asking what changes to the European legislative framework are needed to address these issues. We need to focus on who should take what concrete actions. I think the FSB will be picking up that issue.

Resolution and support operations: who should pick up the tab?

The second issue concerning resolution I want to say something about is the allocation of losses to creditors and to the official sector from support operations. The formal position varies between support for insured deposits and for other creditors.

Deposit insurance, and risk-based premia

Insured deposits are, of course, insured. It is often assumed that governments stand behind such schemes. But governments do not have pick up the final tab. Such schemes are ultimately paid for by the banks themselves. Whether schemes are funded or not, governments have a legal right to make recoveries from the residual banking industry over the succeeding years.

There is, still, a question of the basis of the levy. This arises most clearly in a system which guarantees 100% repayment up to some meaningful amount (now £50,000 in the UK). While it has many merits, complete cover affects the dynamics of the market place in a potentially unhelpful way. It makes it easier for banks to pay up for deposits. The implied signal that a bank offering a high return would be taking greater risk than others, as it would have to, does not matter to the depositors. They are covered, and so are induced to place their money wherever they can achieve the best returns.

That is a recipe for imprudent risk taking. One possible way of addressing it would be to make such risk-taking banks pay a higher levy into the insurance scheme. The Bank of England thinks that this deserves serious consideration, and it is now the subject of debate in the UK.

Beyond deposit insurance: how can the industry bear the cost of rescues?

During the current crisis, around the world governments have gone much further than protecting only insured depositors – <u>uninsured wholesale creditors</u> have been bailed out too. The need for such support operations was evident if complete systemic collapse was to be averted. But it does raise big questions looking ahead – of fairness and of incentives. Once more, we need some principles for what are in effect official Capital of Last Resort (CofLR) operations.

One possible <u>starting</u> point is how central banks have learned to think about bespoke <u>liquidity-support</u> operations, so called Emergency Liquidity Assistance. After explicitly recognising that occasionally liquidity support operations can end up providing de facto risk capital if the recipient deteriorates, the late Eddie George offered some thoughts on this in 1993;[9] "central banks are not in the business of providing public subsidy to private

[9] "The pursuit of financial stability", LSE lecture by the late Eddie George, *Bank of England Quarterly Bulletin, 1997*; and Mervyn King's September 2007 letter to the Treasury Select Committee, "Turmoil in financial markets: what can central banks do?"

shareholders. If we do provide support, we will try to structure it so that any losses fall first on the shareholders and any benefits come first to us. And any support we provide will be on terms that are as penal as we can make them, without

precipitating the collapse we are trying to avoid ……… We look for a clean exit. The company may be required to run down or restructure its operations, under our surveillance, to the point where it can do without our support. We aim to protect the system, not to keep in being unviable banking capacity …...." And, paraphrasing Mervyn King in 2007: "if the [authorities] underwrite any [risk] that threatens to damage the economy as a whole, it encourages the view that as long as a bank takes the same sort of risks that other banks are taking then it is more likely that their problems will be insured ex post."

That provides a useful context for the debate about whether the cost of bailouts can somehow be recovered from the industry. Compared with a year ago, a number of ideas are now in circulation. One possibility is to establish a fund in advance. Another is to raise a levy on the surviving banks.

An argument in favour of the former is that it would raise contributions from risky banks before they fail. And it would allow the levies to be related to the size of their uninsured creditors, as some in the US have suggested.[10] But I do just wonder whether it would be realistic to raise, and over the decades sustain, a sufficiently large fund.

The alternative, as I have discussed before,[11] is to raise a levy from surviving firms after the event. This would have to be linked to a systemic-crisis threshold being passed for the deployment of public funds. And the basis for deciding how much was recovered from individual firms would need to be both clear and principled. In particular, it would be important to try to incorporate features that enabled costs of failures somehow to fall to uninsured, wholesale creditors. Those who finance the system in the good times need to have incentives to price for risk.

Summary

This has been a fairly high-level survey of the instruments on the crisis management menu. They are, of course, interlinked. They also bear on the wider debates about the structure and regulation of the financial system. Perhaps most obviously, the feasibility of producing recovery and resolution plans will feed into international and domestic decisions on minimum capital requirements for banks in general and on the mooted add-ons for so-called systemically significant firms. The weaker a recovery plan and the greater the obstacles in the way of its effective resolution, the more capital (and liquidity) a bank is going to have to hold. This is why emerging interest in Contingent Capital instruments is so important. If CoCos could form a material part of recovery plans, the landscape might just be transformed.

And that in turn goes to the big issue. Whether our community can find ways of distributing the costs of official sector support operations back to the system and its uninsured creditors rather than to the general taxpayer. If we can achieve that, market discipline would be enhanced. We need to hang on to "market discipline" as a watchword in these debates. The goal of re-regulation – of redrawing the rules of the game for the financial system – should not be to reintroduce the wisdom of the state into micro decisions about how to run businesses. But rather to put market discipline at the heart of a market economy. An effective

---

[10] See the recent statement by Sheila C. Bair, Chairman, Federal Deposit Insurance Corporation, to the Financial Services Committee; US House of Representatives (29 October, 2009).

[11] See Tucker P M W (2009b), "The repertoire of official sector interventions in the financial system: last resort lending, market-making, and capital", Bank of Japan's 2009 International Conference, Tokyo, May 2009 (pp. 18).

framework for crisis management drawing on the lessons of this crisis can take us in that direction.