# Discussion

# 1. Richard Portes

### 1.1 Origins and the extent of the crisis

The paper by Ben Cohen and Eli Remolona provides an excellent summary of the origins of the crisis. I agree with their emphasis on three key factors. There was: (a) financial innovation – with exceptional opacity of new instruments; (b) low interest rates globally, which prompted a search for yield; and (c) an environment of 'ravenous' risk appetites driven by problematic incentives in various guises. The authors state that as credit risk problems became apparent, they transformed into a liquidity event, leading to what they claim to be the unique depth and duration of this crisis. The key to this is the interaction between market liquidity and funding liquidity in the context of maturity mismatch, with the potential for multiple adverse liquidity spirals as laid out by Brunnermeier (forthcoming).

With this as background it is worth asking: what policy options might have worked to prevent or mitigate the effects of the crisis this time around, if they had been applied? There is some evidence that better regulation could have stopped some excesses. One case is the Bank of Spain, which did not permit abusive offbalance sheet exposures, the use of structured investment vehicles, and the like. As a result, Spanish banks are in relatively good shape, despite the bursting of the Spanish real estate bubble.

History teaches that the next crisis will not have the same origins. Because it will come from somewhere else, policy-makers must avoid the mistake of 'fighting the last war'. Great examples of this kind include the portfolio insurance problems of 1987, derivatives disasters in the 1990s, and exceptionally high hedge-fund leverage associated with the LTCM crisis of 1998. All these evoked 'suitable' policy responses, so none was a source of the current turmoil – which came nevertheless.

The main puzzle in my mind is the extent to which the current episode really constitutes a financial crisis, rather than only a crisis for the financial sector. So far, the effects on the non-financial sector and the aggregate real economy, even in the United States, are far short of what one might expect from the 'biggest financial crisis since the Great Depression'. It could, in fact, be argued that commodity and food price inflation have been much more important factors in driving the fall in growth rates – which still, almost a year after the onset of the turmoil, does not amount to a recession.

In some respects the problems are similar to those faced in the latter part of 1998 – during which there was a major sovereign default and a spike in market volatility that was just as great – even though the financial market turmoil then was not as deep nor as long as the current episode. So we have more puzzles: deleveraging has so far been much less than in previous episodes; volatilities and indicators of risk aversion do not appear unusual in historical perspective (even the peak of credit default swap

(CDS) spreads in February–March is not much higher than the 2002 peak); TED and LIBOR-OIS spreads are stubbornly high despite exceptional liquidity interventions; and long rates have not risen *pari passu* with inflation expectations.

#### **1.2 Policy responses**

Part of the answer to these puzzles may be that policy has actively responded to the financial turmoil. In particular, there have been cuts in monetary policy rates; not by the European Central Bank, but they might otherwise have raised rates in August 2007. There have also been major changes in the market operations of central banks, a widening of the range of collateral accepted (though not in the euro area, where it was already extensive), the creation of new facilities (again not in the euro area), and swap agreements across countries. In addition, there have been efforts to repair bank balance sheets. Policy-makers have acted aggressively in their own domains. In many respects, however, there has been a lamentable lack of policy coordination among the major central banks, sometimes even vocal discord.

On the issue of write-downs and recapitalisation many questions remain. Why did the banks not cut dividends quickly and substantially? Was there any pressure from regulators to do so? To the extent that there has been action, the approach has been piecemeal. Repeated write-downs have been largely perceived as lacking transparency and have in many cases led to further falls in bank share prices. Sovereign wealth funds, hedge funds and others who have invested new funds have been burnt, so not surprisingly, there is a reluctance to invest further in bank recapitalisation. All this has been partly caused, or at least exacerbated, by mark-to-market accounting.

## **1.3** Capital market dysfunctionalities

I now want to turn to three types of problems in capital markets that have exacerbated the turmoil. These are problems that policy-makers did not fully or properly understand, so it is only now that they are attracting attention – but perhaps not yet enough. The first of these is in the CDS market, which faces considerable distortion. In particular, if current levels of CDS spreads were accurate indicators of the probability of default, then many banks should be pronounced dead. The problem is that this market started out with a view to buying and selling credit protection, but it has now also become a vehicle for speculation – the size of the market is an order of magnitude greater than the underlying credit risks being hedged. The market now has also become one-sided. Everyone wants to bet against the banks, but no-one wants to write protection. And with limited supply and rumours fuelling demand, prices have gone way up on thin and volatile trading. It seems clear that this is a highly speculative market, and it is subject to some manipulation.

The abnormally high CDS spreads have become a major problem for the banks because new bond issues have to be priced by reference to (and hence above) CDS spreads. Given the current high spreads, these markets are effectively closed. It also appears that hedge funds are 'playing rough', trying to make things look worse than they actually are, thereby helping to drive spreads up even further. Such a strategy can be combined profitably with going short in bank stocks.

There is a vicious circle operating in this market. CDS spreads widen, investors demand higher yields, the cost of capital rises and its availability falls, balance sheets deteriorate, and CDS spreads widen further. What could be done to fix this? Often discussed – including by Ben and Eli – is the value of organising centralised clearing, thereby significantly lowering counterparty risks. This falls far short, however, of the transparency and normalisation of the markets that would come from requiring that they go onto organised exchanges. If the specificity of many of these instruments precludes exchange trading, then we should simply accept the cost of greater uniformity. Unfortunately, any such initiative will be resisted by the investment banks, which generate large profits precisely from the specificity and opacity of the current arrangements. They are enthusiastically pushing for centralised clearing in order to circumvent pressure for exchange trading.

The second problem plaguing capital markets is the application of marking to market. Valuing assets at 'market value' in period of financial distress (when the market is not functioning) amplifies balance sheet problems. It also inhibits reliquefaction of markets, because asset holders will not want to sell at distressed prices if they then have to mark down their entire portfolios to those prices. Another vicious circle can arise here, because as hedge funds and others sell at distressed prices, banks are forced to mark their books lower, requiring them to tighten credit and leading to a further round of selling. Meanwhile, long-term investors do not enter the market because they believe prices will fall still further. These problems are compounded by the fact that many assets are valued with respect to credit derivative prices (for example, the ABX index), which are highly volatile and appear to overestimate probabilities of default.

It is less than 15 years ago that the Securities and Exchange Commission began to require 'fair value' accounting. Fortunately, that was well after the debt crisis of the early 1980s, when the nine New York money centre banks found themselves with aggregate exposure to developing country sovereign debt of about 250 per cent of their equity capital. If these assets had been marked to market when Brazil, Mexico and others stopped paying, the banks would have been 'under water' (assuming a market valuation of less than 60 cents on the dollar – which is not much below where they settled in the Brady Plan, almost a decade later). The world financial system faced a serious danger of collapse. What was the solution? Jacques de Larosière and Paul Volcker saw the threat clearly and successfully pressed for forbearance, that is, classifying this debt as being 'held to maturity'. This cannot be done nowadays.

Ben and Eli argue that '... suspending fair value accounting ... would do more to reduce confidence ... than any short-term relief it might bring ... But there are legitimate questions regarding how to value assets when markets are illiquid. In response ... the International Accounting Standards Board has established an expert panel ...'. It will report in due course. Meanwhile, I think it would be wise and not confidence-impairing to limit the application of fair value accounting to assets on trading books, while excluding assets which are bought to hold till maturity. The third dysfunctionality I want to highlight is that of the (dis)credit(ed) rating agencies (CRAs). The natural monopoly characteristics of this industry have been enhanced by the dependence of regulators on ratings – that is, the CRAs have been granted a 'regulatory licence'. Pension funds, insurance companies and others may invest only in securities given 'investment-grade' ratings by a small number of agencies specifically designated by the regulators. But they are subject to considerable conflicts of interest, use models which are suspect, produce ratings that are lagging indicators and add little, if any value (Levich, Majnoni and Reinhart 2002). Ben and Eli tell us that 'regulators have begun to investigate the ways in which ratings are sometimes "hard-wired" into regulatory and supervisory frameworks'. They also propose better management of conflicts of interest 'in line with the revised International Organisation of Securities Commissions Code of Conduct'. The 2005 version of the Code was fully implemented, however, with zero effect (see AMF 2008); I would suggest that self-regulation is unlikely to accomplish anything.

So how else can the CRAs be dealt with? The heart of the problem lies in designing a system with the right incentives. Normally public goods should have public funding, but not here – there are obvious problems that would arise with public involvement in ratings. I would argue that subscription (the pre-1975 model) should be revived, perhaps via a levy on users. We should also require the agencies to provide more information regarding their judgments, including an assessment of the liquidity characteristics of an instrument and the likely volatility of its market price. Moreover, rating ranges should be provided in many instances, in preference to point estimates. The business of providing ratings should be separated from the advisory/consultative side of the business. Most important, the 'regulatory licence' should be eliminated.

Let me conclude by commending Ben and Eli on their summary of the nature of this crisis and the manner in which it has unfolded. I think that more work needs to be done to address problems in the capital markets, which this crisis has exposed. At the same time, we need to avoid merely 'fighting the last war' by remembering that while all '... crises are the same ... All crises are different' (Portes 1999, pp 471–472).

There is an alternative. That this conference session is being held on Bastille Day brings to mind an admittedly radical policy – to 'shoot the speculators' (the guillotine being an outdated technology). The then French Finance Minister, Michel Sapin, cited this historical precedent in his parliamentary intervention on the crisis of the EU Exchange Rate Mechanism in autumn 1992. One can easily imagine that it would be a popular policy now.

### References

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### 2. Grant Spencer

The paper by Ben Cohen and Eli Remolona provides a good overview of the current episode of financial turmoil and is a useful introduction to what will no doubt be an interesting conference. In my comments I would like to briefly discuss the effects that the financial turmoil has had on New Zealand so far, and its implications for the Reserve Bank of New Zealand (RBNZ, which is also the prudential regulator). I think that this is likely to be of some interest given that New Zealand's very open capital markets and relatively high debt levels have presented some very specific issues in the current adverse global credit environment.

Overall, New Zealand's financial system has so far withstood the global financial turmoil well. This is partly because it has little direct exposure to the mortgage market in the United States, and NZ banks have not developed the complex structured financial instruments which have been a key contributor to the recent turmoil. New Zealand has, however, been affected by the global tightening of credit markets. So while the banking sector has not suffered any shortage of equity, it has been affected by the tighter cost and availability of debt. As defaults on US sub-prime mortgages have risen, liquidity in global capital markets has become scarce. NZ (as well as Australian) banks source a significant degree of funding from international capital markets (around 40 per cent of bank liabilities in New Zealand are external) and often at short maturities. In both Australia and New Zealand, the spread to overnight indexed swaps increased in mid 2007 and has remained well above its long-run average, although it is worth noting that these spreads are not as large as those in the United States and Europe.

The significant external exposure of the NZ economy is manifest in its sizeable current account deficit, with a large share of the nation's external liabilities held on NZ banks' balance sheets. Clearly, any disruption in the flow of funds to NZ banks will be potentially disruptive for the macroeconomy. In other words, a further tightening of global credit markets could have significant implications for macrofinancial stability as well as the prudential soundness of the banking system. Related to this, there is concern about liquidity shortages in the foreign exchange market. Although the NZ currency is presently above its long-run average, it has been below the level suggested by the historical relationship between the exchange rate and the yield differential with the United States. The declining appetite for risk in global financial markets and the international economic slowdown may put downward pressure on the NZ currency, which could pose risks to markets and the economy if the adjustment is sharp.

The immediate policy response in New Zealand to the global financial market turmoil has been to adopt a quite accommodating liquidity stance for banks. The RBNZ implemented changes to its domestic market operations to ensure that banks would be able to access liquidity should the credit squeeze become more acute. The RBNZ increased settlement cash levels, narrowed the discount margin and lengthened the discount window to 30 days. We also expanded the range of securities we would accept as collateral to encompass NZ dollar, NZ-registered, AAA-rated residential mortgage-backed securities.

The RBNZ is also currently undertaking a review of its prudential regulation, specifically focusing on liquidity management by banks. It is likely that this review will produce recommendations aimed at ensuring that banks lengthen the maturity of their wholesale funding as well as diversify their sources of liquidity. Given the reliance of the major NZ banks on short-term wholesale funding from the international markets, I would expect that the new policy will require more conservative liquidity profiles than we see at present. In implementing the new Basel II regime, the RBNZ has focused on ensuring that bank holdings of capital are adequate to withstand credit losses from a significant downturn in the domestic housing market. In the current environment, this is a very real risk over the coming year or two. The RBNZ will soon also have responsibility for the regulation of non-bank deposit-takers and the insurance sector. The relevant legislation is currently in the House of Representatives. An important role of these regulatory frameworks is to provide buffers against the sort of international financial shocks that we are now experiencing.

Finally, I would note that the credit creation process has been very procyclical in New Zealand over recent years. Aggressive credit expansion by the banks through 2003–07 contributed to the biggest housing boom seen in decades. Subsequently, since mid 2007, credit standards have tightened sharply as the housing market has turned down – particularly with the overlay of tight global credit markets. Factors contributing to this procyclicality, in my view, include asymmetric incentives facing bank management, mark-to-market accounting, the new International Financial Reporting Standards provisioning requirements, and point-in-time capital models. A potential response to this could be a countercyclical prudential policy, which could operate by means of the Pillar 2 supervisory overlay. Such an approach has been discussed at earlier RBA conferences, along the lines of the work of Claudio Borio and Philip Lowe. However, our own simulations suggest that the required moves in capital ratios would be too large for practical implementation. The cyclical component would swamp the prudential component, thereby undermining the original rationale for the capital adequacy policy. An alternative could be a more countercyclical monetary policy. However, as we have found in New Zealand in recent years, this can also be very difficult if the domestic cycle is out of sync with the global economic cycle.

# 3. General Discussion

The paper and discussants' comments provoked debate about the magnitude of the 2007 and 2008 financial market turmoil to date, and its likely impact on the real economy. This was partly in response to Richard Portes's suggestion that, on a range of metrics, financial conditions did not look as bad as they had been during recent financial crises. Some participants thought this view was too sanguine, suggesting that the decline in the US housing market, according to some measures, had been greater than during the Great Depression. In line with this, a number of participants suggested that – notwithstanding the positive effect of recent policy responses – a substantial part of the effect of the financial turmoil on the real economy was yet to materialise, and that weaker economic outcomes (assuming they did occur) would lead to further losses for financial institutions.

The discussion moved on to a debate about the causes of the recent financial turmoil. Some participants suggested that low global interest rates early in the decade and the extent of financial market innovation were both potentially factors which led to and/or exacerbated the crisis. In particular, the creation of some complex financial instruments had made risk exposures more difficult to assess and added 'opacity' to some parts of the financial system. One participant suggested that risk had become more concentrated, not less, in part because the largest dozen banks in the world now handle the bulk of the transactions, hold a large part of this risk, and operate with similar business models. Consequently a problem at one major institution can have global ramifications. More generally, participants argued that the model of banking had changed in recent years, with many commercial banks now operating in similar ways to investment banks, particularly in their use of high-leverage strategies. This raised the general question of whether it was appropriate for all banks to operate in this way. Other participants argued that systems of executive compensation had also evolved such that there were conflicts of interest in the private sector. This met with some debate, as some suggested that private-sector agents needed to have more 'skin in the game', while others thought that recent large declines in bank share prices and the loss of managements' reputation, by association with any bank failures, were incentive enough to promote prudent risk management. In response to the question of how problems in one part of the financial markets could lead to the global turmoil, one participant suggested that the underlying problem had been the house price bubble in the United States, and the sub-prime mortgage problems were just one symptom of this much bigger concern.

Much of the rest of the discussion was focused on the role of policy-makers in managing risk in the financial system. One participant argued that a key goal for macro-prudential regulators is to determine how to predict crises by identifying events which might indicate the advent of a crisis. In this regard, a few participants highlighted the importance of large increases in the prices of assets, particularly those that form the basis of collateral and accompany rapid increases in credit. With regards to potentially adverse structural change, the institutionalising of mark-to-market accounting was raised as a possible policy concern on a number of fronts. First, it was suggested that accounting has become quite liberal and in some ways more art than science. Second, there was some question about whether

it should be the role of the authorities to create markets where they do not exist, so that mark-to-market accounting could work effectively. Related to this, there was a debate about the role of central banks in becoming market-makers of last resort, with the attendant moral hazard concerns. Some thought the moral hazard issues were significant, while others were of the view that it had not been a major problem in previous episodes.

There was a brief discussion about procyclical prudential regulation. Some participants agreed with Grant Spencer's comments, suggesting that it was unlikely that loan-to-valuation ratios (LVRs), or procyclical liquidity and capital requirements could be implemented in a way that had a substantial effect on reducing credit cycles. In response, Eli Remolona suggested an alternate view, citing developments in Hong Kong in the early 1990s as an example of the successful use of procyclical LVRs. Hong Kong's LVR was lowered significantly during the run-up in house prices, which helped limit the extent of large systemic problems and bank failures when house prices subsequently declined.