

## Grant Spencer: Prudential lessons from the Global Financial Crisis

Presentation by Mr Grant Spencer, Deputy Governor of the Reserve Bank of New Zealand, to the Financial Institutions of NZ 2012 Remuneration Forum, Auckland, 3 May 2012.

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New Zealand has a small open economy and a financial system that is well integrated into the international financial system. So, not surprisingly, New Zealand was heavily affected by the Global Financial Crisis (GFC) and the global recession that followed.

In the real economy, our export prices tumbled and GDP growth remained negative or flat through most of 2008 –2009. In the banking system, while we saw no failures, the banks were unable to access funding from the international markets for a number of months. This was alleviated through Reserve Bank liquidity support and government guarantees.

In the non-bank sector of course, we saw a string of finance company failures. These were related more to the domestic property sector downturn and weak internal governance than international developments. However, increasing investor caution and competition for funding in the wake of the GFC did increase the funding pressures on finance companies.

The GFC has taught us many lessons and it will continue to do so as we witness the follow-on effects of the original shock.

Today I want to talk about three key lessons from the GFC that I regard as the most important for prudential policy in New Zealand. Indeed I believe they are very relevant for all countries with well developed banking systems. The three lessons are:

1. The contagion effects of a crisis can be heavily amplified by the contraction of liquidity in funding and asset markets.
2. The credit cycle is a major driver of risk in the financial system – the seeds of crises are often sewn in the credit booms that precede them.
3. Large bank failures can have devastating effects on both financial systems and government finances. Governments must find ways of protecting the financial system from bank failures without having to resort to bail-outs.

I will look at these three lessons in turn, considering the broad international responses we have seen, and looking specifically at what we are doing here in New Zealand.

The net result of all this is a raft of changes aimed at strengthening our existing prudential regime for banks, which we believe will enhance the soundness of New Zealand's financial system going forward.

### 1. Heightened contagion and liquidity risk

In the GFC, the first round of credit losses was seen in institutions holding US sub-prime mortgage investments. However, the uncertainty around who actually held such investments led to a sharp contraction of liquidity in a much wider range of markets. This loss of global liquidity had adverse consequences that were much greater than the initial sub-prime losses. Many financial institutions were simply unable to refinance maturing debt in markets that had frozen.

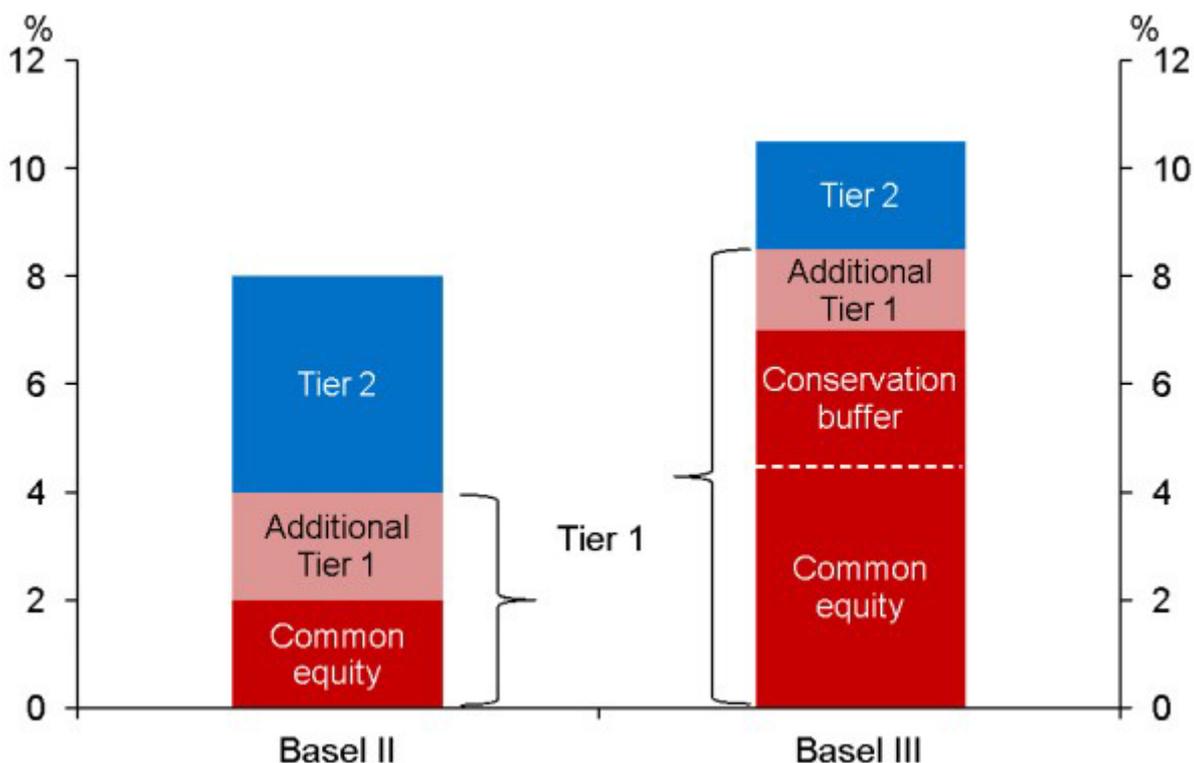
In many cases, liquidity problems translated into solvency problems when banks had to revalue assets on the basis of very thin and distorted market trading. The consequent amplification of contagion effects was greater than expected by regulators and banks alike.

The primary response to the heightened vulnerability of the international banking system has been a concerted strengthening of prudential capital and liquidity standards under the banner

of “Basel III”. The new framework was released by the Basel Committee in late 2010 and is currently being implemented by banking authorities internationally. While some countries, such as Australia and New Zealand, are moving faster than others, the new Basel III capital standards are expected to be widely adopted over the coming few years.

On the capital side, the emphasis has been on increasing the loss absorbency of bank balance sheets by raising the quality and quantity of capital (Figure 1)

Figure 1  
**Basel III versus Basel II capital requirements**  
 (percent of risk weighted assets)



Source: RBNZ

The Basel III standards for increased liquidity buffers are being less uniformly adopted than the new capital standards. This is perhaps not surprising given this is the first attempt at cross border coordination of bank liquidity requirements. It also reflects significant country differences in the liquidity of sovereign debt markets – the liquid asset of choice by the Basel Committee – and in approaches to liquidity provision by Central Banks.

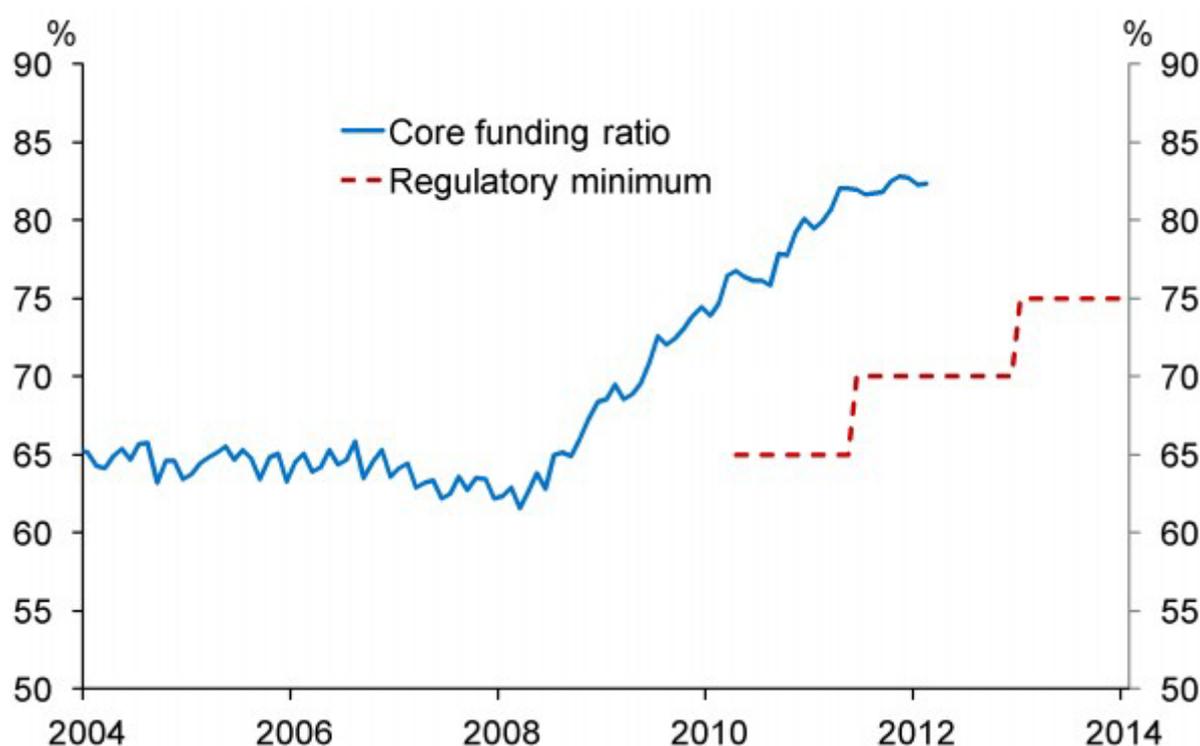
In New Zealand, as in many other countries, the GFC revealed liquidity risks that were much greater than the Reserve Bank or the banks had expected. At the height of the crisis, in late 2008/early 2009, the liquidity shortfall was met through special liquidity facilities at the Reserve Bank and additional parent bank funding as well as Government guarantees on bank deposits and debt securities.

In order to ensure greater bank self reliance going forward, the Reserve Bank introduced a prudential liquidity policy in April 2010. The policy includes minimum liquid asset requirements and, perhaps more importantly, a minimum core funding ratio (CFR) (Figure 2). This requires a minimum proportion of total lending to be funded by more stable “core funding” instruments, ie retail deposits and long term borrowing (over one year).

The banks' core funding ratios had reached very low levels in the period leading up to the GFC. After the crisis, banks realised they needed to strengthen their core funding and were also encouraged to do so by the rating agencies. The new CFR policy reinforces this trend and will ensure that strong funding buffers are maintained in the future, including through periods of greater risk appetite.

The CFR is currently set at 70%. Last November, due to difficult international market conditions, the Reserve Bank deferred a planned further increase in the CFR to 75% which had been scheduled for June 2012. We are confirming today our intention to increase the CFR to 75% on 1 January 2013.

Figure 2  
**Core funding ratio of NZ banks**  
 (percent of loans and advances)



Source: RBNZ

The heightened awareness of contagion and liquidity risks has led to a range of other policy responses in addition to the strengthening of capital and liquidity buffers. Such measures include extra safety requirements for large global “systemically important financial institutions” (SIFI’s), and changes to the “wiring” of the financial system in an attempt to reduce contagion risks.

Examples of such measures include the “Volcker rule” in the US, which is aimed at isolating the risks from proprietary trading, and the Vickers recommendations in the UK, which propose to separate retail banking from investment banking. The challenge for such policies is to achieve a sustained reduction in financial system risk rather than simply distorting market behaviour.

Some countries have also adopted measures intended to restrict executive remuneration in banking. This has occurred mainly in countries such as the UK and US where bail-outs resulted in the Government becoming a major bank shareholder. In Australia, APRA has not

imposed direct controls, but has set down guiding principles for executive remuneration and incentive schemes.

## **2. Countering the credit cycle**

There is no doubt that the severity of the GFC was aggravated by the sustained boom in asset prices and credit that preceded it. An important contributing factor to the boom was the persistently easy global monetary condition over this period.

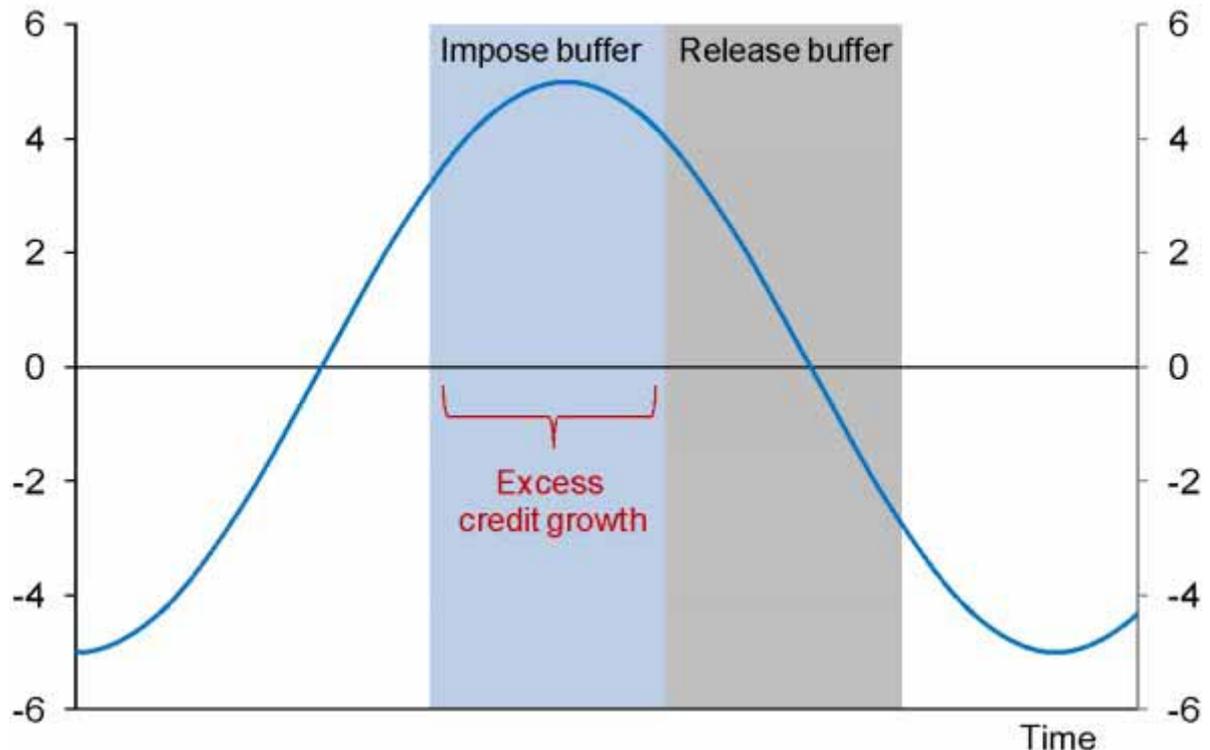
A further contributing factor was the tendency for prudential policies to be pro-cyclical. For example, new provisioning rules brought in by IASB in the early 2000's, prevented banks from taking a "through the cycle" approach to loss provisioning. Also, many banks had adopted capital models that tended to reduce the capital backing of loans when markets were strong and increase capital backing when markets were weak.

In this sense, the existing prudential framework failed to take account of the growing systemic risk arising from the sustained boom in credit and asset prices that occurred between 2002 and 2007. The lesson was clear: prudential policy should take more account of macro-financial risks as well as the micro-financial risks specific to individual banks.

In response to this lesson, macro-prudential policy has become an active new area of policy development internationally. In the Basel III regime, the important new macro-prudential element is the counter-cyclical capital buffer (CCB): an additional capital requirement that local supervisors may apply when credit is booming, and remove when the cycle is turning down (Figure 3). A range of other instruments are also being developed and applied in various countries under the general heading of "macro-prudential" policies.

In broad terms macro-prudential policies are aimed at reducing financial system risk by introducing additional safeguards, such as capital and liquidity buffers or collateral requirements that vary with the macro-credit cycle. Such policies will also tend to have the effect of either: 1) dampening the credit cycle; or 2) dampening international capital flows and hence exchange rate pressures. For those reasons, macro-prudential policies might be expected to play a useful secondary role in helping to stabilise the macro-economy.

Figure 3  
**Countercyclical capital buffer**  
 (Credit-to-GDP ratio, deviation from trend)



Source: RBNZ

At the Reserve Bank we have been doing a lot of thinking about potential macro-prudential policy instruments and how they might be used<sup>1</sup>. The four instruments we currently consider viable candidates are:

- The Counter Cyclical capital Buffer
- The Core Funding Ratio
- Adjustments to sectoral risk weights<sup>2</sup>
- Limits on Loan to Value Ratios (LVR's)

The Reserve Bank already has powers under the Reserve Bank Act to modify prudential instruments with the objective of financial system stability and efficiency. However, this is a new approach to prudential policy and as such we are developing, along with Treasury, an explicit macro-prudential governance framework to be agreed with the Minister of Finance as a basis for policy decisions going forward. We expect that the Reserve Bank will take the lead role in implementing macro-prudential policy, subject to consultation with Government.

<sup>1</sup> See Reserve Bank Financial Stability Reports; Bollard (2011) "Where we are going with macro and micro-prudential policies in New Zealand", Speech to the Basel III Conference, Sydney; Ha & Hodgetts (2011) "Macro-prudential instruments for New Zealand: A preliminary assessment", Reserve Bank of New Zealand workshop on Macro-prudential policy; Spencer (2010), "The Reserve Bank and macro-financial stability", Reserve Bank of New Zealand bulletin 73(2).

<sup>2</sup> As used to calculate Risk Weighted Assets under the Basel capital adequacy regime



### 3. Stronger failure resolution mechanisms

During the GFC, many failing banks were bailed out by governments who feared the systemic consequences of large scale creditor losses. There were some exceptions: in cases such as Bear Stearns a private sector “white knight” was found<sup>3</sup>; in the case of some medium sized banks the FDIC resolution regime could be implemented (eg Washington Mutual); in the case of the Icelandic banks losses were imposed on both domestic and foreign creditors; and of course Lehman Brothers was allowed to fail under normal commercial process.

While there were glimpses of what could be achieved through effective failure resolution mechanisms, the widespread fallout from the Lehman collapse tended to reinforce the “too big to fail” consensus.

Probably the most costly case of bank bail-outs occurred in Ireland where the government is estimated to have spent close to 30% of GDP on bank recapitalisations between 2008 and 2010. The burden this placed on the Irish taxpayer contributed to the downfall of the Irish government and the need for an IMF-led rescue package.

The lesson was clear: country authorities need better options for dealing with bank failures than having the binary choice of either a full taxpayer bailout or an unconstrained liquidation.

Many countries have responded by introducing stronger powers for their banking authorities, new mechanisms for absorbing losses ahead of default and more systematic procedures for resolving actual failures. Canada, the UK and the US are good examples. A range of approaches have been taken. New tools such as “living wills” and “bail-in bonds” are being used to enhance the likelihood of an ailing bank’s survival.

Statutory management powers are being strengthened and new resolution structures such as bridge banks are being established to facilitate the orderly resolution of failing banks without recourse to government funds.

The key international forum on these matters, the Financial Stability Board (FSB) has set clear guidelines on how failure resolution regimes should be structured. In particular FSB recommends:

“The resolution plan should facilitate the effective use of the resolution authority’s powers with the aim of making feasible the resolution of any firm without severe systemic disruption and without exposing taxpayers to loss while protecting systemically important functions. It should serve as a guide to the authorities for achieving an orderly resolution, in the event that recovery measures are not feasible or have proven ineffective.”

(From FSB, Key Attributes of Effective Resolution Regimes for Financial Institutions, Annex III, October 2011)

In New Zealand, while we already have quite strong failure management powers within the Reserve Bank Act. We know that the failure of any of our large systemic institutions would require close official involvement. Our main response to this third lesson from the GFC has been to enhance our existing failure management framework by including a resolution structure called “Open Bank Resolution” (OBR).

The OBR framework requires banks to structure their systems so that, in the case of a failure where losses exceed a bank’s available capital reserves, the excess losses can quickly be allocated across depositors and other creditors. The intention here is to allow a bank failure to be resolved quickly, say over a weekend, with depositors having access to their diminished, but guaranteed balances on Monday morning. The bank (under statutory

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<sup>3</sup> Albeit with the Federal Reserve taking a significant amount of risk.

management) and its customers would be free to participate in the payments system from the re-opening, thus minimising any systemic impact of the failure.

The Reserve Bank has been developing the OBR policy over a number of years; the GFC experience provided the final prompt to make it operational. The policy can be seen as a complement rather than a substitute for the various “recovery plan” tools such as living wills and loss-absorbing debt instruments.

OBR is also fully consistent with the Reserve Bank’s local incorporation and outsourcing policies that were introduced in the early 2000s to help protect New Zealand’s largely foreign owned financial system from shocks to parent institutions.

It must be emphasised however that OBR is just one tool in the resolution toolbox. The government may or may not implement OBR when dealing with a bank failure; the choice will depend on a number of factors. But it is important for government to have this option available. OBR gives the government a realistic alternative to the costly bail-out option should a large bank get into difficulties. The policy also serves as a reminder to investors that there are no guaranteed institutions, thus helping to limit moral hazard in the financial system.

## **Conclusion**

The GFC continues to teach us many lessons. Today I have focussed on three key lessons for prudential regulation that I believe are relevant for New Zealand and indeed all countries with developed banking systems.

The first is that financial institutions are more vulnerable than we previously thought to network contagion effects which can be heavily amplified by the evaporation of market liquidity.

In response, we have “upped the game” on liquidity requirements for banks, and are doing the same with capital under the “Basel III” capital adequacy framework.

Second, we need to be more active in offsetting the build up of macro-financial risks. We are developing macro-prudential policy tools for this purpose which will dovetail with our existing micro prudential framework. Such tools will not prevent credit cycles in the future, but should reduce the risk associated with them.

The macro-prudential policy will be focused primarily on financial system stability. However, by its nature, is likely to lend support to monetary policy. In this regard, macro-prudential policy should also “keep an eye” on monetary policy objectives.

Third, and finally, while we can reduce the likelihood of bank failures, we also need to be better prepared for the rare event of a large bank failure. The OBR option will help to protect both the financial system and the government accounts from a large bank failure.

Learning these lessons and improving our prudential policy framework will make us better equipped to withstand the effects of future financial shocks.