The macroprudential policy framework in New Zealand

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Introduction

Like many countries, New Zealand has developed a macroprudential policy framework over the last 5 years. I only have time to make some key remarks about that framework, but I will provide references to relevant Reserve Bank of New Zealand (RBNZ) publications for interested readers.

New Zealand's macroprudential policy framework focuses on what Borio (2009) described as the 'time dimension' of macroprudential policy – that is, leaning against procyclicality in the supply of credit. This is not to say that we consider cross-sectional distributions of risk unimportant. It is more that our existing approach to the calibration of prudential settings such as capital and liquidity rules seeks to be sufficiently robust to protect the system as a whole rather than simply ensuring the solvency of a particular individual institution.

An interesting historical point in the New Zealand context is that in the early 2000s (prior to the global financial crisis (GFC)) interventions of a sort we would now call 'macroprudential' were contemplated because of significant concern about the balance of monetary policy pressure and the overvaluation of the exchange rate. A booming housing market was insulated from monetary policy restraint because the high level of the exchange rate (weakening export activity) meant limited interest rate rises were required. This prompted a search for interventions that would restrain domestic demand without exacerbating pressures on the tradable sector. While no formal policy was actually implemented, possibilities including loan-to-value restrictions were being contemplated by 2006 (see Blackmore et al (2006)).

NZ macroprudential policy implementation

As in other countries, credit conditions in New Zealand tightened in the immediate wake of the GFC. Once credit began to flow more smoothly from around 2011, lower long term mortgage rates put intense upward pressure on house prices, particularly in Auckland (New Zealand's largest city). Auckland house prices fell slightly during the GFC, but then rose sharply between 2012 and 2015 (Figure 1), to reach around 9 times the average income. Banks resumed high volumes of high loan-to-value ratio (LVR) mortgage lending by 2012 after being unwilling to do substantial high LVR lending during the GFC.

Internationally, the idea of cyclical adjustments to prudential requirements to lean against procyclicality had become more mainstream by 2011, as the Basel Committee on Banking Supervision worked on the countercyclical capital buffer rules

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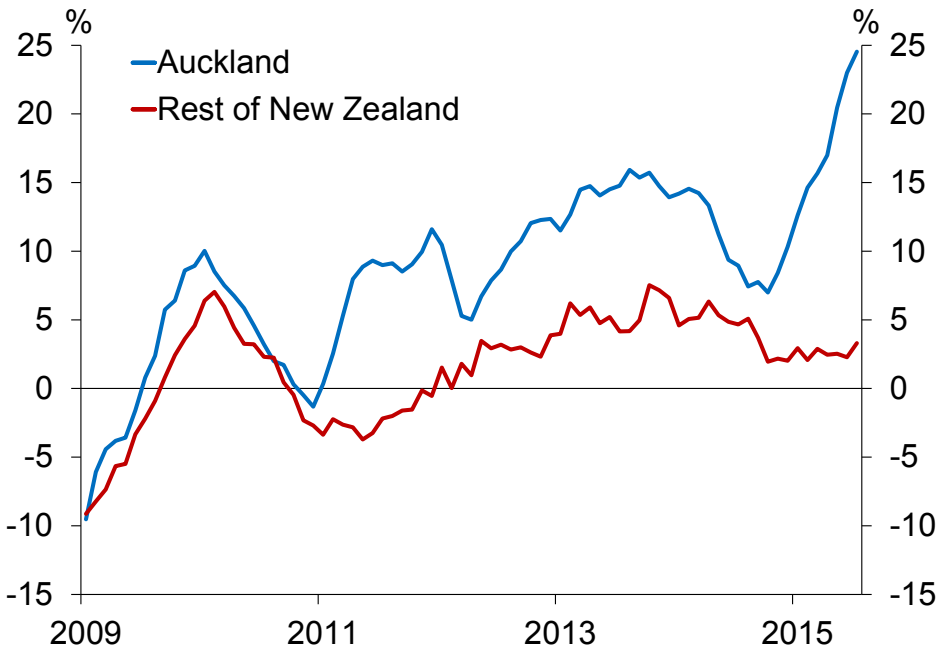
and a wide variety of countries introduced or tightened LVR restrictions and other tools (see, eg, Lim et al (2011)). While the RBNZ had the existing legal powers necessary for cyclical variation of prudential tools, it was considered appropriate to agree on a framework with the Government and Treasury that formalised the objectives of macroprudential policy, the tools under consideration, and the consultative processes that would be followed if macroprudential tools were to be used. The Memorandum of Understanding on Macroprudential Policy was put in place in May 2013 (see RBNZ (2013)) and is described in detail in Rogers (2013) and Wheeler (2013). The Memorandum establishes that the RBNZ initiates any macroprudential policy action, but only after consultation with the Treasury and Minister.

House price developments after the global financial crisis

(annual percentage changes) Figure 1

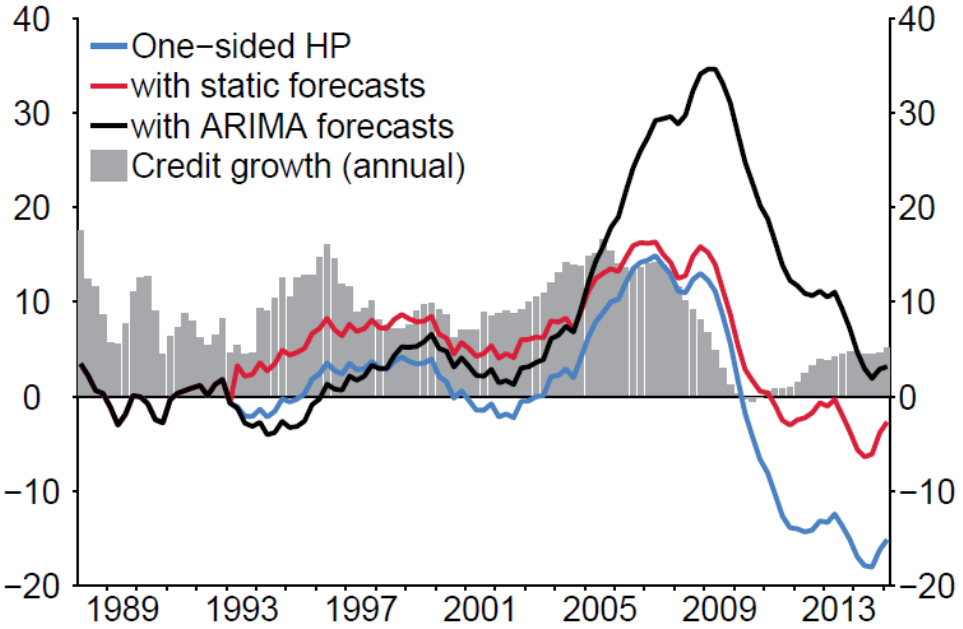


To support macroprudential policy decision making, the RBNZ has examined international literature on relevant indicators and compiled a regular macroprudential chartpack which is published on its website. However, our experience suggests that there will still be a significant discretionary element in decisions to apply macroprudential tools, reflecting the likelihood that each financial cycle will differ in important ways. For example, while BIS work suggests the so-called credit gap was a fairly reliable indicator of risk prior to the GFC, most countries implementing macroprudential policy tightening since the GFC (such as New Zealand) are doing so in the context of a significantly negative credit gap (using one-sided HP filters). Credit has been growing moderately in New Zealand and key asset prices have been reaching record levels, so there is clear evidence of risk, but credit is well below its pre-crisis trend (Figure 2). This demonstrates that lessons (and indicators) derived from past financial cycles are not always reliable guides to the future. For these reasons, the chartpack is used to inform risk assessment (which is then discussed in the RBNZ's Financial Stability Report) rather than the indicators being used mechanically to set policy.

The RBNZ was relatively unique in using a 'speed limit' approach for LVR restrictions and intending the restrictions to apply temporarily. In mid-2013, rules were introduced that required banks to reduce the volume of high LVR lending to below 10% of new commitments (from circa 30% prior to the new rules). Because there is scope to shift lending outside of the banking system (eg via securitisation), temporary restrictions may be more effective since the costs of setting up new lending business models may be unjustifiable when the LVR restrictions are expected to be temporary. More generally, temporary macroprudential interventions (such as cyclical monetary policy) are likely to be a useful complement to permanent policy settings if the central bank is able to diagnose elevated financial risk and respond to it, rather than leaving policy settings tighter permanently.

Measures of New Zealand's "credit gap"

(excerpt from RBNZ Macroprudential Chartpack) Figure 2

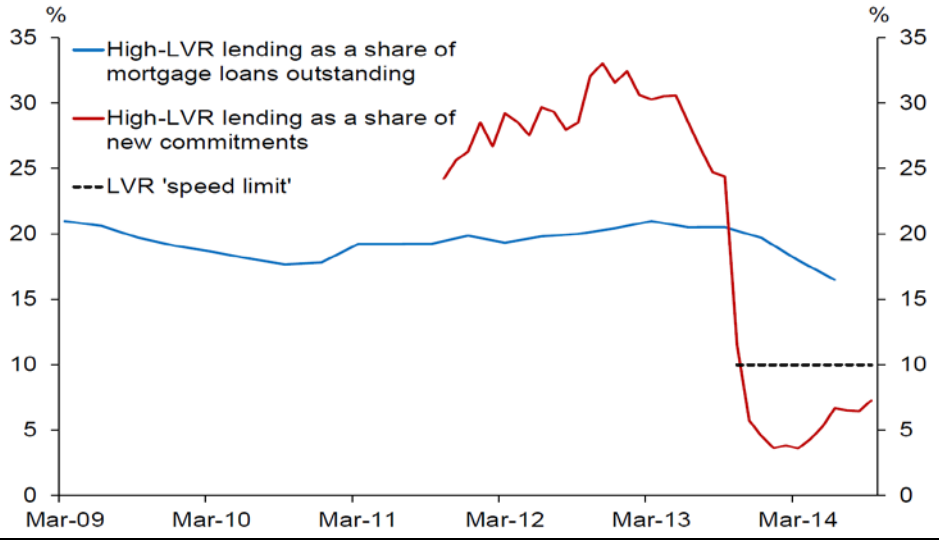


The 'speed limit' approach allows some high LVR lending to continue, which allows banks to deal with special cases (eg restructuring loans for customers in unexpected difficulty) which would otherwise be problematic.

It is difficult to produce a formal counterfactual analysis of the impact of a policy such as LVR restrictions. A key and enduring benefit of the policy is to improve financial system resilience by reducing the proportion of high LVR loans on bank balance sheets (Figure 3). In terms of macroeconomic impacts, our approach has been to look at a wide range of housing market indicators, both informally and formally in a VAR model (see Price (2014)). The VAR model is estimated up to the point LVR restrictions are put in place and then used to predict the evolution of key variables like house prices contingent on the actual outturns for certain exogenous variables such as external migration. If actual house prices fall below the track predicted by the VAR analysis during the period of LVR restrictions, this provides some evidence the LVR policy has been effective.

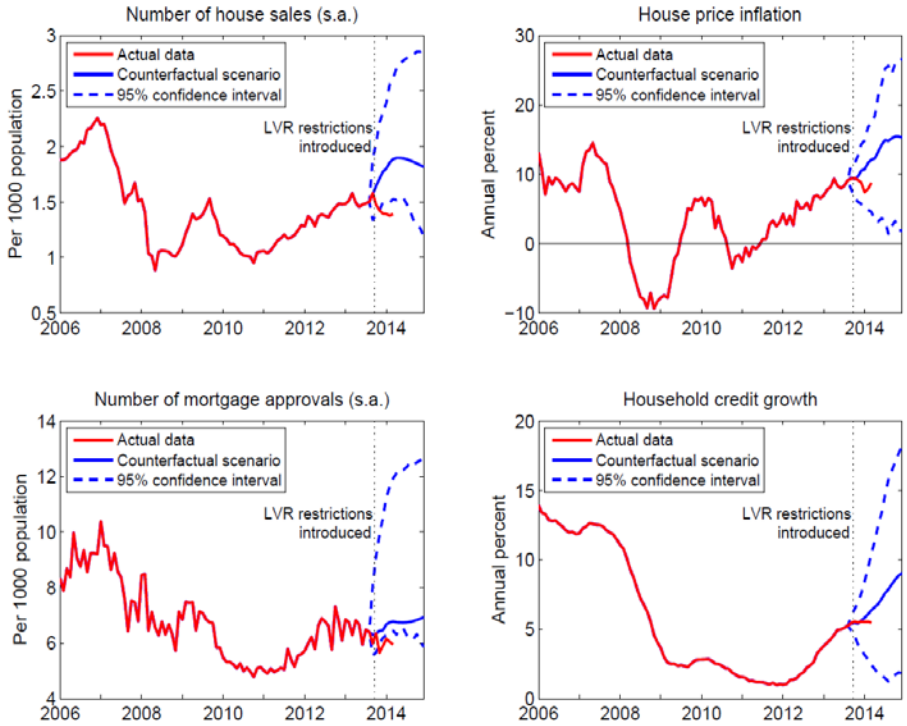
Stock and flow of high-LVR mortgage lending

(>80% LVR as the share of all lending) Figure 3



Counterfactual scenario without LVR restrictions

(from Price (2014)) Figure 4



Note: the estimated impact of the policy can be gauged by comparing the actual line (red) to the counterfactual scenario (blue).

Figure 4 shows that most variables moved in the expected direction (relative to the model prediction) when the policy was put in place. Our overall view is that LVR restrictions had a discernible impact on house prices, slowing them through 2014, but that the impact was not particularly large relative to the ongoing house price cycle, which intensified again during 2015, particularly in Auckland (Figure 4). This was

consistent with our expectations prior to enacting LVR restrictions – they were not expected to dramatically alter the house price outlook.

The issues faced in 2015 were somewhat different from those leading to the application of nationwide LVR restrictions in 2013. First, pressures (and apparent overvaluation) were most evident in the Auckland market. Second, there was evidence of increased investor activity in Auckland. Analysis of Irish default experience and other evidence suggest that investor lending would be relatively risky in a severe downturn (see RBNZ (2015a, 2015b)). For these reasons, the RBNZ proposed tighter restrictions on lending to people buying investment properties in the Auckland region, essentially requiring 30% deposits for that sort of lending. At the same time LVR restrictions outside Auckland were eased with the speed limit on high LVR loans (LVR>80%) raised from 10% to 15%.

Reflections on the role of macroprudential policy based on New Zealand experience

The first point I would like to make is that cyclical macroprudential policy is complicated, and is no substitute for striving for the appropriate permanent policy settings. When the RBNZ contemplates cyclical policy settings, we first consider whether other permanent policy adjustments would be a more efficient way to solve the underlying problem. Before LVR restrictions were put in place, the RBNZ made permanent changes to our housing risk weight rules, and discussed with the government the possibility of initiatives to boost residential dwelling supply. For countries that may have systemic risks arising from issues such as foreign currency-denominated lending to the household sector, I would advocate concentrating resources on permanent responses to these issues before turning to cyclical policies once all desired permanent policies are in place.

We have continued to consider the potential relationship between monetary and macroprudential policy in recent years (see Dunstan (2014)). In general, I think we agree with the views expressed by Erland Nier earlier – that the two policies have separate goals and tools, and are able to operate independently while taking the other into account. However, at the margin, the policies may be able to assist each other. One obvious example would be easing of macroprudential policy where monetary policy has reached the zero lower bound. I also mentioned above that the RBNZ had an interest prior to the GFC in macroprudential policy as a way of shifting the balance of monetary policy sector towards the nontradable sector.

There may also be times when one policy may have an unusually large impact on the other's objectives. For example, the very low level of interest rates worldwide has been seen as a potential cause of risk-taking behaviour and asset bubbles (see Stein (2013)). With respect to the household sector and house prices, in my opinion these risks are probably larger than for other asset markets. For example, households may take a myopic view of the current level of interest rates and push house prices up on the assumption rates will stay low forever. House prices may then come under downward pressure in the future if interest rates normalise or the high level of house prices prompts a substantial construction response. This suggests that very low interest rates (while they may be needed for monetary policy objectives) can be detrimental to financial stability. At a minimum, this seems to be a good reason to study the behaviour of housing markets at very low interest rates further.

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