Grant Spencer: Coordination of monetary policy and macro-prudential policy

Speech by Mr Grant Spencer, Deputy Governor and Head of Financial Stability of the Reserve Bank of New Zealand, at the Credit Suisse Asian Investment Conference, Hong Kong, 27 March 2014.

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Accompanying tables and figures can be found at the end of the speech.

1. Introduction

The Reserve Bank expects to tighten monetary policy substantially over the next two years in response to emerging inflation risks. At the same time, speed limits on high loan-to-value ratio (LVR) lending have been in place since 1 October 2013, in order to reduce systemic risk associated with highly leveraged households and rising house prices. The natural question arises: how do LVR speed limits interact with monetary policy? And to what extent should they be coordinated? These questions relate to the current business cycle but also raise a broader question – what are the general principles that should apply in managing macro-prudential policy and monetary policy going forward?

These are important questions that do not have simple answers. They are being explored in the economic policy literature and the Reserve Bank is currently undertaking research to help clarify the issues in the New Zealand context. Today I would like to discuss the Bank's current thinking on the interaction of monetary and macro-prudential policies, and point to areas for further analysis. The Bank sees it as important to communicate its thinking on policy coordination, to maintain the transparency it has built up over many years on monetary policy.

To summarise the Bank's current position, we believe it is essential to retain clear primary objectives for both monetary and macro-prudential policy. These primary objectives are price stability and financial system stability respectively. However, there is an appropriate role for policy coordination in certain circumstances and with certain policy tools. The key in this respect, is to ensure that the primary aims of the two policy arms are not undermined by too heavily diverting the attention of those policies to secondary objectives.

Conceptually, there is a case for coordinating the use of monetary policy and a macro-prudential policy instrument provided they both affect outcomes relevant to the achievement of both policy objectives. In general this condition is likely to be met, but in widely varying degrees.

Most of the time monetary policy and macro-prudential policy should be able to operate largely independently, or have complementary effects on each other that are relatively easy to manage (Table 1). Relative independence will be possible when one or both of the policies are in 'neutral', and therefore imparting little influence on the other's objective. The greatest degree of complementarity will occur when the real and financial cycles are in sync – either rising or falling together as depicted in the SW and NE corners of Table 1. In these situations, coordination should be relatively simple, requiring each policy setting to allow for the complementary effects of the other. Conversely, the two policies will be in greatest potential conflict when the real and financial cycles are out of sync, as depicted in the NW and SE corners of the Table. These are the situations where coordination is difficult but also important. This is where the primary objectives of the two policies need to be carefully balanced. (Table 1)

To explore the policy coordination options more closely, I will first examine what macro-prudential can do for price stability, and then turn the tables and ask what monetary policy can do for financial stability.

2. What can macro-prudential policy do for price stability?

The basic motivation for using a macro-prudential instrument to assist monetary policy is to help support the price stability objective of the central bank. The monetary authority will in most cases welcome assistance from a range of other policies, such as supportive fiscal policy or structural reforms that increase competitive pressures and enhance productivity. Assistance will be particularly welcome from macro-prudential policy if it targets a 'hot spot' such as an overheated housing market. (Figure 1)

Macro-prudential instruments can reduce systemic risk in two ways: 1) by dampening credit and asset price cycles; and 2) by increasing the resilience of balance sheets in the downward phase of the cycle. When thinking about policy coordination, we are mainly interested in tools that work through the first channel, such as LVR restrictions. Our work to date suggests that LVR restrictions have material impacts on the supply of credit (RBNZ (2013)) and hence on the inflation objective. Other macro-prudential tools, such as the Counter Cyclical Capital Buffer (CCB), operate more through the second (resilience increasing) channel, and are less relevant for coordination with monetary policy[1].

Assistance from macro-prudential tools is likely to be most appropriate when monetary policy faces constraints and difficult trade-offs in dampening inflation pressures. For a small open economy like New Zealand, these constraints often emerge as a result of spill-over effects from the global financial markets and, in particular, exchange rate pressures. A good example is the experience with monetary policy during the last housing boom from 2003–2007.

During that time, monetary policy lost a degree of traction as relatively high policy rates and market returns attracted strong capital inflows, resulting in a high exchange rate and downward pressure on long-term interest rates. Borrowers responded by locking in longer term financing at relatively low rates, thereby reducing the impact of official cash rate (OCR) increases. This meant that larger increases in the OCR were required to control inflation, putting additional upward pressure on the New Zealand dollar exchange rate.

There were loud calls at the time for the use of alternative policy instruments to assist monetary policy. Possible candidates included macro-prudential policy and tax measures, such as a capital gains tax or a mortgage interest levy (Treasury and RBNZ (2006)). With hindsight, the use of another policy instrument would have been helpful during this period, to assist in slowing domestic demand and inflation pressure, with less of the work having to be done by the OCR and the exchange rate. LVR restrictions may have been able to assist, given the rapid rates of credit and house price growth at the time which presented risks for financial stability as well as price stability.

Macro-prudential tools may also have been a useful complement to monetary policy in the economic downturn from 2008. If banks had entered the recession with more stable sources of funding and larger capital buffers, then the tightening in credit conditions that ensued after the GFC may have been ameliorated, potentially reducing the need to ease monetary policy as significantly. In this way, the use of macro-prudential adjustments in downturn situations can lower the risk of running up against the zero lower bound on interest rates.

But there can also be significant costs if macro-prudential policy instruments are used too aggressively in support of monetary policy. All macro-prudential instruments create incentives for financial disintermediation– credit flows that avoid the regulation by moving outside of the regulatory perimeter. Over-use of macro-prudential tools in an attempt to

[1] These other macro-prudential tools work by forcing banks to temporarily increase capital or funding buffers during periods of rising asset prices and leverage. Because the cost of capital and/or core funding is likely to be compressed during such periods, any cycle-dampening effects from these instruments are likely to be more limited. However, these tools can have significant effects by improving the scope for banks to continue to lend in the downward phase of the cycle.

manage the credit cycle would likely see disintermediation increase, thus reducing the effectiveness of the policy tools. Moreover, by pushing financial intermediation towards secondary 'shadow banking' channels, excessive use of macro-prudential policy could weaken financial system efficiency and ultimately reduce the soundness of the financial system. We have seen examples of such behaviour in New Zealand's history and in many other countries.

With all these considerations in mind, there may be scope for macro-prudential policy to assist monetary policy, to a limited extent, both in the up and down cycle, provided its primary objective of promoting financial stability is kept firmly in mind.

3. What can monetary policy do for financial stability?

We regard financial stability as a necessary – but not sufficient– condition for macro-economic stability. The GFC-induced recession is evidence enough of the potential for financial instability to generate macroeconomic instability. Further, monetary policy can influence asset price and credit cycles through its impact on bank lending rates. Thus, there is a potential case for monetary policy to assist in promoting financial stability or, at a minimum, not to undermine it.[2] (Figure 2)

The emerging literature identifies a number of channels through which monetary policy can influence risk-taking behaviour and the build-up of systemic risk (Borio and Zhu (2010)). In particular, an extended period of low interest rates can contribute to financial stability risks by increasing risk-taking, leading to a 'search for yield' and compression of credit spreads. In a similar way, an extended period of low interest rates can also lead to an excessive easing of bank lending standards.

Looking at the issue from another angle, a tightening of monetary policy to rein in inflation pressure has often brought an end to credit booms (Drehmann and Juselius (2012)). In other words, sharp movements in interest rates, as well as sustained low levels of interest rates, can lead to financial system stress.

However, a key lesson from the literature and from our own experience is that the transmission of monetary policy to financial stability is far less clear than its transmission to inflation. In particular, the effect of monetary policy on financial stability will depend critically on the state of the financial sector at the time. For example, the impact of an OCR tightening cycle may be very different depending on the starting levels of household and corporate debt and debt servicing capacity.

When are monetary policy adjustments likely to be helpful from a financial stability perspective? This is likely to be in situations where asset and credit markets are buoyant and prudential policies alone are insufficient to constrain a build-up of financial system stress.

For example, by themselves, macro-prudential policies such as LVR restrictions may have limited effects on asset price inflation and the credit cycle. Macro-prudential policies must remain consistent with micro prudential principles and are therefore not generally scalable in the way that interest rates are. Further, the impact of macro-prudential policies can be eroded if there is disintermediation outside the regulatory perimeter, something which becomes more likely if interest rates are set at stimulatory levels. Thus, in a situation where inflation is near the target, but asset markets are rising sharply, assistance from monetary policy can be an important means of meeting financial stability objectives.

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[2] Many countries are currently actively considering how to manage the potential effects of an extended period of loose monetary policy on financial stability. For example, the Bank of England has recently included a financial stability knock-out in its forward guidance on monetary policy (Kohn (2013).

As noted by Federal Reserve Governor, Jeremy Stein (2012), monetary policy"gets in all the cracks" of the financial system. It affects the cost of credit for all borrowers, including those that may be avoiding macro-prudential regulations as a result of disintermediation.

Other policy initiatives that seek to alleviate supply-demand imbalances in asset markets can also be helpful. In the case of housing markets for example, this might involve regulatory reform around zoning and other planning restrictions, or changes in taxation that reduce the incentive for speculative investment.

Should monetary policy respond to a request from the prudential authorities for tighter policy? The key test is whether this is consistent with the primary monetary policy objective of price stability. If monetary policy is diverted too far or too long from its primary objective of price stability there is a risk that the transparency and credibility of monetary policy will be damaged, thus reducing the long-run effectiveness of monetary policy in achieving its prime objective. This potential problem has been emphasised for example by Svensson (2011).

Policymakers and academics around the world have debated the appropriateness of tightening monetary policy on financial stability grounds during credit or asset booms. Broadly speaking, there are two opposing views in the 'lean versus clean' debate:

- The "clean" view was dominant prior to the GFC. This view proposes that monetary policy should not respond to asset or credit booms, except to the extent that they influence inflation pressures. It assumes that monetary policy can 'clean up' the impact on the real economy if the financial cycle crashes, and that the tightening in monetary policy required to lean against a credit or asset price boom would create unacceptable costs for the wider economy. This view implicitly assumes that micro- and macro-prudential instruments can effectively limit the extent of financial system damage in the downturn.
- The 'lean' view has become more prominent since the GFC for two reasons. First, policy makers were surprised how large asset bubbles could emerge under conditions of sustained price stability, prudent fiscal policies, and small output gaps. Second, the output and employment losses and other social and economic costs associated with the aftermath of the GFC proved to be much greater and more deep-set than policy makers expected. The'lean' view proposes that monetary policy should actively lean against credit booms for financial stability purposes. It is assumed that: (i) monetary policy that leans against credit booms is consistent with long-run price stability; and (ii) increased interest rates can be effective in limiting a credit boom with limited costs for the wider economy. This view implicitly assumes that there can be circumstances where prudential policies – both micro and macro – are insufficient to contain financial system risks on their own. (Table 2)

Research is continuing in this area. Although the 'lean' view has become more dominant, in particular reflecting research from the BIS (Borio and Lowe (2003)), there is no consensus that monetary policy should always respond to emerging financial stresses. Rather, there is an emerging consensus that financial stability is a valid secondary objective and that monetary policy may respond to financial stability concerns when such actions are also consistent with the primary price stability objective (Smets (2013)).

4. The New Zealand framework: conditional policy coordination

New Zealand's policy framework might be described as one of conditional policy coordination. That is to say, the two policies retain distinct primary objectives, but are free to lend a hand to the other policy objective, provided their primary objectives are not compromised. In New Zealand, such coordination is facilitated by decisions on macro-prudential and monetary policies being undertaken by the Reserve Bank's Governing Committee, but with clearly distinct mandates for the two policies.

The Reserve Bank of New Zealand has long had a mandate to use its (micro-) prudential policies to promote a sound and efficient financial system. We do not have a mandate to protect the soundness of individual institutions. The macro-prudential policy framework established in 2013 also focuses on promoting a sound and efficient financial system using a set of instruments that may be varied through the financial cycle. A Memorandum of Understanding on macro-prudential policy was signed with the Minister of Finance in 2013 that sets out the objectives, instruments and responsibilities for macro-prudential policy (Rogers (2013)).

The new macro-prudential framework draws lessons from the monetary policy framework. It incorporates a commitment to achieving the objective that it is best suited to financial stability – combined with decision-making at arm's-length from political pressures. However, a key difference is that macro-prudential policy decisions involve a greater degree of consultation with government and the public.

The New Zealand policy framework recognises the interactions between monetary and macro-prudential policies and the logic of conditional policy coordination. In pursuing its primary objective of price stability, the Policy Targets Agreement (PTA) states that monetary policy must have regard to financial stability. And in pursuing its primary financial stability objective, macro-prudential policy is required under the MoU to consider any implications for monetary policy.

5. LVR speed limits and interactions with monetary policy

New Zealand has experienced live issues at the interface of macro-prudential and monetary policies. During 2003–2007, New Zealand experienced one of the highest house price appreciations among the OECD economies. A period of sustained low interest rates since 2009, combined with easing lending conditions and a housing supply shortage has contributed to a resurging housing market with house prices at end 2013 almost 15 percent above the 2007 peak. The Bank responded with the introduction of an LVR 'speed limit', commencing 1 October 2013 (RBNZ (2013)).

The purpose of this LVR restriction is to reduce the build-up of financial system risk by: 1) dampening the rapid growth in house prices; and 2) strengthening households' and the banks' balance sheets. The policy does not ban high LVR lending, but allows banks to write no more than 10 percent of their mortgage commitments at LVRs over 80 percent, and has led to a significant reduction in high-LVR lending. (Figure 3)

Initially, we estimated that the LVR restrictions would dampen annual growth in house prices by 1–4 percentage points; house sales by 3–8 percent, and credit growth by 1–3 percentage points over the first year that the policy was in place. The evidence to date suggests that the dampening effect of the LVR restrictions on house prices has been broadly in line with these expectations. House sales have fallen by 13 percent since September, and there are early signs that this is beginning to translate into weaker house prices and credit growth.[3] (Table 3)

While LVRs have a financial stability purpose, they have been an important consideration in our monetary policy assessment. The dampening effect of LVRs on house price inflation and credit is expected to reduce wealth and credit effects on consumption that might have otherwise increased due to a rapid expansion in house prices. This, in turn, is estimated to have reduced CPI inflation pressures by an amount similar to a 25–50 basis point increase in the OCR.

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[3] Reserve Bank simulations of the counter-factual – what would have happened to house price inflation in the absence of LVR speed limits – suggests house price inflation would have been about 2.5 percent higher than its current level. We are continuing to monitor the effects of LVR restrictions and will publish new estimates of their impact in the Reserve Bank's May *Financial Stability Report*.

Earlier this month, in response to broadening inflation pressures, the Reserve Bank began an OCR tightening cycle after three years of no change in the policy rate. Given that the LVR restrictions began to moderate the housing cycle from October 2013, the monetary policy tightening cycle might have needed to be more accentuated in their absence. While the main benefit of the LVRs has been to redress the impact of the easier lending conditions, they may also have helped to take some pressure off the New Zealand dollar exchange rate.

What if the policies had not been "conditionally coordinated"? While purely hypothetical, if these policy decisions were being made on a strictly independent basis, we may have seen macro-prudential policy'wait' for the coming monetary policy tightening cycle to slow the housing market. An absence of any macro-prudential measures may in turn have prompted the monetary policy tightening to have started somewhat earlier.

To be clear, the monetary policy tightening cycle that is now underway is motivated by the need to ensure that CPI inflation remains in the vicinity of 2 percent over the medium term. The boost to financial system resilience provided by the LVR restrictions, as well as a decision to increase risk weights for high-LVR housing lending[4], has meant that monetary policy has not needed to consider a tightening for financial stability purposes. However, while not motivated by the financial stability objective, the monetary policy tightening is expected to help in dampening further house price inflation. In this regard, as interest rates move back to more normal levels, we will expect to have greater scope to ease or remove the LVR restrictions.

The Reserve Bank stated from the outset that the LVR restrictions are not intended to be permanent. They will be removed once housing market pressures have moderated and when we are confident there will not be a resurgence in house price inflation (Wheeler (2013)). But how should the exit be coordinated with the expected OCR tightening cycle? The factors to consider include:

– The degree of moderation achieved in rates of house price inflation and credit expansion;

– Factors that might affect the potential for a resurgence in house price inflation following the removal of the LVRs, such as the dampening effect of increased housing supply and mortgage rates, and the stimulatory effect of higher net immigration flows;

– Any distortions or inefficiencies that become apparent as a result of the policy.

A decision to ease or remove LVR restrictions will ultimately take into account both the financial stability and price stability implications of doing so. We will be alert to the risk that the removal of LVR restrictions could produce a resurgence in house price inflation, which would potentially undermine both financial and price stability.

6. Conclusion

While monetary policy and macro-prudential policy need to retain their separate primary objectives of price stability and financial stability, the significant spill-over effects between the two policies make a clear case for their co-ordination. However, such coordination must be conditional on each policy arm continuing to focus on its primary objective. Changing to joint objectives for both policies would: 1) complicate policy decisions; 2) undermine transparency; and 3) potentially be damaging to the credibility of monetary policy and macro- prudential policy.

[4] Increased risk weights for high-LVR mortgages applied to the large Internal Ratings Based (IRB) banks from September 2013.

The policy framework in New Zealand is consistent with this conditional coordination approach. In the monetary policy targets agreement we have financial stability as a secondary objective. This means that the monetary authorities need to think hard if an OCR decision might have adverse effects for financial stability. Similarly, in the macro-prudential MoU it is required that macro-prudential initiatives have regard to their potential impact on monetary policy.

There remain many aspects of policy co-ordinations where we need to deepen our understanding. These include:

- The quantitative effects of macro-prudential policy on macro-economic outcomes and their implications for monetary policy.
- The scale and timing of spill-over effects between the OCR and our four macro-prudential tools.
- How best to coordinate OCR and macro-prudential policy decisions at different points of the economic and financial cycles, particularly when the two cycles are out of sync and the policies are not complementary.

This is an active area of the academic literature and a priority area for our own research. I look forward to the insights that this work will give us for our future monetary and macro-prudential policy decisions.

References

Beau, D, L Clerc and B Mojon (2012) "Macro-prudential policy and the conduct of monetary policy", *Banque De France Working Paper,* 390.

Borio, C and P Lowe (2003), "Borio, C. and P. Lowe (2002), "Asset prices, financial and monetary stability: Exploring the nexus", *BIS Working Paper*, 114.

Borio, C and H Zhu (2008) "Capital regulation, risk-taking and monetary policy: A missing link in the transmission mechanism?" *BIS Working Paper,* 268.

Drehmann, M and Juselius M (2012), "Do debt service costs affect macro-economic and financial stability?", *BIS Quarterly Review,*September 2012.

Kohn (2013), "The interactions of macro-prudential and monetary policies: a view from the Bank of England's Financial Policy Committee,*Speech given to the Oxford Institute for Economic Policy,*
http://www.bankofengland.co.uk/publications/Documents/speeches/2013/speech692.pdf.

Reserve Bank of New Zealand (2013), "Regulatory impact assessment: Restrictions on high-LVR residential mortgage lending",
http://rbnz.govt.nz/financial_stability/macro-prudential_policy/5407434.pdf

Rogers, L (2013), "A new approach to macro-prudential policy for New Zealand", *Reserve Bank of New Zealand Bulletin,* 76:3.

Treasury and RBNZ (2006), "Supplementary Stabilisation Instruments: Initial report", http://www.rbnz.govt.nz/monetary_policy/about_monetary_policy/2452274.pdf.

Smets (2013), "Financial stability and monetary policy: How closely interlinked?", *Riksbank Quarterly Economic Review,* 2013:3.

Stein (2012), "Lean, clean and in-between", *Speech presented to the NBER research conference: Lessons from the financial crisis for monetary policy*,
http://www.federalreserve.gov/newsevents/speech/stein20131018a.htm

Svensson, L (2011), "Monetary Policy after the Crisis",*Speech given at the Federal Reserve Bank of San Fransisco,* http://larseosvensson.se/files/papers/LS111129e.pdf

Wheeler (2013), "The Introduction of Macro-prudential Policy", *Speech delivered to Otago University,* http://rbnz.govt.nz/research_and_publications/speeches/2013/5407267.html.

Table 1. Possible scenarios for macro-prudential and monetary policies

		Outlook for inflationary pressure		
		Weakening	**Stable**	**Strengthening**
Asset and credit price cycle	**Exuberance**	Potential for conflict	Independent	Complementary
	Stable	Independent	Independent	Independent
	Contraction	Complementary	Independent	Potential for conflict

Source: Adapted from Beau et al (2012).

Figure 1. Monetary and Macro-prudential policy interactions

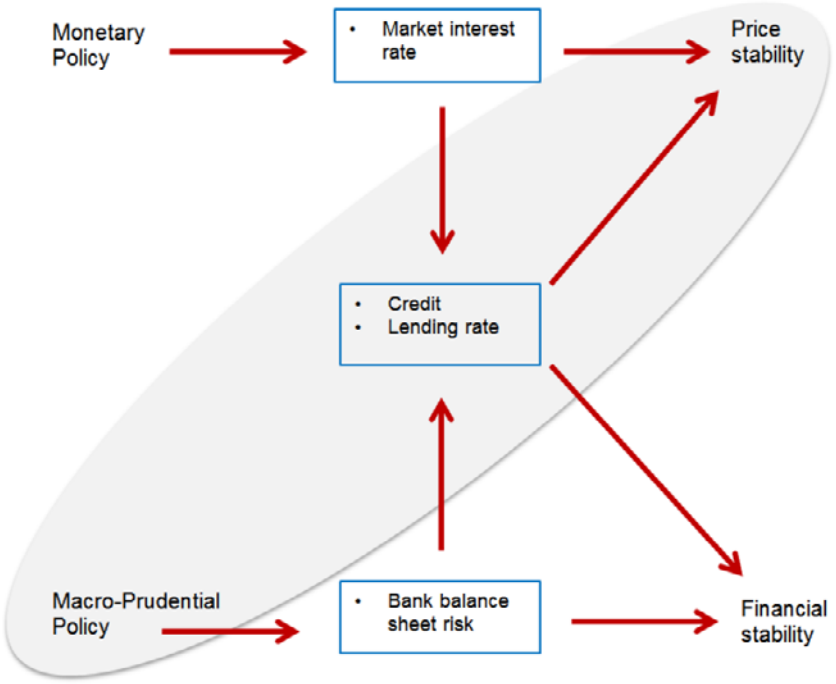

Figure 2. Monetary and Macro-prudential policy interactions

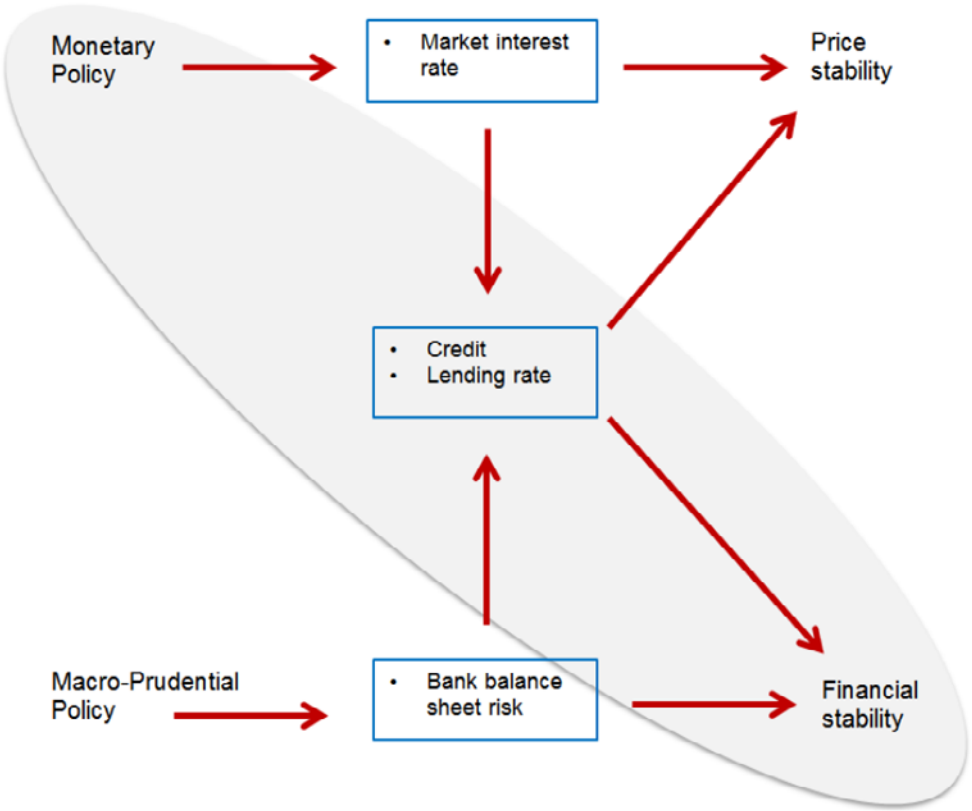

Table 2. Different views of the role of monetary policy in achieving financial stability

	Clean	Lean
Monetary policy	Framework does not need to reflect financial stability Limited spill-over effects on credit and risk-taking Blunt instrument to deal with asset market imbalances	Financial stability a valid secondary objective Supports macro-prudential by 'getting in all the cracks' Slowing asset prices consistent with long-run price stability
Prudential policy	More targeted and effective than monetary policy	Can be ineffective against systemic asset market imbalances
Interactions	Clearer separation of objectives and policy decisions	More policy coordination required

Source: Adapted from Smets (2013).

Figure 3. Share of high-LVR lending

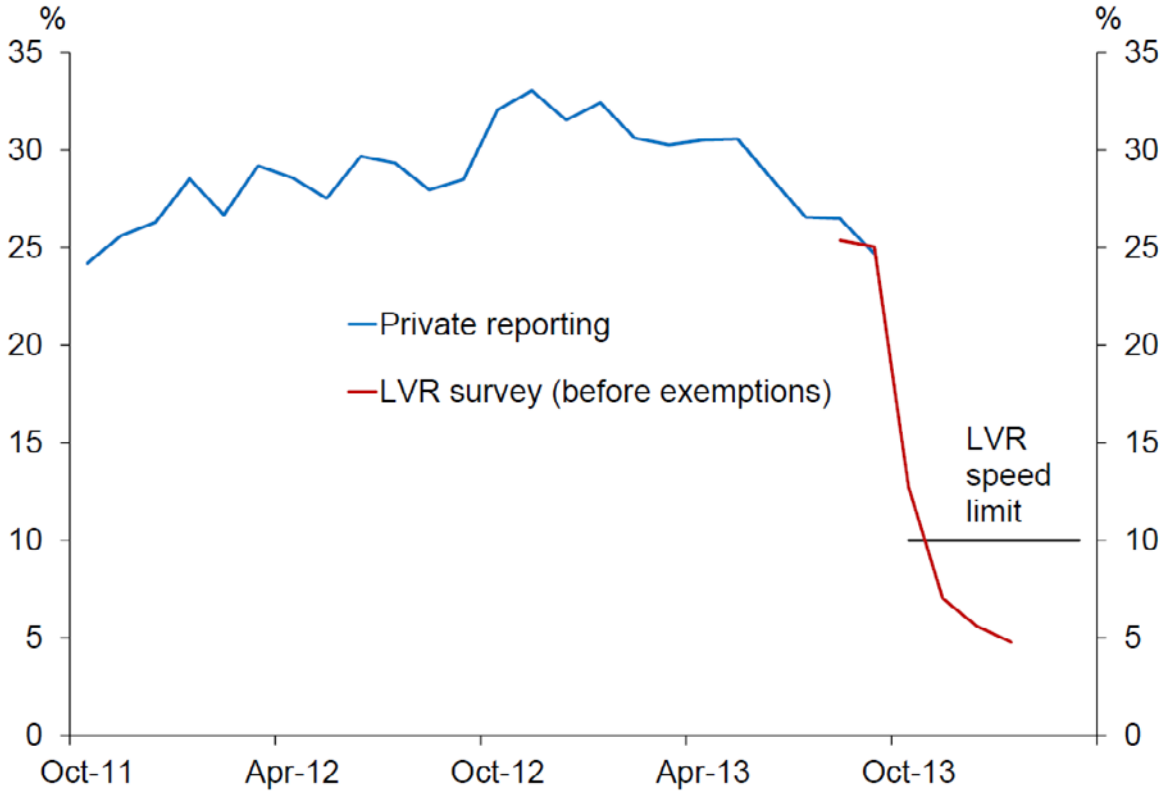

Table 3 Housing and credit developments since the introduction of LVR speed limits

	Expected reduction over first year	Reduction since September
House sales (monthly)	3-8%	13%
House price inflation (annual percent change)	1-4%	2.1%
Housing credit growth (annual percent change)	1-3%	1.1%*

* Due to the slow-moving nature of housing credit, this figure is calculated as an annualised three-month percent change.