

# Introduction

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Property markets have long been recognised as an important source of risk to financial stability. Many economies have had multiple episodes of rapidly increasing property market prices leading to significant stresses for their financial system. Despite the recurring patterns of boom and bust, every crisis has its own unique features and there is always something new to be learned by carefully examining what went wrong, as well as what could have gone wrong but did not.

Although the shockwaves emanating from the global financial crisis that started in 2007 have yet to fully dissipate, enough time has elapsed to gain valuable insights into the relationships between property markets and financial stability. One of the purposes of the 24th annual RBA research conference, on the topic of 'Property Markets and Financial Stability', is to take stock of what has been learned by recent events in property markets and elucidate what lessons policymakers might take away from these experiences.

The Conference also marks the completion of the two-year research agenda of the Representative Office for Asia and the Pacific of the Bank for International Settlements (BIS). Four of the six papers presented at this Conference were commissioned by the BIS Asian Office at a workshop they co-hosted with the Monetary Authority of Singapore (BIS 2012). The BIS is very grateful to the RBA for sharing the platform of its longstanding annual research conference for the presentation of this research in 2012, as well as ensuring the participation of renowned researchers and senior central bank officials both within and outside the region.

There is a rich history of RBA and BIS research related to the link between property price cycles and financial stability. Kent and Lowe (1997), for example, show that large and rapid falls in the price of assets used as collateral for loans, such as housing assets, can have adverse effects on financial system stability. While financial regulation can significantly reduce the costs of collapses in asset-price bubbles there remains a case for monetary policy tightening in the early stages of an emerging property-price bubble. Borio and Lowe (2002) note that even with price stability, financial imbalances – especially the combination of asset price increases and rapid credit growth – are good predictors of a financial crisis.

Such findings have given rise to a fertile area of research at the BIS focused on the use of macroprudential tools, defined as those specifically targeting systemic risk, to moderate swings in property prices, related credit growth and other sources of financial vulnerability (see CGFS (2010) and the citations therein). The predictive capacity of financial imbalances for banking crises – evidenced all too clearly in the most recent crisis – has also motivated the general countercyclical capital buffer framework of Basel III, as well as related country-specific frameworks such as the one recently adopted by the Swiss National Bank, which uses the mortgage-to-GDP ratio and property prices as key indicators of the need to build up more capital in their financial system (SNB 2012).

The RBA's communication with the public over the early and mid 2000s also demonstrates the weight policymakers have placed on the link between property price cycles and financial stability (see Bloxham, Kent and Robson (2010) for an overview of these communications). Prior to two cash rate rises over November and December 2003, the Bank was engaged in an extensive dialogue with the public on the dangers of an overheating housing market for financial stability. In a speech in May of 2003, for example, Assistant Governor John Laker drew attention to the risks for financial stability posed by a substantial correction in the housing market, and suggested it was important for individual institutions not to 'lower their guard' (Laker 2003).

At the Conference one of the main themes that came out of the presentations and discussions was that the details of institutional arrangements, including financing arrangements, legal systems and policy settings, are fundamentally important for understanding the way property markets evolve and the implications these dynamics could have for both macroeconomic and financial stability. The corollary of this general observation is that it is important to think carefully about such details before transferring a lesson learned in one set of circumstances to another.

In opening, Glenn Stevens highlights the intimate link between property price cycles and financial stability by reflecting on Australia's historical experience and draws several policy lessons. First, he recognises that the policy debate has shifted towards acknowledging the need to pre-emptively respond to asset and credit price cycles – a theme that was revisited several times throughout the Conference. Second, Stevens stresses that monetary policy cannot succeed in managing cycles, asset values and leverage by itself; prudential supervision and the will to enforce prudential regulations are crucial for achieving financial stability policy objectives. Finally, he touches upon the importance of carefully measuring property price dynamics, particularly when making international comparisons.

The paper by Yongheng Deng, Joseph Gyourko and Jing Wu emphasises the importance of measurement issues in the analysis of property market dynamics. Based on detailed city-level data from China, they argue that housing price indices that approximate repeat sales measures, which are regarded in advanced economies as the most accurate means of controlling for changes in the composition of homes sold each period, can provide a biased picture of property market developments compared with more traditional hedonic measures. Most participants agreed that there are many problems of 'matching' comparable housing transactions in an emerging economy where a large share of the housing stock has been built recently. However, a number of participants also warned that the remarkable changes occurring in Chinese cities such as Beijing and Shanghai imply that measuring the generic characteristics used in a hedonic model, such as proximity to a subway system or to the centre of a city, is also extremely difficult.

Frank and Veronica Warnock focus on the importance of institutions in explaining housing market development. They start by observing that, in contrast to advanced economies, the problem for many emerging economies is that their housing finance systems are still insufficient for their country's needs. The Warnocks' analysis shows that a number of institutional variables affect the size of mortgage debt as a share of GDP, including the strength of property rights, the quality of available credit information and macroeconomic stability, and thus improvement in these variables would be likely to contribute to the development of mortgage markets. A point made during the discussion was that demographic factors (such as the age distribution of an economy and

life-cycle needs of population) should also be considered. The availability of fixed-term mortgages was also proposed as a positive factor, though it was also pointed out that the flexibility afforded by variable rates in a number of economies helped ease the burden of interest rate repayments in the recent crisis and mitigate the financial stability consequences of falling property prices.

The keynote speaker, John Muellbauer, emphasises the importance of taking into account economy-specific details when analysing the dynamics of housing prices. The paper he presents assesses the different channels through which changes in housing prices can affect the real economy. Muellbauer shows that channels that are very important for some economies – such as the link between housing wealth and consumption in the United Kingdom and the United States – do not have a significant influence in others, such as Japan and France. At the same time, emerging markets often have quite different channels that are important, such as the impact property prices have on the balance sheets of local governments in China. When considering policy responses to perceived bubbles, Muellbauer recommends distinguishing between two types of housing market overvaluation: one based on overshooting due to extrapolative expectations such as the recent housing market boom in the United States, versus overvaluation due to a sharp weakening of fundamentals such as in the United Kingdom and Finland during the late 1980s and early 1990s.

The paper by Luci Ellis, Mariano Kulish and Stephanie Wallace focuses on understanding the way in which different features of property markets and loan contracts affect property price dynamics and their consequences for financial stability. Their paper uses a simple model to demonstrate that while housing prices in markets with elastic supply may increase by less during the boom period, the potential for an overhang of supply after housing prices peak will be greater, and so the bust phase of the housing cycle could in fact be more damaging to financial stability under these conditions. The model also demonstrates that when finance is obtained through an interest-only loan structure (which is often the case with commercial property), the probability of default is higher during the bust phase than when the financing is via a variable-rate loan structure, as is common in the Australian residential property market.

Frank Packer and Tim Riddiough also explore how differences in institutional arrangements might account for why some property markets are more resilient, while others are more prone to booms and busts. In particular, they investigate how commercial real estate investment trusts (REITs) in the United States are well designed to convey accurate information about the balance of supply and demand in the commercial property sector. They argue that, as a result of this, the commercial property market in the United States was not the source of financial instability that it had been in earlier decades and in fact proved much more stable than the residential real estate market during the most recent financial crisis. Packer and Riddiough find more mixed evidence for the stabilising effects of REITs in other economies, and there was considerable discussion after the presentation among the conference participants about the extent to which the lessons drawn from the United States could be relevant for other markets. Which isn't to say these markets have been ignored in other countries: the Bank of Japan has even purchased Japanese REITs since 2010 as part of their unconventional monetary policy easing measures (Bank of Japan 2012).

Giovanni Dell'Ariccia summarises the state of knowledge on the relationship between housing cycles, bank risk-taking and the likelihood of poor macroeconomic outcomes and/or financial instability. He points out that while the state of economic modelling is not sufficient to fully

understand the underlying relationships, it is still possible to find variables that are useful indicators of those changes in bank lending behaviour that increase systemic fragility. In particular, Dell’Ariccia points to the risks of increasing leverage, lower credit standards and a rise in loan types that are more attractive when property prices are expected to grow strongly. The author concludes that monetary policy should be used more actively than just to help ‘clean up’ after a downturn in the housing cycle. At the same time, there is no definitive evidence as to which policies will be the most effective in preventing an unsustainable build-up in housing prices and credit.

The question of whether monetary policy or prudential policies have had any systematic effect on housing prices or housing credit is addressed in the paper by Kenneth Kuttner and Ilhyock Shim. Using a large cross-country panel dataset, they find that increases in short-term interest rates do have some dampening effect on housing price growth, as do caps on loan-to-value and/or debt-to-income ratios, although the effects are rather modest. Prudential policies also have a strong, statistically significant effect on housing credit growth, suggesting that such policies can be effective tools for stabilising cycles in housing prices and credit, thereby ensuring the resilience of the banking system.

The role of monetary policy is also a focus of the policy panel. All four panellists, Carlos Araújo, Per Jansson, Tae Soo Kang and Kiyohiko Nishimura, indicate that their institutions have had some success with using monetary policy in the early stages of a housing price and/or credit cycle, and there is general agreement that there is a role for monetary policy to ‘lean’ against housing price booms. There is also some discussion about the way in which communication can increase the effectiveness of monetary policy in this task. Nishimura makes a distinction between the early stages of a housing price and/or credit cycle as opposed to the collapsing stage; during the latter it is almost impossible to achieve much with standard monetary policy tools.

The panellists also discuss the effectiveness of macroprudential policies. While noting that some policies had been effective, Kang relates how in Korea’s experience there have also been unintended consequences associated with avoidance of restrictions on lending, which in turn has led to a broadening of the policies over time to cover loopholes. General discussion picked up on the theme of the importance of a strong prudential supervisory regime and how best to ensure that there is a cooperative relationship between institutions with responsibility for prudential supervision and financial stability.

All four panellists also confirm the importance of correctly assessing the underlying fundamentals of supply and demand. Carlos Araújo notes that while the Banco Central do Brasil is monitoring rapid growth in credit and housing prices, the significant undersupply of housing and ongoing structural changes to the housing finance system means that these developments were less of a concern than otherwise. Nishimura and Kang both emphasise the importance of demographic change in assessing the longer-term risks and sustainability of housing price developments.

The importance of learning from past experience and continuing to pursue reform even after crisis conditions have passed is stressed by Jansson and seconded by others. In particular, Jansson attributes some of Sweden’s resilience over the past five years to the fact that fiscal policy had been run in a sustainable manner and the prudential supervisory regime had been strengthened following previous crises.

In his closing comments, Stephen Cecchetti emphasises the need for internationally comparable data on property prices. He also conjectures that if all property financing were to be moved out of banks and into markets, financial systems would be more stable, but boom-bust cycles would remain, as these cycles reflect imbalances that are more fundamental than those of the financial structure itself. Cecchetti also highlights that we urgently need to know more about the effectiveness of various policy measures and their interaction.

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