# **Closing Remarks:** Property Markets and Financial Stability – Issues and Interpretations

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## Introduction

Our understanding of financial stability and instability is improving. After being lulled into complacency, policymakers, academics and market participants in the advanced economies now appreciate that financial crises are more the norm than the exception – and that the US experience from 1934 to 2007 was the anomaly. We now accept that in any given year, there is likely to be a financial crisis in at least one country in the world. This realisation leads us all to work on understanding how we might reduce the frequency of financial crises and their costs to the broader economy.

This is the motivation for research that concentrates on the role of banks and debt. And that research has yielded new and important insights. We now know, for example, that high levels of debt are bad for growth. We now know that when debt grows quickly it creates a drag on the real economy. We now know that financial systems, necessary to spur development, can become bloated and draw resources away from more productive activities.<sup>2</sup> And, most importantly, we now know that leverage in all of its forms creates financial instability.

Armed with this understanding that leverage is a major source of financial instability, we are immediately drawn to look at banks and real estate. Banks are not only the most highly leveraged institutions in the most leveraged sector of the economy, but also the source of the credit used elsewhere. And real estate is the single most credit-intensive good out there. In the United States, for example, 34 per cent of all credit market debt extended to the domestic non-financial sector is in the form of mortgages. And mortgage debt comprises two-thirds of personal debt.

As several Conference speakers noted, the combination of debt intensity and boom-bust cycles gives property markets a central role in financial crises. But they do more than that. Property market bubbles have some very real negative effects on the economies where they occur. First is the direct effect of too much building. Travelling only a few kilometres from the historic centre of Dublin in Ireland today, one will see empty buildings that are the consequence of the real estate boom from 2002 to 2007.

<sup>\*</sup> I thank Frank Packer and Ilhyock Shim for their assistance in the preparation of these remarks. The views expressed here are those of the author and do not necessarily reflect those of the BIS.

<sup>1</sup> See Gorton (2012) for a detailed discussion.

<sup>2</sup> See Cecchetti and Kharroubi (2012).

Overbuilding is usually accompanied by overconsumption, as the wealth effect from the perceived increase in housing wealth leads to a fall in saving. This empirical fact is at odds with what theory tells us: there should be no consumption wealth effect from changes in house prices. In the aggregate, when the price of housing rises, the economy as a whole cannot consume more (except for housing services, but that's accounting). The point is that we all need to live somewhere, so the person to whom someone might sell their more valuable house will have to increase their saving to buy it. And that rise in saving by the prospective buyer must exactly match the dissaving of the prospective seller.<sup>3</sup> I should note that higher housing values can provide collateral for borrowing by liquidity-constrained households. But these loans will need to be repaid, so this is only a short-run effect (and on average it should be negative, not positive as we see in the data).

Before coming to the themes of the Conference, I have two more introductory comments. First is that booms in the prices of assets used as collateral create procyclicality. This obvious point is one of the things that makes property booms and busts so damaging. As prices rise, the collateral value of a property rises, allowing for more borrowing. Extrapolative expectations then lead to an actual increase in leverage, as pointed out by John Muellbauer in his keynote speech. When the bust inevitably comes, insolvencies are potentially enormous.

Second is the fact that property price booms are much worse than equity price booms. And they are worse in virtually every way.<sup>4</sup> This means that understanding property markets is a key to understanding when financial stability is at risk.

Turning to the RBA-BIS Conference, this marks the culmination of the two-year research program on property markets and financial stability carried out by the BIS Asian Office under the direction of the BIS Asian Consultative Council. Three major themes formed the core of the discussions:

- 1. Measurement of property prices: how should we assess valuation?
- 2. Financial structure: do some housing finance systems promote stability?
- 3. Policy: what should policymakers do about this?

The Conference and research program brought together experts on real estate markets and finance with experts on monetary policy and macroeconomics. This combination has improved our understanding of these issues.

#### Measurement

The starting point for any study of the relationship between property markets and the economy has to be measurement. To begin with, we need to know what is happening to the prices of both residential and commercial real estate. Unsurprisingly, the difficulties in measuring housing prices are really the same as those for measuring the prices of other goods and services.

To give a simple example of the latter, consider the case of washing machines. You would think that it would be straightforward to collect the price of a specific model of washing machine every

<sup>3</sup> See Cecchetti (2008) for a discussion.

<sup>4</sup> See Cecchetti (2006).

month and use this as the basic input into a consumer price index. Well, it turns out that models are changing all the time, making this very difficult.<sup>5</sup>

In the case of property, the difficulty is heterogeneity and the infrequency of transactions. As Yongheng Deng, Joseph Gyourko and Jing Wu describe in their paper, the solution is hedonics. But even then, there can be difficulties. As noted by Haibin Zhu in his discussion of the paper, for the case of Shanghai, the recent expansion of the subway system has taken property that was once remote and made it effectively much closer to the centre of the city.

Overall, the work discussed at the Conference documented clear progress on the measurement front. But it also clarified the need for internationally comparable data on property prices, something that is clearly missing today. And, because understanding financial stability and instability requires cross-country comparisons – crises may be frequent, but the true variation in the data comes from a panel of country experiences – it is important that we have consistency across countries

#### **Financial Structure**

Several papers from the Conference examine mechanisms for property finance and the implications for financial stability. In particular, Frank Warnock and Veronica Warnock study the determinants of the relative size of housing finance systems across economies. Frank Packer and Timothy Riddiough analyse commercial property investment and the development of REIT markets in the United States and other economies to see if the disintermediation of property finance via real estate securitisation stabilises property prices. Luci Ellis, Mariano Kulish and Stephanie Wallace discuss the relation of various features of property loans, including amortisation requirements and maturity, and boom-bust cycles. And Giovanni Dell'Ariccia provides evidence that sharp increases in credit and leverage are at the core of the relationship between real estate booms and banking crises, and that real estate booms are associated with increases in banks' risk-taking.

At this point, it is worth saying that collateralised borrowing very clearly improves welfare. It allows for consumption smoothing, diversification and small business formation, among other things. And, as de Soto (2000) emphasises, the ability to use property as collateral spurs economic development.

Given that we need to be able to provide credit collateralised by property, the question is whether there are some mechanisms that are better for doing it than others. Put differently, would it make sense to shift all property financing out of banks and into markets?

There is surely no one-size-fits-all answer to this question. Among potential reasons is the fact that different economies have different legal systems. This, along with the path-dependence of most financial structures, will cause significant differences to persist.

But it is still worth asking what would happen if all real estate lending were fully securitised. Or, what if mortgage lending were peer to peer? Yet a third option would be forms of Islamic banking where there is no net asset value guarantee for liability holders.

<sup>5</sup> See Silver and Heravi (2003) for a detailed discussion on this point.

<sup>6</sup> In some places, peer-to-peer lending has moved into some consumer areas. See, for example, www.prosper.com.

Put slightly differently, we might ask whether there is a natural supply among investors for the maturity transformation that we now tend to concentrate inside banks. To see what I mean, think about the fact that young people wishing to save for their old age are a natural market for long-lived assets. So, given population demographics, there is a natural maturity structure of saving portfolios. And there is also a natural maturity for the capital stock. Are these materially different? Do we really need financial institutions to provide additional maturity transformation?

The answer, I believe, is that if we could substitute market mechanisms for the bank provision of credit to the property sector, we would have a more stable financial system. But we would not eliminate boom-bust cycles and the problems of overbuilding and overconsumption that they create. These real problems are more fundamental than the financial structure itself.

# **Policy**

This leads to the final theme of the Conference: the relationship of property markets to the design of financial stability policy.

Stepping back a bit, here is how I see the problem: the primary objective of economic policymakers is to stabilise real consumption growth at the highest sustainable level. Housing is a significant portion of consumption – something like one-fifth to one-quarter – so it plays a very important role. And because it is so durable (the building I live in was originally built in 1363) and costly to adjust, it is very important that we have the right amount of housing. That is, the big question for policymakers is: how can we ensure that we have the right amount and the right kind of housing? I say the right kind because one of the big questions in housing is the relative quantity of rental versus owner-occupied dwellings.

What tools do policymakers have to try to achieve this objective? The focus of much of the discussion in the central banking world is on the combination of monetary policy and prudential policy. The former is related to the debate over leaning against bubbles as they develop versus cleaning up after the bubbles burst, discussed by Glenn Stevens in his opening address to the Conference. And the second is about the question of whether to achieve goals by regulating and monitoring borrowers or lenders.7

On the former, I have little new to say beyond what I have written previously.8 And on the latter, I firmly believe that we urgently need to know more. The paper by Kenneth Kuttner and Ilhyock Shim helps further our understanding of the effectiveness of various policy measures on housing prices and credit. We need to know still more about the impact of individual tools and more about their interaction. And, importantly, we need to understand this in the context of the long-horizon problem that is inherent in housing.

<sup>7</sup> For an enumeration of the long list of policies being considered, see CGFS (2010).

<sup>8</sup> See Cecchetti (2006) and the references therein.

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