Discussion

1. David Hargreaves

Over the years I have come to expect research work from the Reserve Bank of Australia to be rigorous and well focused on an important policy issue, and this paper is no exception. I like how the authors have combined careful liaison work with empirical work in the paper.

The lending officers that the RBA spoke with emphasised the importance of the character and capacity (serviceability) of a prospective borrower. At the same time, it appears that most small business lending is collateralised, and that housing equity is a very important source of collateral. My interpretation of these somewhat contradictory viewpoints is that while banks will not lend without satisfying themselves of the character and capacity of the borrower, collateral still provides a very important margin of safety for their lending. Since serviceability assessments for a business are based on inherently uncertain forecasts, the credit risk associated with uncollateralised small business loans is fairly significant. Banks are able to offer larger loans and considerably better terms when collateral is available.[1]

Given its current importance, it is interesting to consider whether residential property collateral is likely to have been as important for small business lending in the past as it appears to be now. My understanding is that the situation has changed in the period since financial deregulation in the 1980s in important ways. For one, there was no 'right' in the past to redraw on loans that had been amortised, and it was much harder to borrow against existing housing equity and at high loan-to-value ratios than it is today.[2] House prices were also much lower relative to income and interest rates much higher – factors that would tend to make it harder to use housing collateral to start a business if there was any doubt about cash-flow projections.

Turning to the household-level empirical work, the authors demonstrate that home equity raises the probability of a household starting a business, while non-housing equity does not. Furthermore, the businesses are more likely to have employees, and debt, if the owner has home equity. Overall, these results seem convincing. While the economic significance of the effects found are fairly small, they are nontrivial.[3] The sample of households starting businesses is relatively small, but because there are few business datasets with so much information about the balance sheet of the underlying household this is probably unavoidable.

My main comment on the household-level results is that it seems counterintuitive that non-housing wealth does not contribute to business formation. The authors should possibly

1 While this is sometimes seen as a 'regulatory capital' issue, I think it would actually still be true in an environment without regulatory risk weights. Regardless of capital requirements, banks would be aware of the higher expected loss from uncollateralised lending (and larger risk of unexpected loss) and make business decisions accordingly.

2 This is not empirically well documented. Some evidence for New Zealand is gathered by Coleman (2007).

3 As an aside, some studies do not provide enough information for readers to understand the economic significance of reported coefficients. In this paper, the authors illustrate the economic significance of their key coefficients in a very useful and intuitive way.

think further about the full range of options available to someone raising funds to start a business. It could be that much non-housing wealth is in superannuation accounts and thus somewhat inaccessible – but a footnote suggests that this is not the key driver. Accessible financial assets can be liquidated to generate cash (and indeed housing equity can also be sold, especially if the household owns investment properties). There seems no reason why a household that wanted to start a business would not do so if they had adequate funds in the bank, if the same household would happily borrow against housing wealth to start the business if they didn't have money in the bank. Perhaps this counterintuitive result reflects the fact that non-superannuation financial wealth is concentrated in a relatively small, wealthy section of the population that has fewer incentives to take the risk of starting a business.[4]

Because the authors have balance sheet statistics (both before and after the business formation) for households that started a business, they should be able to examine how the businesses in their sample were funded by the owning households, beyond the use of bank debt.

Turning to the postcode-level analysis, this also has intuitive and interesting conclusions. Companies are more likely to start in places where house prices are rising. This effect is particularly strong for small companies and for collateral-dependent industries. Finally, the result is not just due to companies setting up to service an increasingly affluent local market – i.e. cafes and the like – but also includes companies providing tradeable goods or services to a larger market.

The key question I have about this analysis concerns the possibility of reverse causality. There are some regions that have developed agglomerations in tradeable industries over time – Silicon Valley is a leading example. This is likely to involve a lot of businesses starting at the same time as house prices increase quickly. The reverse causality is that the high business formation rates generate demand for housing – and therefore increase house prices – because entrepreneurs move to the area to start businesses.

This issue is similar to the one discussed by Mian and Sufi (2009). Mian and Sufi use an index of housing supply elasticity to show that house prices mainly rose during the pre-financial crisis expansion in areas where supply was inelastic, but that the increase in credit was more universal. This provides evidence that credit drove rising house prices rather than the other way around. The authors may wish to look for underlying variables that might drive business formation and house price growth and see if these drive the results. One example would be if the resource price boom had led to business formation and house price growth in resource-rich regions of Australia. It is possible that Mian and Sufi's methodology would work in this context as well. For example, if there are many regions in Australia with above-normal business formation, but house prices only rise alongside rapid business formation in regions where housing supply is inelastic, that would tend to suggest house price growth is not the underlying causal variable.

Looking towards the future, there are interesting new technologies being employed to obtain unsecured finance via peer-to-peer lending and crowdfunding. These appear to be quite successful in niche areas and will probably become more important over time, potentially reducing the importance of housing collateral. As others at this Conference have noted, this may be important because the next generation of people looking to start small businesses will be less likely to own housing.

4 Data from the Australian Bureau of Statistics 'Household Wealth and Wealth Distribution' release show that non-superannuation financial assets are mostly held by the highest wealth quintile.

References

Coleman A (2007), 'Credit Constraints and Housing Markets in New Zealand', Reserve Bank of New Zealand Discussion Paper Series DP2007/11.

Mian A and A Sufi (2009), 'The Consequences of Mortgage Credit Expansion: Evidence from the U.S. Mortgage Default Crisis', *The Quarterly Journal of Economics*, 124(4), pp 1449–1496.

2. General Discussion

Discussion began with queries about the econometrics used in the paper. One participant questioned the construction of a business formation rate using the number of businesses as the denominator, because changes in the number of businesses due to business exits will be driven by factors similar to those that drive business formation. Gianni La Cava explained that using working-age population as the denominator yielded similar results; however, there were timing problems with data availability, which is why the paper used the number of businesses. A participant noted that reverse causality might be a problem if geographical centres for innovation – like Silicon Valley – are reflected in the data. In these areas, demand by new entrepreneurs for housing drives up house prices. Dr La Cava agreed that this effect is difficult to control for, but that postcode-level population and income growth partially account for it.

One participant questioned whether the paper had controlled for age, citing that over 30 per cent of businesses are owned by the over 55 years age group, compared with just 3 per cent of businesses that are owned by young entrepreneurs. Matthew Read responded that the paper's analysis controlled for age and that the findings were robust to age effects.

Another participant was interested in the importance of the housing collateral channel relative to other factors relating to business formation. The participant suggested using the effect of income on business formation as a benchmark. Relatedly, some participants also remarked on the seeming importance of some of the demographic characteristics used as controls in the analysis. In particular, one participant noted that gender had a much larger effect on new business formation than housing collateral. Mr Read agreed that many of the demographic controls had effects that were much larger than the housing collateral channel; however, the paper had not drawn attention to these findings because they were less relevant to monetary policy.

Participants noted that the paper's finding that a large proportion of new business lending is secured against housing collateral was intuitive and accorded with other evidence. Several participants noted that there is no cost for lenders in using housing collateral if it is available and, from the perspective of entrepreneurs, large differences in price between secured lending and unsecured lending would encourage using housing as collateral.

Participants discussed the role of personal credit cards in financing small businesses. One participant noted that it is common for personal credit cards to be issued with new home loans and that these might be used as a cash-flow tool by small business owners. Another participant suggested that the application process for a personal credit card is sometimes easier than for a business credit card, for example due to difficulty in providing evidence of business cash flow. The same participant observed that some lenders have had to promote the benefits of loyalty

programs to encourage small business owners to apply for business credit cards, rather than continuing to use their personal credit card.

Discussion closed by turning to the policy implications of the paper's findings. One participant made the point that economies with lower levels of home ownership nonetheless have similar levels of entrepreneurship. The participant suggested that these economies might have similar savings rates but instead invest their wealth in other assets. In these economies, wealth in the form of, for instance, bank deposits might be used to fund new ventures purely as an equity investment, rather than using housing equity to secure financing. The participant opined that this suggests that the housing collateral channel might not pose a problem for policy. Dr La Cava agreed that this observation was plausible and that it related to the difficulty of separating wealth effects from the housing collateral channel. He noted that it is possible that rising house prices boost home owners' wealth, leading some home owners to develop an appetite for more risk. These home owners might choose to channel this risk by forming new businesses; this channel does not depend on housing collateral.

A participant questioned whether policy has a role to play in ensuring entrepreneurs without housing equity have access to finance and, in particular, whether there is scope for superannuation funds to play a role in equity financing. Picking up on this question, one participant suggested that self-managed superannuation funds could already be used to purchase a business premises or shares in newly formed companies. Ellis Connolly noted that small business owners using their self-managed superannuation fund to purchase business premises only benefits those who have already accumulated wealth – like those close to retirement – and could not help younger entrepreneurs. Another participant suggested that superannuation funds would face large fixed transaction costs in the provision of equity finance to small businesses. Consequently, it was unlikely to be a viable option. Mr Connolly agreed and questioned whether there was space in the market for an intermediary to develop technology for superannuation funds that could help to assess applications for equity finance. This technology would reduce the transaction costs of investing in small to medium-sized enterprises.