## Non-technical summary for 'The Role of Collateral in Borrowing' By Nicholas Garvin, David W Hughes and José-Luis Peydró

Collateral plays an important role in credit markets, by changing the risks faced by lenders. In a collateralised loan – a mortgage, for example – the borrower pledges an asset to the lender as security, which is forfeited in the event of a default. Uncollateralised loans – for example, credit cards – involve no pledged security, so the lender has more to lose if the borrower defaults. As well as mortgages and credit cards, banks also frequently make collateralised and uncollateralised loans to other banks.

## This paper asks:

- 1. Does a financial crisis affect the ease of obtaining a collateralised loan relative to an uncollateralised loan?
- 2. If so, how does it depend on characteristics of the borrower?

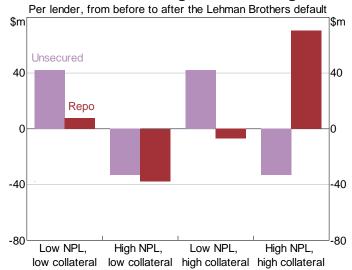
In financial crises, lenders typically reduce their risk taking, so one would expect collateralised borrowing to become relatively easier. But there is a lack of research that documents this, or that examines the role of borrowers' characteristics.

We answer these questions by focusing on Australian short-term interbank markets during the extreme financial system stress in September 2008. In these markets, collateralised and uncollateralised loans are quite similar – they take place between the same entities, at the same maturities, for similar dollar values, and at the same time. These similarities allow us to hone in on differences in reactions across the 2 markets that are caused by the presence of collateral. Interbank markets are also important to understand in their own right, as a central part of the financial system and the channel through which standard monetary policy is implemented.

We show that the presence of collateral indeed affects reactions to stress and the reactions are different depending on the characteristics of the borrower. When the Lehman Brothers collapse in mid September 2008 caused sudden global financial turmoil, collateralised and uncollateralised interbank markets reacted differently. Collateralised borrowing rose, particularly by borrowers that already held large amounts of collateral prior to the stress. Uncollateralised borrowing did not increase overall, and for riskier borrowers (i.e. those with more non-performing loans (NPL) on their balance sheet), it decreased. Figure 5 in the paper, shown below, illustrates how different types of borrowers reacted in the collateralised market (i.e. repo) and uncollateralised market (i.e. unsecured). The combined outcome of these reactions was that riskier borrowers that held sufficient quantities of collateral switched from uncollateralised to collateralised borrowing.

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## **Estimated Change in Borrowing**



We also show that after the stress arose, collateralised borrowing became relatively easy if the collateral comprised assets that were in high demand throughout the financial system. As previous work has shown, the late 2008 stress generated a global spike in demand to hold the safest types of investments. In Australia these are Australian Government Securities (AGS), which are frequently used as collateral in interbank markets. We show that this spike in demand meant that lenders became willing to provide cash to borrowers at very low interest rates if the borrower provided AGS as collateral to the lender in return. Previous research has argued that funds could become unobtainable in uncollateralised interbank markets during stress; our work shows that the opposite can happen in collateralised markets.

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