Non-technical summary for 'Modelling Reserve Demand with Deposits and the Cost of Collateral'

By Laurence Bristow

What did I set out to do?

In Australia, there are two types of digital money: one is used when transacting with the RBA and between commercial banks (reserves) and the other when transacting with everyone else (bank deposits).

If you transfer money to a friend who banks with a different bank, your bank will, behind the scenes, transfer reserves to your friend's bank to settle the transaction. If your bank does not have enough reserves to settle the payment, it can borrow reserves from other banks or from the RBA. Banks can borrow as many reserves as they want from the RBA at a rate close to the RBA's interest rate target. Alternatively, banks can borrow from each other, and tend to do so at an interest rate close to that from the RBA.

As a contingency, banks can choose to hold enough reserves to make sure they can meet a high volume of requests from their customers to withdraw money during a crisis period.

I look at the demand for reserves in Australia by considering two key questions:

1. How many reserves do banks want to borrow from the RBA?
2. What factors affect their decision?

My research is important as the number of reserves that banks want to borrow affects the size of the RBA's presence in financial markets and the amount of financial risk it takes on. If its presence in financial markets or the amount of financial risk is too high, the RBA could make borrowing reserves more expensive – lessening banks' demand.

What did I learn?

I discovered that banks want to borrow between $100 billion and $200 billion of reserves from the RBA given the current rate they can do so at. This estimate is much larger than the $3 billion of reserves banks borrowed before the pandemic. In part, this increase reflects a decrease in the cost of borrowing reserves from the RBA since the pandemic. However, a large part of the increase has been driven by an increase in their customers' deposits. More deposits mean banks want more reserves to manage potential withdrawals or routine payments between customers.

What was my key takeaway?

Given the current RBA lending rate, banks want to borrow more reserves from the RBA than before the pandemic. This, in turn, requires the RBA to expand the size of its reserve lending operations. Larger operations mean the RBA will make up a larger part of the Australian financial system and, as a result, take on more financial risk.