Non-technical summary for 'Demand in the Repo Market: Indirect Perspectives from Open Market Operations from 2006 to 2020'

By Chris Becker, Anny Francis, Calebe de Roure and Brendan Wilson

What did we set out to do?

Banks need liquidity – that is, readily available cash – to meet their payment obligations and remain viable. It is therefore important that there is an adequate supply of liquidity in the financial system to meet demand and to maintain financial stability. Measuring overall demand is difficult, however, and tends to be done indirectly. To address this gap, our study uses data on open market operations (OMOs) from 2006 to 2020 to derive a demand curve for liquidity and determine trends from that period.

To understand how OMOs relate to liquidity, we must first understand how they relate to the repo market. A repurchase agreement (repo) is when a bank lends cash to another bank in exchange for collateral, which is the lender's guarantee. The repo market is a major short-term funding market in Australia and is crucial for the plumbing of a modern financial system. It is also crucial for the implementation of monetary policy and so the RBA keenly observes the repo market to ensure it is functioning smoothly. However, there is a lack of readily available data on the repo market. As such, the RBA has been analysing it indirectly using data from its own OMOs. This is possible because both the repo market and OMOs are conducted in the form of repos. Prior to the COVID-19 pandemic, OMOs were conducted as competitive auctions and the results of these auctions closely reflected the market for repos – thus allowing us to indirectly observe the functioning of the repo market.

In the competitive auction process, banks submitted bids and the highest bidders would be allowed to transact with the RBA – as such, those bids served as an indication of how much each bank was willing to pay for cash. By aggregating this data, we were able to construct the overall demand curve for bank liquidity and measure it over time. Using this framework, we reviewed historical changes in liquidity demand from the period just prior to the global financial crisis (GFC) to the onset of the COVID-19 pandemic.

What did we learn?

Throughout the period of study, we found the following trends:

- Prior to 2008, the demand for liquidity was relatively stable and the spread between the repo rate and the benchmark rate (i.e. the overnight interbank swap (OIS) rate) was small.
- During the GFC, precautionary demand rose and so rates increased relative to the OIS rate.
- After the crisis, demand receded and so rates lowered, and market conditions stayed calm until around 2016.
- From 2016 to 2019, demand for Australian dollars in the international currency market increased and the spread between the repo rate and its benchmark rose.
- During the outbreak of the pandemic in 2020, the RBA increased the supply of cash to unprecedented levels and so the demand curve flattened.

In 2020, the RBA stopped holding competitive auctions and switched to a system of full-allotment tenders.

What was our key takeaway?

Our study demonstrates that liquidity demand increases in periods of heightened uncertainty in financial markets, and an increase in liquidity supply can flatten the demand curve. As such, our framework to measure liquidity demand serves as a tool of market monitoring.