

Non-technical summary for 'Designing an Efficient Reference Rate: Lessons from SOFIA'

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What did we set out to do?

We set out to assess the reliability of Beta Secured Overnight Funding Index Australia (SOFIA), which is an interest rate the ASX publishes each day based on overnight secured lending. A good benchmark rate should mainly move when real market conditions change.

We looked at how much 'noise' there is – that is, small, short-term movements that don't reflect real trends – what causes that noise and whether better design rules could reduce it.

What did we learn?

Using detailed trading data, we found that Beta SOFIA becomes noisier when the market is quiet or dominated by only a few players. This happens when there are fewer trades, fewer traders, more related-party trades and lower liquidity.

We tested different ways to calculate the rate and found that removing the top 5 per cent of trades (by high yields), as well as the bottom 25 per cent (as is already done), helps reduce noise. We also identified points where the market is so small – by number of trades, volume or counterparties – that the noise becomes four to five times larger.

What was our key takeaway?

We conclude that noise can be reduced by:

- leaving out related-party trades
- using expert judgement when trading activity drops below set minimum levels
- trimming the most extreme trades at both ends (bottom 25 per cent and top 5 per cent).

These improvements would make the rate more reliable and ensure it better reflects real market conditions.