

# Retail CBDC offers more flexible monetary policy

A retail CBDC provides a solution to Singapore's unique monetary policy circumstances.

BY XIE TAOJUN AND AMMU GEORGE

IN THE past week, the Bank for International Settlements (BIS) released the results of a survey on Central Bank Digital Currency (CBDC). Two-thirds of 81 central banks are actively interested in CBDCs, with many currently developing or testing retail CBDCs. The survey shows monetary policy implementation as a key motivation for the central banks to consider retail CBDC issuance.

In this regard, the November 2021 paper from the Monetary Authority of Singapore (MAS) on assessing the economic case for retail CBDCs in Singapore becomes relevant. While acknowledging that the CBDC payment landscape would eventually evolve, the report says that Singapore has no "urgent need" for a retail CBDC.

Despite that viewpoint, MAS has launched "Project Orchid" as a pilot for a retail CBDC in Singapore, amid concerns about the competition from foreign digital currencies.

Based on our scientific study of retail CBDCs in the context of small and open economies, we argue for another important motivation for having a retail CBDC in Singapore's monetary system – greater monetary policy independence – which the MAS paper overlooked.

## Monetary policy dilemma

The current economic environment has presented central bankers with a dilemma: the high inflation calls for a rise in interest rates, yet the global economy is still recovering from the pandemic. Nonetheless, major central banks like the US Federal Reserve have raised interest rates to curb further inflation.

In its latest monetary policy statement, to maintain price stability in Singapore, the MAS also decided to strengthen the Singapore dollar in the months to come. Such a move will lower the costs of imports but may, at the same time, inflate Singapore's export price. According to traditional macroeconomic theory, a central bank needs to deal with the 'impossible trinity' when formulating its monetary policy. It can only simultaneously achieve two out of the three objectives of free capital flows, stable exchange rates, and independent monetary policy.

Due to its high dependency on trade and its status as a global financial centre, it is in Singapore's best interests to give up an independent monetary policy. Essentially, the MAS sets the paths of its exchange rates and allows the interest rate to follow a foreign one, primarily the US interest rate. Thus, the MAS lacks the independence in setting the interest rate to influence residents' consumption and investment decisions. The one option to bring down inflation in the current economic environment is strengthening the Singapore dollar.

## An interest-bearing retail CBDC

A retail CBDC is meant for general public use. Like cash, a retail CBDC is also a direct claim on the central bank but with many technological advancements. The MAS paper states that a "frictionless" retail



A "frictionless" retail CBDC can be a risk-free digital medium of exchange, universally accessible, elastically supplied, and interest-bearing. AFP

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The interest-bearing feature is also highlighted as a crucial design principle of retail CBDCs in a paper by Michael Kumhof from the Bank of England and Claire Noone from the Reserve Bank of Australia. The CBDC interest rate has an additional advantage as a second monetary policy tool. In the event of high inflation, the central bank may reduce the interest rate of a retail CBDC, incentivising consumers to hold less CBDC for transaction purposes, thus removing liquidity from the economy. The central bank can then tame inflation.

## A small and open economy's context

Our study, titled "CBDC with an adjustable interest rate in small open economies", co-authored by researchers from the Asia Competitiveness Institute and the Nanyang Technological University, finds that an interest-bearing retail CBDC helps the central bank overcome the macroeconomic impossible trinity, especially when the economy is highly open to trade and capital flows.

In other words, the central bank in a small and open economy can adjust the retail CBDC's interest rate to limit consumption at home when inflation is too high. At the same time, stable exchange rates and free capital flows remain.

The key design feature to achieve this compromise of the impossible trinity, in addition to the four principles outlined by Kumhof and Noone, is that the retail CBDC caters to domestic users only. The MAS paper also talks about similar safeguards through restrictions on the use of CBDCs by non-residents. The fact that the CBDC is not internationally traded, as are government bonds and other international assets, means that changes in its interest rate do not attract international arbitrage, resulting in exchange rate instability.

## Implications for Singapore

Our findings suggest the possibility for Singapore to achieve monetary policy in-

dependence in the domestic economy while maintaining its existing capital market and exchange rate arrangements.

An interest-bearing retail CBDC for domestic use would help MAS gain independence in monetary policy. MAS can influence consumer behaviour by adjusting the interest rate of the retail CBDC, thus impacting domestic economic activity and inflation dynamics. Exchange rate stability is maintained because internationally traded assets' returns still follow foreign ones.

Restricting the usage of a retail CBDC would not be an unrealistic design, as Singapore dollar notes and coins also primarily circulate within Singapore's geographical boundary.

It is worth stressing that local banks already use deposit interest rates to influence consumer behaviour. Depending on their objectives, the local banks have introduced different incentives in the form of bonus interest on deposits. Typically, additional interest payments are awarded if the account holders spend more than a threshold from the account in a given period or if the holders purchase a specific product with the bank.

Given the rising popularity of retail CBDCs among global central banks and Singapore's status as a leading fintech hub, it is puzzling that Singapore finds the development of a retail CBDC not a "pressing" task.

The MAS lacks the ability to set the interest rate in Singapore's domestic economy independently. A retail CBDC presents an opportunity for the central bank to gain more independence.

Regardless of the outcome of the actual experimentation, receptiveness toward retail CBDCs in future endeavours can be beneficial for Singapore.

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