

In early June the Reserve Bank of Australia cut the official cash rate to a new historic low of 1.25%, leaving the door open to further cuts. However, it is generally recognised there is a limit to how far the RBA can push down the official rate, and that this so-called lower interest rate bound is higher than zero.

What is this lower limit? And perhaps more importantly, what other policies could the RBA pursue should the need for further monetary easing arise?

We start by providing a brief history of modern quantitative easing. We then address the following questions:



HOW DOES QE WORK?



HOW WOULD IT WORK IN AUSTRALIA?



COULD QE BOOST AUSTRALIA'S ECONOMIC GROWTH?



WHAT IS THE LIKELY IMPACT ON AUSTRALIAN CAPITAL MARKETS?

A BRIEF HISTORY OF MODERN¹ QUANTITATIVE EASING

Modern quantitative easing (QE) originated in Japan, following the collapse of Japan's "Bubble Economy" in the early 1990s. Amid a series of 'traditional' fiscal stimulus packages², and after cutting the official policy rate from 8.0% to just 0.5% between 1991 and 1995 (and then subsequently to zero in 1999), the Bank of Japan (BoJ) first began purchasing Japanese bank commercial paper in 1997 (helping to recapitalise the country's ailing banking system). In 2001, the BoJ also commenced large scale purchases of Japanese Government Bonds (JGBs), funded by increases in the money supply, which came to be known as QE. Still in the grip of stubbornly low inflation, however, ensuing attempts to 'normalise' Japanese interest rates and to end QE have all proved unsuccessful.

Moving forward to the Global Financial Crisis of 2008, many other major central banks, including the United States Federal Reserve (the "Fed") and the Bank of England (BoE), were also forced to cut official interest rates to effectively zero. In addition, central banks purchased massive quantities of government and non-government securities, in the process expanding their balance sheets and injecting massive amounts of liquidity into stressed banking and financial systems³. Given the similarities with the BoJ's actions over the previous decade, these interventions were also quickly termed QE.

Although these actions ultimately contained (and ameliorated) the crisis, the subsequent US recovery struggled to sustain momentum. In 2010, with the Fed Funds rate still at zero, the Fed announced it would purchase a further \$US600bn of Treasuries, again funded by increases in the US money supply ("QE2"). Abstracting from the role of QE in financial crises, it was at this point that central bank balance sheet expansion first became a key tool of monetary policy outside of Japan.

Other central banks, including the BoE and the European Central Bank (ECB) and other European central banks, have also since implemented various iterations of QE.

¹ "Modern" refers to the post War period. The US Federal Reserve belatedly implemented policies similar to the recent quantitative easing during the Great Depression of the 1930s.

²Perhaps as a result of this government spending, Japan is now the most indebted country in the world. As of 2018, the Japanese public debt-to-GDP ratio was at an all-time high of 254%.

³ At the peak of the US sub-prime crisis, the Federal Reserve purchased some \$US1.5 trillion of various government and non-government securities, most of which appeared as a corresponding increase in the excess reserves of US banks (often described as the Fed 'printing money'). As the Euro area plunged into a separate sovereign debt crisis in 2010, the ECB was forced to engage in similar quantitative easing from 2015 onwards, to the tune of 2.6 trillion euros.

1. HOW DOES QUANTITATIVE EASING WORK?

"This (quantitative easing) is just monetary policy...it will work or not work in much the same way that ordinary, more conventional, familiar monetary policy works."

- Ben Bernanke, former Chair of the Federal Reserve⁴

In addition to QE, central banks have experimented in recent years with a number of other 'non-conventional' monetary policies. Some, including the ECB, the BoJ and a number of other European central banks, have implemented negative policy rates. The BoJ tailors the monthly size of asset purchases to control the level and shape of the Japanese yield curve. All these banks at different times have also adopted 'forward guidance', pledging to keep short-term rates low for prolonged periods (and ultimately pushing down entire term structure of interest rates).

Despite some controversies, there is tentative agreement QE has been the most effective of the unconventional measures central banks have tried to date. Abstracting from market crises and the need for central banks to provide emergency liquidity, the rationale of QE is fairly simple. Even with the policy rate at zero, by entering markets and directly purchasing government and non-government assets or securities, the central bank is able to force down both term premia (taking duration out of the market) and risk premia (by compressing interest rate spreads).

Concurrently, viewed from the liabilities side of the central bank's balance sheet, QE is a source of low cost liquidity and funding to the banking system. This funding assists banks with the process of maturity transformation and credit growth, in turn strengthening bank profitability. In theory, banks are more able to lend, either by purchasing marketable securities (which could be appreciating in value if a component of central bank asset purchase schemes) or directly to the private sector (or final borrowers). However, reflecting also tighter regulatory and capital requirements, so far recoveries in bank lending growth have generally been tepid.

Nevertheless, QE is not without risks for central banks, including the need to manage a large portfolio of securities with inherent credit risk. Back in 2010, the Fed's huge injections of liquidity, or 'high-powered money', were also seen by some as potentially highly inflationary. In the event, these inflationary fears have proved unfounded. There is also criticism that the abundance of cheap liquidity leads to capital misallocation, including allowing otherwise unviable ('zombie') entities to survive. Other criticisms focus on the notion that QE entrenches wealth inequality, and others cite the adverse spillover into other economies including overvalued exchange rates in economies with positive nominal interest rates.

More recently, as the US economy appeared to be approaching full employment, the Fed completely ceased new asset purchases in 2014, and in 2017 began to sell a set monthly value of Treasuries and MBS back into the market. This process of shrinking the Fed's balance sheet, otherwise known as *Quantitative Tightening*, has accompanied a series of increases in the Federal Funds rate. However, the Fed has since announced net sales will cease in late 2019 and has also reduced the long term long term neutral /equilibrium rate ("r-star") from 2.75% to 2.5%, which means that after a decade of easy money the Fed Funds target range of 2.25%-2.5% is now at neutral.

⁴As reported by Paul Krugman in the New York Times, 2010, https://www.nytimes.com/2010/11/08/opinion/08krugman.html

⁵ This latter function is the objective of the ECB's targeted longer-term refinancing operations (TLTROs), and the Bank of England's 'Funding for Lending' scheme.

⁶ Although money bases expanded to an unprecedented extent under QE in many economies, the potential inflationary impact has been offset by the declines in velocities of circulation (the rate at which money turns over in the economy). The reasons for the declining velocity of circulation fall outside the scope of this paper.

⁷Some groups argue that the money created through QE to date has not been re-intermediated to final borrowers, but has been used by banks to refinance existing debt at lower interest rates.

2. HOW WOULD IT WORK IN AUSTRALIA?

"QE is a policy option in Australia, should it be required. There are less government bonds here, which may make QE more effective. But most of the traction in terms of borrowing rates in Australia is at the short end of the curve rather than the longer end of the curve, which might reduce the effectiveness of QE."

- Guy Debelle, Deputy Governor of the RBA8

INFLATION REMAINS LOW

Australia's economic performance has been relatively satisfactory since the bursting of the commodity export price and mining booms in the middle part of the current decade. However, in the past three years core inflation has remained firmly stuck below the lower end of the RBA's 2% – 3% target range. Even with the most recent cut in the official cash rate, and the potential for further cuts, the apparent strength of secular disinflationary forces suggest there is no certainty inflation will quickly return to the RBA's target range. And while it is equally unclear whether a lengthening period of 'lowflation' would lead to a destabilising decline in inflation expectations, nevertheless the RBA's current mandate requires the bank to ensure inflation averages 2% – 3% over the course of the cycle.

HOW LOW CAN INTEREST RATES GO?

There is a general consensus the RBA has scope to continue lowering the official cash rate below the current level of 1.25%. Like many other developed economies, however, Australia's lower nominal interest rate bound is likely to be higher than zero. The lower limit will depend on a number of factors, most importantly the structure of bank funding costs, and the capacity (or willingness) of banks to pass on cuts in the official cash rate. According to an analysis of funding costs undertaken by Westpac, below a cash rate of 0.75% and 'certainly' below 0.50%. QE would be more effective in easing credit conditions and stimulating credit growth.¹⁰ This view is shared by a number of other private sector analysts who also point to our negative current account deficit. Australia still needs sufficiently high rates to attract capital from abroad given our limited domestic savings.11

HOW CAN THE RBA MOST EFFECTIVELY INTERVENE?

Beyond the lower interest rate bound, how best could the RBA intervene to continue easing financial conditions? Overseas experience suggests forward guidance on interest rates could be a useful weapon, preceding or accompanying other non-conventional approaches. In contrast, it seems unlikely the RBA would seriously consider a negative cash rate, given the drawbacks of such approaches (particularly the potential adverse impacts on bank profitability). Notably, the other regions to have implemented negative policy rates tend to run current account surpluses, and are less dependent on the need for capital inflows.

The broad-based adoption of QE in other developed economies suggests such an approach could also be effective in Australia. In contrast to other developed economies undertaking QE, many key lending rates in Australia are 'variable', and priced from the cash rate rather than longer-term interest rates. This is certainly the case with Australian home loan rates, approximately 80% of which are variable. It also suggests Australian QE will not solely rest on the RBA buying Commonwealth Government Securities, in order to drive down longer-term interest rates. Rather, a more effective approach would be possibly to emulate the BoE's Funding for Lending program, driving down risk spreads for home borrowers and businesses, and providing cheaper funding for bank lending to these sectors.

⁸ https://www.rba.gov.au/speeches/2018/sp-dg-2018-12-06.html

⁹ Global inflation remains low despite tight labour markets. Some suggest China as the world's factory is exporting deflation, others mention technology, globalisation (trade), demographics (ageing and flexible working), as well as the sharing economy (like Uber and AirBnB).

 $^{^{10}} https://www.macrobusiness.com.au/2019/06/westpac-rba-cut-tuesday-aug-nov-qe/?utm_medium=email&utm_campaign=Daily%20\\ MacroBusiness&utm_content=Daily%20MacroBusiness+CID_3667642f105b94588f07377ea1242b87&utm_source=Email%20marketing%20\\ software&utm_term=Westpac%20RBA%20cut%20Tuesday%20Aug%20and%20Nov%20then%20QE$

¹¹ For example, see https://www.news.com.au/finance/economy/interest-rates/rba-could-cut-cash-rate-to-05-per-cent-jp-morgan-says/news-story/7112cbde3b549b838118897a3f8512e9 and https://www.businessinsider.com.au/rba-cash-rate-helicopter-money-australia-economy-2019-4

HOW CAN THE RBA MOST EFFECTIVELY INTERVENE? (CONTINUED)

One widely cited option to increase home lending is for RBA to expand the size of residential mortgage-backed security (RMBS) purchases from banks and non-banks. As part of the RBA's Committed Liquidity Facility (CLF), introduced during GFC, the Bank already accepts AAA-rated RMBS as collateral for regular repurchase (open market) operations. The Bank also accepts a range of other AAA-rated asset-backed securities (including commercial mortgages and commercial paper), again suggesting this approach could be extended to small-and medium-sized businesses.

The availability of cheaper funding for banks could be tied to lending targets. Moreover, given the relative strength of Australian bank balance sheets, it is less likely that banks would use to cheaper funding to refinance existing obligations at the lower rate, which has been a problem with similar schemes overseas.

3. COULD QE BOOST AUSTRALIA'S ECONOMIC GROWTH?

A casual glance across the globe suggests a mixed scorecard for QE and other unconventional policies. There is little dispute the emergency liquidity measures were successful in containing the US sub-prime and European sovereign debt crises. However, it seems fair to say the growing body of academic literature and empirical evidence provides only lukewarm endorsement of the notion that non-traditional policies have "work(ed) or not work(ed) in much the same way that ordinary, more conventional, familiar monetary policy works". This is especially so after taking into account the adverse side-effects of QE.

What seems indisputable is that unconventional monetary policies would be more effective countercyclical tools if actively supported by other arms of economic policy, particularly fiscal policy and structural policies designed to lift flagging labour productivity (and real wage) growth. This point is especially important if the 'natural' real policy rate is very low (or even zero), and if many sectors are attempting to deleverage overextended balance sheets.

With a household debt to income ratio of 190% (up from just 160% a decade earlier), it is unsurprising that household credit demand has slowed sharply in Australia in the past few years. It is widely accepted that monetary policy becomes less effective when rates are close to zero, to the point that policy is like 'pushing on a string'.

This thinking was embodied in the 'three arrows' in Japan, through which it was hoped the co-ordination of monetary, fiscal and structural policies would eventually lift Japan out of deflation (although little structural reform has actually been implemented). Although these policies have not restored Japan to its former glory, it has been suggested that these measures have been behind significant increases in business investment and halted falling inflation expectations, Hence, coordination of monetary, fiscal and structural policies are equally pertinent to Australia, and one that is repeatedly advocated by the Governor of the RBA.



12 https://www.afr.com/personal-finance/budgeting/the-coming-of-aussie-qe-20190510-p51lxi

"As a country, we should also be looking at other options to reduce unemployment. One option is for fiscal support, including through spending on infrastructure. This spending not only adds to demand in the economy, but it also adds to the economy's productive capacity. So it works on both the demand and supply side. Another option is structural policies that support firms expanding, investing, innovating and employing people. All three options are worth thinking about. From my perspective, the best option is the third one – structural policies that support firms expanding, investing, innovating and employing people. A strong dynamic business sector is the best way of creating jobs. Structural policies not only help with job creation, but they can also help drive the productivity growth that is the main source of improvement in our living standards."

- Dr Philip Lowe, Governor of the RBA¹³

MONETARY OPTIONS BEYOND QE

Given the mixed success of QE in supporting sustainable economic growth and lifting inflation expectations, it is perhaps unsurprising that some are now advocating more radical unconventional measures. Gaining more attention are approaches that combine both monetary and fiscal policy, including Modern Monetary Theory (MMT) and helicopter money. The former has some support within the US Democratic Party.

While QE allows central banks to effectively print money to buy securities, MMT proposes printing money to directly fund government spending and deficits. MMT posits that governments should assume primary responsibility for managing the business cycle by means of spending and taxes, rather than relying on independent central banks and interest rate policy.

Proponents seek to allay fears over the impact on budget deficits and government debt by arguing that countries like the US - which issue bonds in their own currency - are unlikely to default. Therefore, provided inflation remains subdued, governments have more 'fiscal capacity' than is currently assumed.

'Helicopter drops' of cash to the household sector could also be considered in the event of recession, perhaps similar to those deployed in Australia in early 2009. In contrast to those earlier payments, which were funded through the public issue of Australian government bonds, helicopter drops would be funded by permanent increases in the money supply (i.e. the RBA would provide the financing).

Both approaches would represent radical departures from current economic orthodoxy. The blurring of fiscal and monetary policy is also politically contentious, and would reverse the efforts of central banks over several decades to conduct monetary policy free of political interference. Indeed, such policies would put the power to create and allocate money, credit, and spending in the hands of politicians.

Even Japan, which has battled deflation for the best part of three decades, has been reluctant to consider either (indeed the government is likely to increase Japan's value added tax in October). Nevertheless, in the US, inflation expectations remain uncomfortably low after a decade of economic expansion (and an unemployment rate of below 4.0%), 30-year Treasury bonds yield less than 3.0%, and there appears to be a bi-partisan disregard for the ballooning Federal Government deficit and debt. Some argue MMT as a logical next step in the evolution of macro-stabilisation policies.

¹³ https://www.rba.gov.au/speeches/2019/sp-gov-2019-06-04.html

4. WHAT IS THE LIKELY IMPACT OF THE RBA ADOPTING QE ON AUSTRALIAN CAPITAL MARKETS?

Fortunately for Australian investors, the broad-based adoption of QE abroad (and subsequently QT in the US) provides some insights into investment market implications.

THE INITIAL STAGE

At the outset, buttressed by low long-term inflation expectations, the abundance of central bank liquidity compresses bond yields and provides strong support for the valuations of risk assets. Despite lacklustre growth in Australia and overseas, earnings multiples remain elevated compared with long-term averages, and credit spreads are historically tight. With the perception that earnings growth is relatively scarce in a world of 'lowflation', investors will also tend to pay up for growth stories, or alternatively reach for (defensive) yield.

The overseas experience also suggests QE contributes to capital outflows and downward pressure on nominal exchange rates. Indeed, this is one mechanism by which QE contributes to economic growth.

THE LONG TERM IMPLICATIONS

At the same time, QE is not without risks to markets and investors. In Japan, for example, the Bank of Japan now owns approximately half of all Japanese Government Bonds on issue, leading to an extremely illiquid government bond market, while also curbing financial institution profitability by repressing yields on investment portfolios.

At a broader level, there is debate around whether it is the stock or the flow of central bank purchases that is important for risk asset valuations. If the latter, it would seem that either ongoing monetary expansion (QE) or stronger economic growth is needed to provide support for historically high earnings multiples and historically low credit spreads.

Perhaps even more fundamentally, current historically low bond yields and elevated risk asset valuations would seem especially vulnerable to either the (unexpected) return of inflation, or to rising real yields. Higher real yields could conceivably emerge in some member countries of the European Monetary Union, which are unable to fund budget deficits in national currencies, and where budget dynamics are already under considerable pressure.

CONCLUSION

While beneficial in the short run to contain crises and support impaired banking systems and financial markets, QE together with easy monetary policy has facilitated the continuing rise in global debt since the Global Financial Crisis. To this end, in the longer term QE and other unconventional monetary policies could also possibly be sowing the seeds for an even larger debt crisis and more protracted economic decline.

AUTHORS

DR HARRY LIEM

E: harry.liem@mercer.com

For further information, please contact your local Mercer office or visit our website at : www.mercer.com

SIMON CALDER

E: simon.calder@mercer.com



Important notices

'MERCER' is a registered trademark of Mercer (Australia) Pty Ltd ABN 32 005 315 917.

References to Mercer shall be construed to include Mercer LLC and/or its associated companies.

© 2019 Mercer LLC. All rights reserved.

This contains confidential and proprietary information of Mercer and is intended for the exclusive use of the parties to whom it was provided by Mercer. Its content may not be modified, sold or otherwise provided, in whole or in part, to any other person or entity, without Mercer's prior written permission.

The findings, ratings and/or opinions expressed herein are the intellectual property of Mercer and are subject to change without notice. They are not intended to convey any guarantees as to the future performance of the investment products, asset classes or capital markets discussed. Past performance does not guarantee future results. Mercer's ratings do not constitute individualized investment advice.

Information contained herein has been obtained from a range of third party sources. While the information is believed to be reliable, Mercer has not sought to verify it independently. As such, Mercer makes no representations or warranties as to the accuracy of the information presented and takes no responsibility or liability (including for indirect, consequential or incidental damages), for any error, omission or inaccuracy in the data supplied by any third party.

This does not constitute an offer or a solicitation of an offer to buy or sell securities, commodities and/or any other financial instruments or products or constitute a solicitation on behalf of any investment managers, their affiliates, products or strategies that Mercer may evaluate or recommend.

For the most recent approved ratings of an investment strategy, and a fuller explanation of their meanings, contact your Mercer representative.

For Mercer's conflict of interest disclosures, contact your Mercer representative or see www.mercer.com/conflictsofinterest.

Mercer universes: Mercer's universes are intended to provide collective samples of strategies that best allow for robust peer group comparisons over a chosen timeframe. Mercer does not assert that the peer groups are wholly representative of and applicable to all strategies available to investors.

Risk Warnings: The value of your investments can go down as well as up, and you may not get back the amount you have invested. Investments denominated in a foreign currency will fluctuate with the value of the currency. Certain investments carry additional risks that should be considered before choosing an investment manager or making an investment decision.

