



RESERVE BANK OF AUSTRALIA

Speech

# Unconventional Monetary Policy: Some Lessons From Overseas

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Thank you for the invitation to address this year's Annual Dinner of the Australian Business Economists. This is the fifth time I have had the privilege of joining you. Thank you for having me back.

One recurring theme of my talks over the years has been the likelihood that interest rates will remain low for an extended period – certainly, much lower, on average, than before the global financial crisis.

This theme remains highly relevant today. As I discussed in the Sir Leslie Melville lecture at the ANU a month ago, low interest rates are not a temporary phenomenon. Rather, they are likely to be with us for some time and are the result of some powerful global factors that are affecting interest rates everywhere. [\[1\]](#)

Given this assessment, it is not surprising that there is a lot of discussion internationally about the use of so-called 'unconventional' monetary policies. People are rightly asking: if interest rates are going to stay low and be constrained by a lower bound, what other monetary policy options are there?

I have been part of these international discussions through chairing the Committee on the Global Financial System (CGFS) at the Bank for International Settlements in Basel. Last month, the Committee published a report titled: 'Unconventional Monetary Policy Tools: a Cross-country Analysis'. [\[2\]](#) The report reviews the experience with the use of unconventional policy tools and discusses how these tools can be used by central banks to achieve their objectives. If you are interested in these issues and have not looked at the report, I encourage you to do so.

This evening I would like to summarise some key observations of the report and then explore how those observations might be applied to Australia.

## The CGFS Report – the ‘Unconventional’ Policy Tools

The report discusses four unconventional policy tools.

The term ‘unconventional’ monetary policy has now become the conventional shorthand for a wide range of policies, although I am not sure it is the best terminology. I say this because most of these tools have always been in the toolkit of central banks and have been used in one way or another in the past. What has been unconventional over recent times is the *way* these tools have been used.

### Negative interest rates

The first of the four tools discussed in the report is negative policy rates.

This is one tool that is truly unconventional.

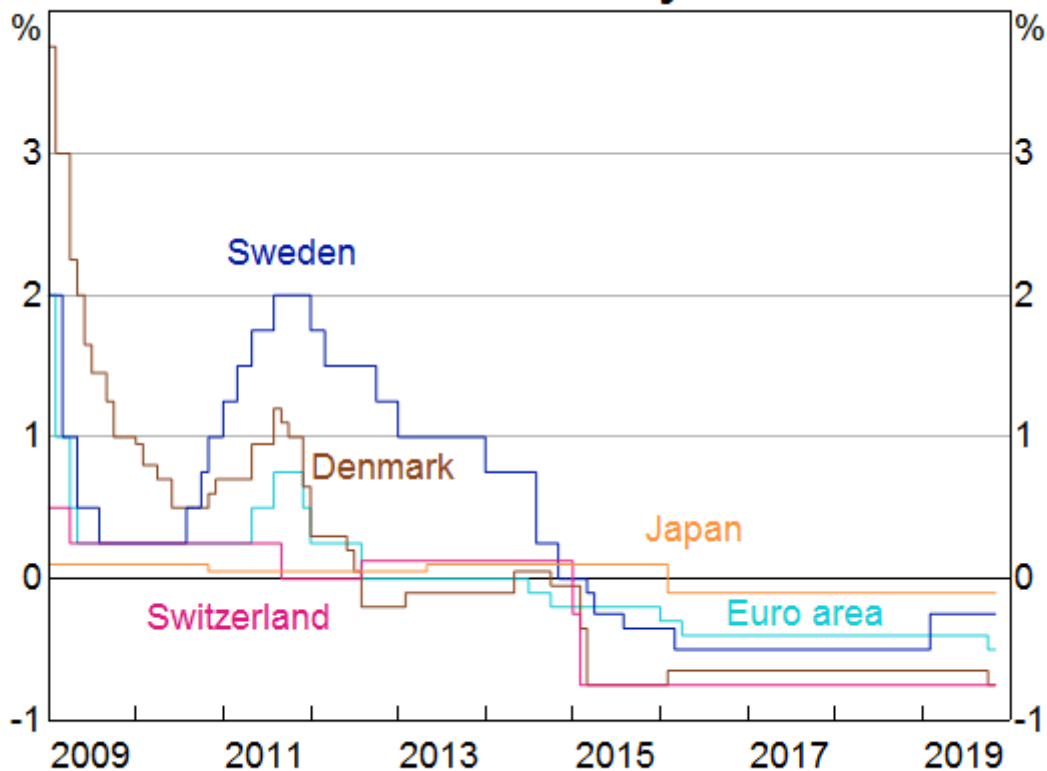
Prior to the financial crisis, it was widely thought that zero was the lower bound for the policy interest rate – so it was common to talk about the ‘ZLB’, or the zero lower bound. It was thought that if interest rates went below zero, people would hold their savings in banknotes rather than be charged by their bank to deposit their money.

But zero has not turned out to be the constraint that it was once thought to be. So we now talk about the ELB – the effective lower bound – not the ZLB. While countries with negative interest rates have seen some shift to banknotes, it has been on a limited scale only. This reflects the use of bank deposits for making transactions and the fact that most banks in countries with negative interest rates have set a floor of zero on retail deposit rates. These banks have judged that it doesn't make sense, either commercially or politically, to charge households and small businesses negative interest rates on their deposits.

It is worth pointing out that negative policy interest rates have largely been a European phenomenon. Policy interest rates have been negative in the euro area, Denmark, Sweden and Switzerland. Rates have been lowest in Switzerland, at minus  $\frac{3}{4}$  per cent (Graph 1). The only country outside of Europe that has had negative policy interest rates is Japan, but even there it is only a very small share of bank reserves at the Bank of Japan that earns a negative rate, at minus 0.1 per cent.

Graph 1

## Central Bank Policy Rates



Sources: Central banks; Refinitiv

## Extended liquidity operations

The second unconventional policy discussed in the report is the extended use of central bank liquidity operations.

In response to the financial crisis, many central banks made significant changes to their normal market operations to deal with strains in financial markets that were impairing the supply of credit to the economy.

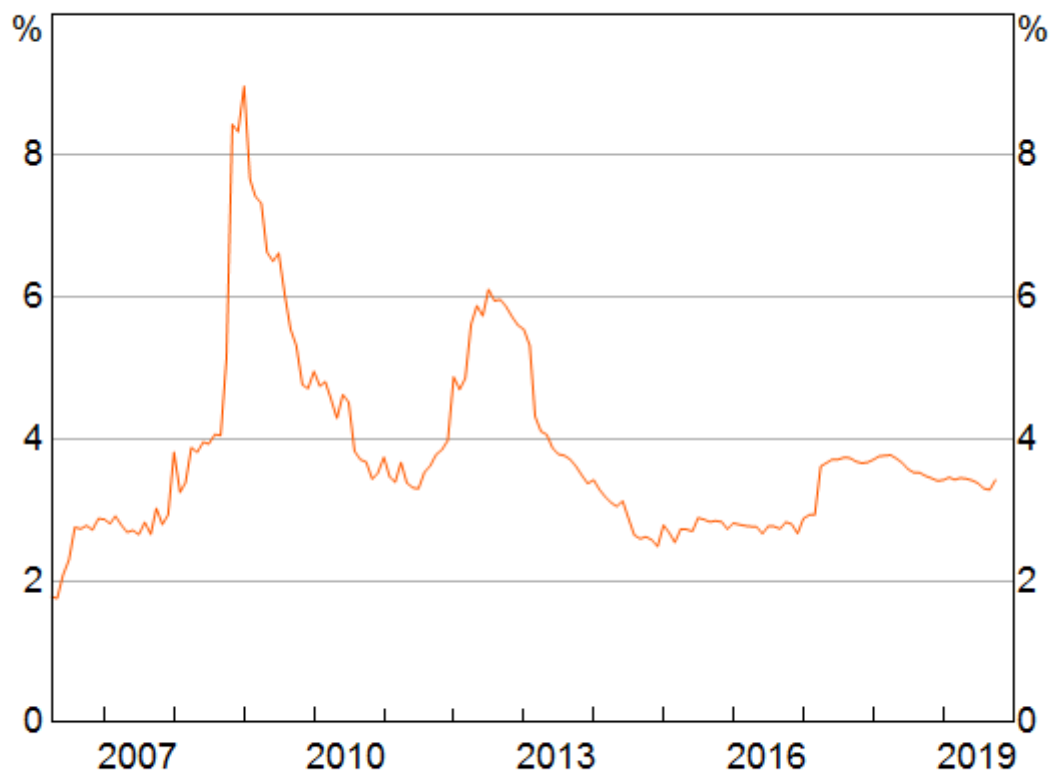
While the specifics differ across countries, the changes to market operations included: expanding the range of collateral accepted; providing much larger amounts of liquidity; extending the maturity of liquidity operations; increasing the range of eligible counterparties; and providing funding to banks at below the cost that was then prevailing in highly stressed markets, sometimes on the condition that the banks provide credit to businesses and households.

This graph shows the size of the extended liquidity operations of the major central banks (Graph 2). The biggest operations were during the crisis period of 2008 and 2009, with significant liquidity support also being provided in 2011 and 2012 to support bank lending during the European sovereign debt crisis.

Graph 2

**Central Bank Extended Liquidity Operations\***

Per cent of GDP



\* Includes the US Federal Reserve, European Central Bank, Bank of Japan, Bank of England and the Swedish Riksbank.

Sources: Central banks; Refinitiv

It is worth recalling that during these periods of stress, banks had become very nervous about their access to liquidity. This, in turn, made them nervous about lending to others, making the possibility of a severe credit crunch very real. By providing financial institutions with greater confidence about their own access to liquidity, central banks were able to support the supply of credit to the economy. The CGFS report recognises that there were some side-effects of doing this, but the strong conclusion of the report is that these measures eased liquidity strains in highly stressed bank funding markets and helped restore monetary transmission channels to the broader economy.

### **Asset purchases – quantitative easing**

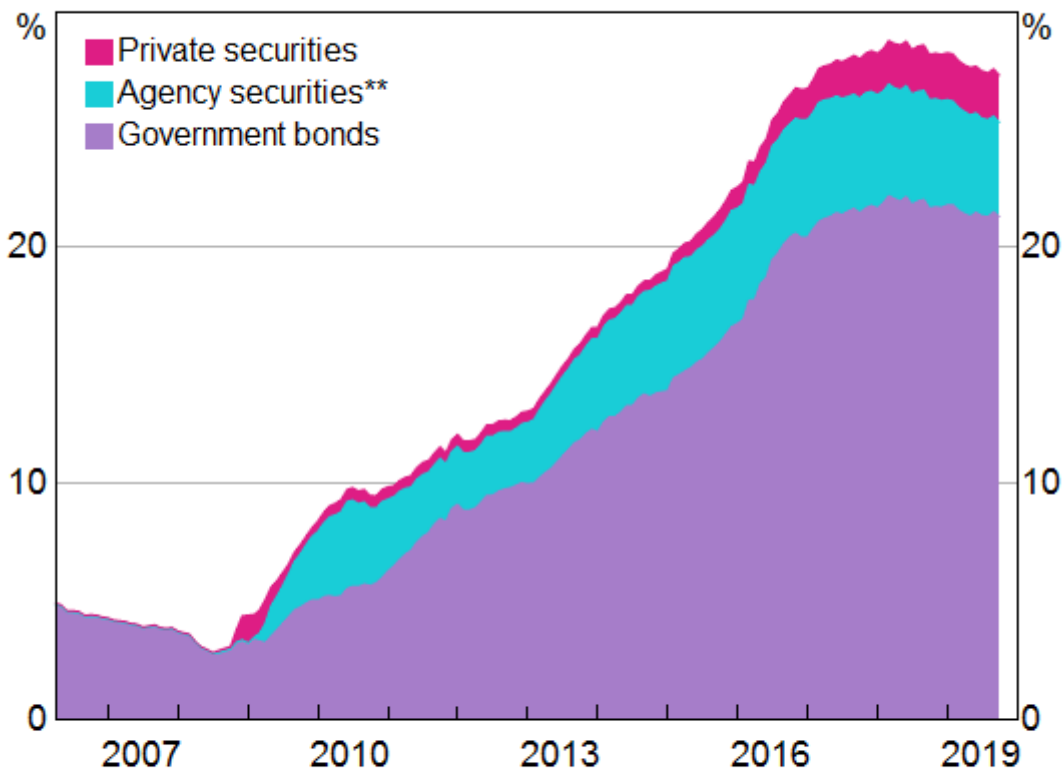
The third policy tool discussed in the report is the outright purchase of assets from the private sector, paying for those assets by creating central bank reserves – also known as quantitative easing or QE.

These asset purchases were on an unprecedented scale and led to very large expansions of central bank balance sheets (Graph 3). Before the financial crisis, the major central banks owned securities equivalent to around 5 per cent of GDP. In recent years, this has risen to nearly 30 per cent. This is a very large change.

Graph 3

**Central Bank Asset Purchases\***

Per cent of GDP



\* Includes the US Federal Reserve, European Central Bank, Bank of Japan, Bank of England and the Swedish Riksbank

\*\* Includes agency bonds, agency mortgage-backed securities and supranational bonds

Sources: Central banks; Refinitiv

As part of their QE programs, central banks bought a wide range of assets, but the main asset purchased was government securities. Central banks now hold nearly 30 per cent of government securities on issue, which is equivalent to around 20 per cent of GDP. The largest purchases have been made by the Bank of Japan, which holds almost 50 per cent of Japanese government bonds on issue.

In the United States, the Federal Reserve also bought large quantities of agency securities backed by the US government. Elsewhere, central banks bought private securities such as covered bank bonds, corporate bonds and commercial paper. And the Bank of Japan bought equities via exchange traded funds (ETFs) and real estate investment trusts.

The precise motivations for these asset purchase programs varied across countries, but a common motivation was to lower risk-free interest rates out along the term spectrum, well beyond the short-term policy rate. Buying government bonds was seen as reinforcing policy rate cuts and/or acting as a substitute for further reductions in the policy rate once it was at its lower bound. The expectation was that lower risk-free rates would flow through to most interest rates in the economy, boost asset prices and push down the exchange rate.

A related motivation for buying government securities was to reinforce market expectations that policy rates were going to stay low for a long time. This 'signalling channel' added to the downward pressure on long-term bond yields.

Another motivation in some countries was addressing problems in specific markets. In the United States, for example, the Federal Reserve purchased government-backed agency securities to support mortgage markets. And the Bank of England purchased commercial paper to ease highly stressed conditions in corporate credit markets.

Finally, the expansion of the central bank's balance sheet through money creation should, in theory, have stimulatory effects through the so-called 'portfolio balance channel'. The idea here is that as the central bank purchases securities with bank reserves, investors seek to rebalance their portfolios, and in so doing push up other asset prices and lower risk premiums for borrowers. It is difficult, though, to isolate this effect from the other channels I just spoke about.

## Forward guidance

The fourth policy response was forward guidance.

This took two forms: calendar based and state based. Under calendar-based guidance, the central bank makes an explicit commitment not to increase interest rates until a certain point in time. Under state-based guidance, the central bank says it will not increase rates until specific economic conditions are met. We have seen examples of both in practice. Some central banks also have provided forward guidance regarding their asset purchase programs.

A primary motivation of forward guidance is to reinforce the central bank's commitment to low interest rates. A related motivation is to provide greater clarity about the central bank's reaction function and strategy in unusual times. The experience has mainly been positive, with the guidance helping to reduce uncertainty. There are, however, some examples where a change in guidance caused market volatility. The 'taper tantrum' in the United States in 2013 is an example of this.

## Some Observations

Before I discuss the relevance of all this to Australia, I would like to make three broad observations, drawing on the report as well as my own reading of the evidence.

The first is that there is strong evidence that the various liquidity support measures and targeted interventions in stressed markets were successful in calming things down and supporting the economy.

When markets broke down and became dysfunctional, the actions of central banks helped stabilise the situation and helped avoid a damaging gridlock in the financial system. They also helped contain risk premiums in highly stressed markets. It is also worth pointing out that many of the measures to support liquidity were successfully unwound once the job was done – so they proved to be temporary, rather than a permanent intervention.

The CGFS report also documents the positive effects of some of the other unconventional measures. In general, though, I find this evidence less compelling. These various measures certainly pushed down long-term yields and provided monetary stimulus in the depths of the crisis when it was needed. But these extraordinary measures have continued way past the crisis period. In some countries, asset purchases have yet to be unwound and it remains unclear when, and even if, this will happen. So a full evaluation is not yet possible.

This brings me to my second general observation. And that is that there have been some side-effects of the various unconventional measures. I will touch on a few of these that the CGFS report discusses.

The first is that the extensive use of unconventional monetary tools can change the incentives of others in the system, perhaps in an unhelpful way.

It is possible that the willingness of a central bank to provide liquidity reduces the incentive for financial institutions to hold their own adequate buffers, making episodes of stress more likely in the future. <sup>[3]</sup> It is also possible that the willingness of a central bank to use its full range of policy instruments might create an inaction bias by other policymakers, either the prudential regulators or the fiscal authorities. If this were the case, it could lead to an over-reliance on monetary policy.

A second side-effect is the impact on bank lending and the efficient allocation of resources. Persistently low or negative interest rates and a flattening of the yield curve can damage bank profitability, leading to less capacity to lend. In some countries, there are concerns that low interest rates allow less-productive (zombie) firms to survive. There are also financial stability risks that can come from low interest rates boosting asset prices (and perhaps borrowing) at a time of weak economic growth.

A third side-effect is a possible blurring of the lines between monetary and fiscal policy. If the central bank is buying large amounts of government debt at zero interest rates, this could be seen as money-financed government spending. In some circumstances, this could damage the credibility of a country's institutional arrangements and create political tensions. Political tensions can also arise if the central bank's asset purchases are seen to disproportionately benefit banks and wealthy people, at the expense of the person in the street. This perception has arisen in some countries despite the strong evidence that the various monetary measures supported both jobs and income growth and thereby helped the entire community.

These are all side-effects we need to take seriously.

The third general observation is that experience suggests that a package of measures works best, with clear communication that enhances credibility. Exactly what that package looks like varies from country to country and depends upon the specific circumstances. But clear communication from the central bank about its objectives and its approach is always important.

The report also notes that there may be better solutions than monetary policy to solving the problems of the day. It reminds us that when there are problems on the supply-side of the economy, the use of structural and fiscal policies will sometimes be the better approach. We need to remember



that monetary policy cannot drive longer-term growth, but that there are other arms of public policy than can sustainably promote both investment and growth.

## Application to Australia

I would now like to turn to what this all implies for us in Australia.

I will make five sets of observations.

The first is that the Reserve Bank has long had flexible market operations that allow us to ensure adequate liquidity in Australian financial markets. We have used this flexibility in the past, particularly during the global financial crisis, and we are prepared to use it again in periods of stress if necessary. [\[4\]](#)

At the moment, though, Australia's financial markets are operating normally and our financial institutions are able to access funding on reasonable terms. In any given currency, the Australian banks can raise funds at the same price as other similarly rated financial institutions around the world, and markets are not stressed. So there is no need to change our normal market operations to do anything unconventional here. Having said that, if markets were to become dysfunctional, you can be reassured by the fact that we have both the capacity and willingness to respond. But this is not the situation we are currently in. Things are operating normally.

The second observation is that negative interest rates in Australia are extraordinarily unlikely.

We are not in the same situation that has been faced in Europe and Japan. Our growth prospects are stronger, our banking system is in much better shape, our demographic profile is better and we have not had a period of deflation. So we are in a much stronger position.

More broadly, though, having examined the international evidence, it is not clear that the experience with negative interest rates has been a success. While negative rates have put downward pressure on exchange rates and long-term bond yields, they have come with other effects too. It has become increasingly apparent that negative rates create strains in parts of the banking system that can impair the ability of some banks to provide credit. Negative interest rates also create problems for pension funds that need to fund long-term liabilities. In addition, there is evidence that they can encourage households to save more and spend less, especially when people are concerned about the possibility of lower income in retirement. A move to negative interest rates can also damage confidence in the general economic outlook and make people more cautious.

Given these considerations, it is not surprising that some analysts now talk about the 'reversal interest rate' – that is, the interest rate at which lower rates become contractionary, rather than expansionary. [\[5\]](#) While we take the possibility of a reversal rate seriously, I am confident that here, in Australia, we are still a fair way from it. Conventional monetary policy is still working in Australia and we see the evidence of this in the exchange rate, in asset prices and in the boost to aggregate household disposable income.

My third observation is that we have no appetite to undertake outright purchases of private sector assets as part of a QE program.



There are two reasons for this. The first is that there is no sign of dysfunction in our capital markets that would warrant the Reserve Bank stepping in. The second is that the purchase of private assets by the central bank, financed through money creation, represents a significant intervention by a public sector entity into private markets. It comes with a whole range of complicated governance issues and would insert the Reserve Bank very directly into decisions about resource allocation in the economy. While there are some scenarios where such intervention might be considered, those scenarios are not on our radar screen.

My fourth point is that *if* – and it is important to emphasise the word *if* – the Reserve Bank were to undertake a program of quantitative easing, we would purchase government bonds, and we would do so in the secondary market. An important advantage in buying government bonds over other assets is that the risk-free interest rate affects all asset prices and interest rates in the economy. So it gets into all the corners of the financial system, unlike interventions in just one specific private asset market.

If we were to move in this direction, it would be with the intention of lowering risk-free interest rates along the yield curve. As with the international experience, this would work through two channels. The first is the direct price impact of buying government bonds, which lowers their yields. And the second is through market expectations or a signalling effect, with the bond purchases reinforcing the credibility of the Reserve Bank's commitment to keep the cash rate low for an extended period.

Currently, the government bond yield curve sits around 20 basis points above the overnight indexed swaps (OIS) curve, which represents the market's average expectation of the future monetary policy rate (Graph 4). Purchasing government securities could compress this differential and could also flatten the OIS curve through the expectations effect I just mentioned. A lower term premium would lower borrowing costs for both governments and private borrowers, and would bring the benefits that come with that. An exchange rate effect could also be expected.

## Graph 4

Our current thinking is that QE becomes an option to be considered at a cash rate of 0.25 per cent, but not before that. At a cash rate of 0.25 per cent, the interest rate paid on surplus balances at the Reserve Bank would already be at zero given the corridor system we operate. So from that perspective, we would, at that point, be dealing with zero interest rates. [\[6\]](#)

My fifth, and final, point is that the threshold for undertaking QE in Australia has not been reached, and I don't expect it to be reached in the near future.

In my view, there is not a smooth continuum running from interest rate reductions to quantitative easing. It is a bigger step to engage in money-financed asset purchases by the central bank than it is to cut interest rates.

There are, however, circumstances where QE could help. The international experience is that in stressed market conditions, the central bank can help stabilise the situation by buying government securities. That experience also suggests that QE does put additional downward pressure on both interest rates and the exchange rate. In considering the case for QE, we would need to balance these positive effects with possible side-effects.

We would also need to consider the effects on market functioning. We are conscious that government securities play a crucial role as collateral in some of our financial markets. Given the limited supply of government debt on issue, the Reserve Bank and APRA have already had to put in place special liquidity arrangements for the banking system. We are also conscious that the

Australian government's fiscal position means that the gross stock of government debt is projected to decline relative to the size of the economy over the years ahead. These considerations are not impediments to undertaking QE, but we would need to take them into account.

It is a reasonable question to ask what might be the threshold to undertake QE in Australia.

It is difficult to be precise, but QE would be considered if there were an accumulation of evidence that, over the medium term, we were unlikely to achieve our objectives. In particular, if we were moving away from, rather than towards, our goals for both full employment and inflation, the purchase of government securities would be on the agenda of the Board. In this world, I would hope other public policy options were also on the country's agenda.

At the moment, though, we are expecting progress towards our goals over the next couple of years and the cash rate is still above the level at which we would consider buying government securities. So QE is not on our agenda at this point in time.

It is important to remember that the economy is benefiting from the already low level of interest rates, recent tax cuts, ongoing spending on infrastructure, the upswing in housing prices in some markets and a brighter outlook for the resources sector. Given the significant reductions in interest rates over the past six months and the long and variable lags, the Board has seen it as appropriate to hold the cash rate steady as it assesses the growth momentum both here and elsewhere around the world. The Board is also committed to maintaining interest rates at low levels until it is confident that inflation is sustainably within the 2 to 3 per cent target range.

The central scenario for the Australian economy remains for economic growth to pick up from here, to reach around 3 per cent in 2021. This pick-up in growth should see a reduction in the unemployment rate and a lift in inflation. So we are expecting things to be moving in the right direction, although only gradually.

The Board continues to discuss what role it can play in ensuring that this progress takes place and how it might be accelerated. It recognises the benefits that would come from faster progress, but it also recognises the limitations of monetary policy and the importance of keeping a medium-term perspective squarely focused on maximising the economic welfare of the people of Australia. There may come a point where QE could help promote our collective welfare, but we are not at that point and I don't expect us to get there.

Thank you for listening. I look forward to answering your questions.

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## Endnotes

[\*] I would like to thank Ellis Connolly for assistance in the preparation of this talk.

[1] Lowe P (2019), '[Some Echoes of Melville](#)', Sir Leslie Melville Lecture, Canberra, 29 October.

[2] Committee on the Global Financial System (2019), 'Unconventional Monetary Policy Tools: a Cross-country Analysis', CGFS Papers No 63, Bank for International Settlements. Available at <<https://www.bis.org/publ/cgfs63.htm>>.

- [3] This risk has been reduced by the strengthening of liquidity regulation. It is also worth recalling that one role of the central bank is to support the liquidity of the system as a whole and that it is neither possible, nor desirable, for financial institutions individually to insure against system-wide shocks.
- [4] Debelle G (2018), '[Lessons and Questions from the GFC](#)', Address to the Australian Business Economists Annual Dinner, Sydney, 6 December.
- [5] Brunnermeier M and Y Koby (2019), 'The Reversal Interest Rate'. Available at: <<https://scholar.princeton.edu/markus/publications/reversal-interest-rate-effective-lower-bound-monetary-policy>>.
- [6] Large-scale asset purchases would increase settlement balances, which would likely result in the cash rate moving below 0.25 per cent.

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