

NZ Insight: Where to now with Quantitative Easing?

28 May 2020



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Contact

David Croy Strategist

Telephone: +64 27 432 2769
david.croy@anz.com

Liz Kendall Senior Economist

Telephone: +64 27 240 9969
elizabeth.kendall@anz.com

Where to now with Quantitative Easing (QE)? And more of your questions answered.

Questions

1. How has QE evolved in New Zealand – and why?
2. How has QE evolved differently in New Zealand compared to other countries?
3. How does QE impact the plumbing of the financial system?
4. How is QE likely to evolve from here?
5. Why is another expansion of QE necessary? Why \$90bn?

Appendix: Timeline of QE in New Zealand

This piece follows on from our recent [QE FAQ \("What is Quantitative Easing?"\)](#), which explains why QE was necessary, how it works and answers to a range of other questions. That publication also included a glossary of some of the terms used here. While this is another lengthy note, that's partly because the response to each of the questions has been written to be standalone, so please excuse repetition in places.

Key take-outs

- QE in New Zealand is having a clear impact by lowering interest rates in a broad fashion and adding liquidity to the banking system, providing monetary stimulus.
- Nonetheless, we think QE has more work to do, and expect the program to be expanded to \$90bn at the August MPS because:
 - The RBNZ will want to signal that it is unquestionably responsive;
 - The macroeconomic outlook is bleak, with clear downside risks;
 - In that light, it's better to do too much than too little;
 - Fiscal support means more bond issuance, which in turn means the RBNZ has its work cut out to keep bond yields low.
- The RBNZ's approach is unique in some ways, in part due to our small government bond market, but there's no reason to think that QE will be less effective in New Zealand.
- The RBNZ is targeting longer-term interest rates, impacting inflation expectations, confidence, investment and spending decisions. It also has the flexibility to pivot its focus to suit conditions.
- The RBNZ has adapted its thinking on QE quickly, but efficiency, ease and effectiveness remain the key considerations, subject to operational readiness.
- We intend to address longer-term issues in a future publication, but we would emphasise that the RBNZ has options if the limits of the current QE programme were to be reached. It could adapt the programme to include more assets, include foreign assets, or lend directly to banks.
- We can't rule out the RBNZ employing a negative OCR in time, but there could be perverse effects from doing so and the hurdles remain high.
- A negative OCR certainly isn't on the table this year. QE needs to run its course first.

1. How has QE evolved in New Zealand – and why?

QE has had to evolve quickly in New Zealand, as have many aspects of the COVID-19 policy response. This crisis was thrust upon us very quickly, and QE had to evolve “on the fly”. Although it has been executed quickly, the way QE has evolved has generally been logical and pragmatic.

Thinking before the current crisis

As the OCR was going lower last year, reaching 1% in August 2019, the Reserve Bank (RBNZ) could see that “alternative” or “unconventional” monetary policy might be needed at some stage as the OCR had little runway left should a negative shock hit the economy (see our [question 7 from our FAQ](#) for more). Work was underway to get prepared for the possibility.

As part of this work, the RBNZ published its [Principles](#) document and a speech in early March 2020, outlining how it would deploy alternative monetary policy tools if needed. At that time, the RBNZ was not preparing to do so imminently; rather it was getting ready, just in case.

At that time, the RBNZ judged that it would, if necessary, transition into alternative policy in this order, for the purposes of “cyclical demand management”:

1. Lower the OCR.
2. Use forward guidance.
3. Use mildly negative interest rates if more stimulus was needed.
4. Consider the use of interest rate swaps to reduce interest rates.
5. Consider asset purchases for further impact.

But more importantly, the RBNZ said they would, “**choose the most appropriate tool or combination of tools, and policy coordination, for the situation at hand**. For example, if an economic disturbance resulted in significant disruption to the functioning of the financial system, this would naturally alter the stylised ordering outlined above.”

In particular, the RBNZ’s decisions would need to take into account the following principles:

- effectiveness;
- efficiency;
- financial system soundness;
- public balance sheet risk; and
- operational readiness.

The response to COVID-19 was not simply a case of “cyclical demand management”, and that impacted what has actually happened in practice. Given the unique circumstances, the above principles have guided the Bank’s decision-making processes.

What actually happened?

First, the RBNZ lowered the OCR from 1% to 0.25% in one emergency cut on 16 March and made a commitment to leave it there for “at least 12 months” (steps one and two, above). A week later it jumped straight to step five, introducing the Large-Scale Asset Purchase programme, commonly known as “QE”.

So, why did the order change?

Efficiency and effectiveness are high up the list of priorities, and QE was the right approach based on these criteria and ease of implementation in the short timeframe required. But operational readiness was also a key consideration. Time was of the essence and the situation evolved rapidly: six days after the [Principles](#) document was published on 10 March, the RBNZ cut the OCR, and seven days later it introduced the LSAP, which has subsequently expanded and currently sits at \$60bn.

For more details, see our [Timeline of QE](#).

Given the practical limitations standing in the way of taking the OCR into negative territory, the RBNZ had very little choice but to use QE. New Zealand's financial system was simply not operationally ready for negative rates, and it was judged that using interest rate swaps to lower and flatten the yield curve would not be as effective as buying government bonds (NZGBs). The Government was the one borrower who needed to tap the market for debt immediately and markets were getting stressed, as we pointed out [in our Insight piece of 19 March](#) calling for urgent QE. QE was indeed delivered just a few days later, and immediately saw bond yields fall, heading off an unhelpful tightening in financial conditions (and not just for the Government, but for all other borrowers too via substitution effects). Rising government bond yields would have compromised other borrowers' ability to access funding – and its price – just as the need for it was likely to increase.

At a very basic level the broad aims of QE and negative rates are similar. They both work by shaping expectations and decisions (see [question 3](#) for more on how QE works). QE flattens the term structure of the NZGB yield curve and lowers the exchange rate, as a negative OCR would. By comparison though, a negative policy rate could have perverse effects, and there are significant hurdles to implementation:

- The financial system would need to be ready, and it isn't.
- Groundwork needs to be done to ready the public, especially given the impact that it would have on savers.
- Negative rates would need to be more acceptable internationally – it is still controversial as a policy tool, and although we don't think the RBNZ would shy away from challenging the status quo, evidence on its effectiveness in Europe is mixed at best.
- The economic outlook would need to be materially worse and QE would need to be perceived as having hit its limits, given that less-risky gains can still be made on that front.
- Credit markets would need to be resilient and financial risks would need to have dissipated. Negative policy rates can undermine the performance of the banking system and thereby credit supply, which is particularly concerning if markets are vulnerable to a repricing of risk and funding pressures emerging, as they are now.

[Click here to return to the list of questions.](#)

2. How has QE evolved differently in New Zealand compared to other countries?

Apart from the fact that we arrived at the QE party about a decade after the major central banks, there are some key factors that have made the evolution of QE in New Zealand a bit different to other countries.

Focus on Government Bonds

A key feature of QE in New Zealand is that its primary focus is on NZGBs. That makes it simple, and also less distortionary. The RBNZ's focus on NZGBs means that it's largely the Government that is directly impacted. The bonds that it is

buying are considered “risk free”, which means that there is limited credit risk on the RBNZ’s (and ultimately, the tax-payers’) balance sheet (as per the principles above). While this puts direct pressure on the NZGB curve alone, this then has widespread implications for other parts of the bond market. As we discuss in [question 3](#), there is clear evidence that QE is driving down yields in broader credit markets.

QE is not focused on directly benefiting the Government, but rather is aimed at flattening the term structure of interest rates in general, even if that’s done via the government bond yield curve. This is important because it lowers the cost of longer-term borrowing, making it easier for those who need to access debt as a result of the crisis. Lowering returns on government bonds also makes it more attractive for would-be bond purchasers to buy bonds from other borrowers, widening the impact of QE. Lowering funding costs for the Government by purchasing NZGBs has also been an effective way for monetary policy to support fiscal policy, which is (quite appropriately) doing the “heavy lifting” in terms of the economic policy response.

The more concentrated focus on government bonds differs slightly from the approach taken overseas, where central banks have purchased semi-government bonds, mortgage-backed securities, corporate bonds (even ones recently relegated to ‘junk’ status) and in Japan’s case, even equities.

If we compare 2020 purchases by the Reserve Bank of Australia (the RBA) and the US Federal Reserve (the Fed), and the RBNZ by the end of May 2020, 95% of the RBNZ’s QE purchases had comprised NZGBs. In contrast, the RBA and the Fed’s government bond purchases comprised around 78% and 68% respectively (figure 1).

Figure 1. Estimated RBNZ, RBA and Fed bond purchases in 2020 as a % of GDP



Source: RBNZ, RBA, Federal Reserve, ANZ

The danger of stepping into purchasing riskier assets is that it not only means that the central bank is taking a gamble on behalf of the taxpayer; it is also, effectively, “picking winners”. The boundaries between monetary and fiscal policy – indeed between the public and private sectors – get meaningfully blurrier when corporate bonds and equities are involved.

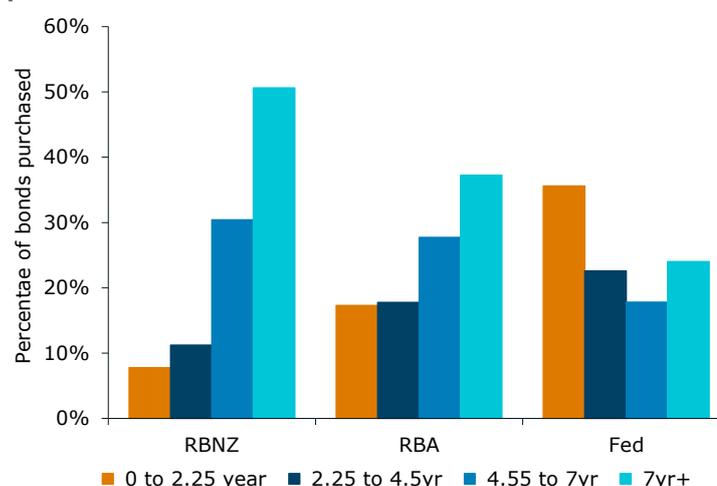
While New Zealand’s low level of government debt is the envy of many countries, it does limit the amount of QE that can be done before RBNZ purchases start to distort the market. At the moment, RBNZ comments suggest it only has appetite to purchase up to 50% of outstanding nominal bonds and 30% of inflation-linked bonds, which seems like a reasonable rule of thumb given the importance of

maintaining functioning markets. If this capacity runs out, and the Bank decides extending it further is too risky, then policy may need to turn to foreign bond purchases, and eventually resort to a negative OCR. It has flagged both as possibilities, but there are more impediments standing in the way of negative rates than foreign asset purchases.

Targeting the long end

The RBNZ has been driving down both short and long term rates, but has particularly focused its purchases on the long end of the NZGB curve (figure 2). The RBNZ has bought progressively more bonds at longer terms to maturity. By contrast, the Fed has tended to buy fewer bonds at longer maturities. The emphasis on the long end has driven 10-year NZGB yields below their US and Australian equivalents.

Figure 2. Term structure of RBNZ, RBA and Fed government nominal bond purchases in 2020



Source: RBNZ, RBA, Federal Reserve, ANZ

There has been some debate about the benefits of driving down longer-term interest rates, given the vast majority of retail borrowing (eg mortgages) tends to be at durations out to about three years. Lowering long-term yields lowers borrowing costs for the Government and other borrowers at those horizons.

But the RBNZ's approach of lowering the whole term structure is primarily about sending a clear signal and managing expectations. Longer yields influence decision making (like house purchases, spending and investment). And a low and flat yield curve is a strong signal from the RBNZ (via markets) that interest rates will remain low for a long time. Low long-term rates impact decisions today that matter for the long-term trajectory of the economy. Eventually, long yields may increase, but that is a long way off, and only expected once the economy is in a much stronger position. By that time, greater investment and spending will be yielding real and financial benefits, and the economy will be ready for gradual normalisation. That assurance helps guide decisions. Lowering longer yields also drives interest rate spreads lower relative to other countries, making NZGBs less attractive, which in turn drives the NZD lower, supporting exports.

Some have been questioning whether QE is beneficial in the long term, given New Zealand's reliance on offshore funding. Lower interest rates potentially make it harder to attract foreign investors. However, it's not just interest rates that drive foreigners to lend to New Zealand; it's also the level of the exchange rate (along with structural factors like perceived credibility and creditworthiness). A lower exchange rate helps foreign investment as investors eye the potential for the NZD to appreciate. And crucially, if the economic outlook is better, the investment opportunities are better and that attracts capital. Shoring up the economic outlook (and limiting potential damage) is the best strategy to support New Zealand in the long term.

There are also concerns that holding NZGBs with longer terms means that the RBNZ will be stuck with a large balance sheet for longer. That's true, but we don't think that is particularly concerning. We intend to address this in a future publication discussing longer-term issues.

Quantity over price

The RBNZ has also opted for a quantity rather than price approach. This is the same approach that has been used in the US, but it differs from the price approach used in Australia and Japan. In these countries, the central bank targets a particular interest rate at a particular point on the yield curve, and commits to purchasing an unlimited quantity of bonds to hold interest rates at that level. For example, the Reserve Bank of Australia (the RBA) has committed to keep the 3-year Australian government bond yield around 0.25%. Despite threatening to purchase an unlimited quantity of bonds to get to that point, it has actually been able to get away with spending comparatively less (in % of GDP terms) than the RBNZ, as just the threat of it, if credible, has significant power.

The RBNZ instead signals its willingness to purchase a quantity of bonds (initially \$30bn, now \$60bn), cumulatively, over time (currently 12 months). The RBNZ knows that by buying bonds it will drive prices up and thereby yields (the interest rate on a bond) down, but they and the market can never be sure how far prices will move for a given quantity of purchases. Although that does make it slightly vague, markets are quick to learn that if the RBNZ keeps buying (as it has been), then it is signalling that it wants yields to go further.

The quantity approach has the benefit of being able to adapt as market conditions and the economic outlook change, making it more flexible. That's an obvious advantage given how uncertain the outlook is, and how quickly we have gone into QE. But the quantity approach also has its challenges. Some would argue that the RBA's price target has been more effective in that fewer purchases have actually been required. But this strategy limits the RBA in terms of its ability to impact yields across the curve and adjust purchases as conditions change.

One obvious challenge is what the RBNZ will do once purchases get close to the limit that the RBNZ has set itself (currently \$60bn). If the market starts to sense that the limit is nearing and the RBNZ might start running out of firepower, yields might start to rise again. If the recovery is gathering steam, this might not be a bad thing. But if the RBNZ still wants to see the yield curve low and flat, then this starts to limit its ability to achieve that.

Sending a clear signal that it can do more is a key reason why the RBNZ lifted the limit from \$30bn to \$60bn in May, even though it had spent only around \$10bn at that time. In the US, the Federal Reserve (the Fed) has managed expectations by simply stating that it has unlimited capacity to buy bonds. It is important to send a clear signal to the market of unquestionable responsiveness, which is one key reason why we see QE being expanded to \$90bn (see [question 4](#)).

[Click here to return to the list of questions.](#)

3. How does QE impact the plumbing of the financial system?

We talked about how QE works to influence interest rates and the economy in our earlier [FAQ](#).

Broadly, it works like this:

- The RBNZ purchases assets (primarily Government bonds at this stage) in significant quantities from holders in the secondary market (not directly from the Government).
- This makes these bonds easier to sell, suppressing borrowing costs for those (like the Government) who are issuing these bonds. In mathematical terms, the resulting higher prices for bonds equate to lower yields (see a bond explainer [here](#)).

- Reduced yields encourage existing holders of these bonds to buy other, higher-yielding ones. This creates beneficial spill-overs, suppressing other yields too (eg on corporate debt). This dynamic also supports other assets, like equities.
- This lowers interest rates in financial markets more broadly, easing costs for a wide range of borrowers. It also tends to lower the exchange rate.
- Lower interest rates, particularly in the future, impact people's expectations and decision making. That's why the RBNZ is not only attempting to lower interest rates but also flatten yield curves (dampen interest rates associated with longer-term borrowing). That provides clear forward guidance, encouraging spending and investment.
- This encourages economic activity by bolstering domestic demand and encouraging net exports. It also leads to higher inflation, and supports inflation expectations.

However, in a technical sense it's more complex than that. There are two channels through which QE impacts the plumbing of financial markets in New Zealand as it provides stimulus to the economy.

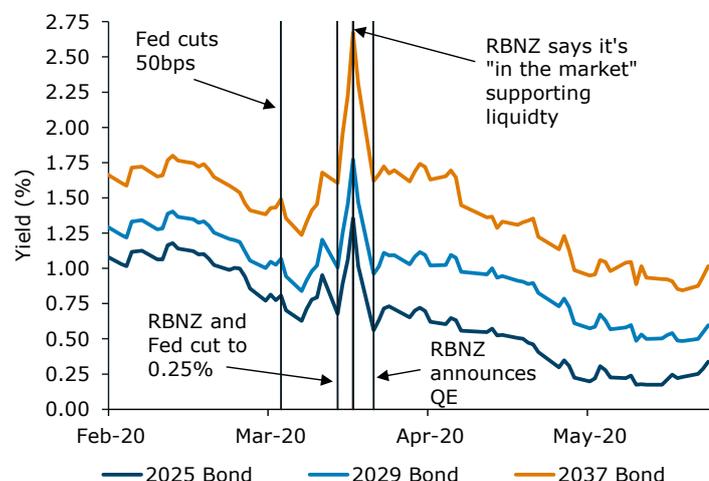
Impact on the yield curve – signal and substance

First, RBNZ asset purchases increase demand for government bonds (and other eligible assets) and mathematically lowers their yields. This encourages other purchasers to move into other higher-yielding assets.

However, it is not necessarily at the time of the purchases that this increase in demand is reflected in the price (yields). The size of the QE programme (currently \$60bn) is a signal of the RBNZ's willingness to expand their purchases, cumulatively, over time. Currently, the purchases the RBNZ has undertaken (around \$14bn by the end of May 2020) are only a fraction of this \$60bn.

The RBNZ's signalling of potential future purchases allows the market to respond in advance of the purchases taking place, in expectation that demand for bonds will be strong. And the signal has already had an impact, lowering and flattening yield curves (figure 3). When the yield curve flattens, it means that interest rates are expected to be low for a longer time. This informs expectations about economic conditions going forward, with expectations of continued low interest rates encouraging spending and investment.

Figure 3. Yields on selected New Zealand government bonds



Source: Bloomberg, RBNZ

As future purchases are undertaken, this will reinforce the lowering and flattening in yields, particularly if the pace of purchases exceeds market expectations and/or they are more front-loaded. But counter-intuitively, the more that the market

thinks that the RBNZ has “got this” and will “do what it takes” via its purchases, the more yields may fall in anticipation, potentially reducing the amount of actual purchases needed in the long run (see [question 4](#)). Pull out a bazooka rather than a hand gun and you can probably get away with firing fewer bullets.

Impact on liquidity – cash is king

In addition to impacting yields, QE also has a liquidity effect. This channel is a bit more technical.

When the RBNZ purchases assets they print money (electronically) to pay for it. When the RBNZ purchases bonds, it creates new electronic money that is passed on to the sellers of those bonds through the payment system.

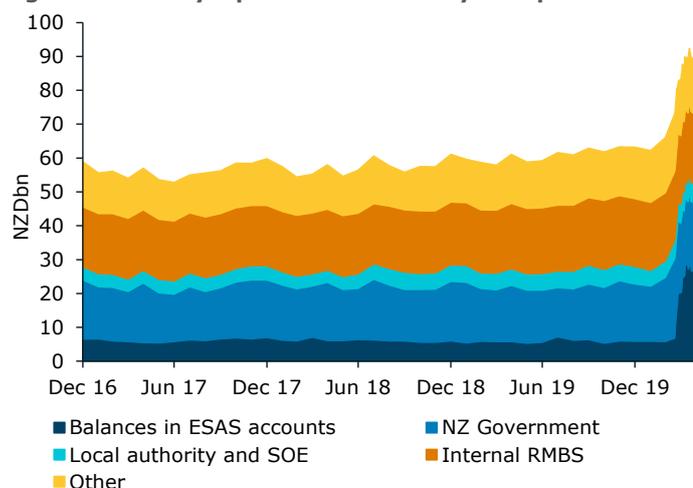
The payment system works through transfers of money between RBNZ, Government and banks’ accounts. These transactions are “settled” through the exchange settlement account system (ESAS). The sum of all ESAS balances makes up the settlement cash level (SCL). Although the sellers of the bonds may not have an SCL account, they will have an account with one of the banks and the funds will be settled through the banks’ accounts.

When new money is created to pay for the bonds, this increases the overall amount of money (“cash”) in the banking system, or SCL. The SCL is a closed system: when the seller of a bond uses the newly printed electronic money to purchase another asset (or do something else), this transaction is also transferred through bank accounts in the payment system.

When QE is undertaken, there is more money sloshing around the settlement system, sometimes referred to as the quantity of “narrow money”. The money does not “escape” when banks lend, but nor is it “stuck”, making QE ineffective. When banks lend, this increases the quantity of money in the broader banking system (“broad money”), and QE incentivises banks to undertake more such lending, including by making narrow money (“cash”) more abundant.

Banks fund their lending (asset growth) through their liabilities, including equity, deposits, market debt funding, and cash (figure 4). When cash holdings increase due to QE, this reduces the banks’ need to source funding from deposits and offshore wholesale markets, where it is more expensive.

Figure 4. Primary liquid assets of locally incorporated banks



Source: RBNZ May 2020 Financial Stability Review

An increase in cash in the SCL has a few implications for banks:

- They have less need to source funds through deposits, leading to downward pressure on deposit rates, such as has been seen.

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- Wholesale funding (ie bank-issued bonds) are less expensive, as a result of the yield curve channel.
 - The composition of funding changes towards cash (which is cheaper), away from more expensive sources (wholesale funding and deposits).

All these channels lower bank funding costs, putting downward pressure on retail lending rates. It will take time for these impacts to flow through the system, since they are more potent when purchases actually happen than when they are announced. But nonetheless, the impacts are starting to show and will continue to do so.

The increase in available funds, low funding costs and low returns on assets generally also encourage banks to expand their lending in search of returns. This encourages credit growth (and spending) relative to otherwise. However, because of the economic downturn taking place, banks are still expected to be relatively cautious. But QE is useful to help aid the provision of credit and keep the economy pumping, cushioning the blow.

[Click here to return to the list of questions.](#)

4. How is QE likely to evolve from here?

There are three ways that we expect QE will evolve over time:

- The RBNZ's **QE guidance** can change. We think the RBNZ will need to scale up its guidance to \$90bn in August to provide more monetary stimulus.
- The RBNZ's **purchases** (and their pace) can be adjusted. We expect purchases to continue to outpace new bond issuance (by the Treasury) in the short term to push yields lower.
- The RBNZ's **approach** to QE can change. We expect that the RBNZ will include other assets (including foreign assets) if required.

We consider each in turn.

The RBNZ's QE guidance

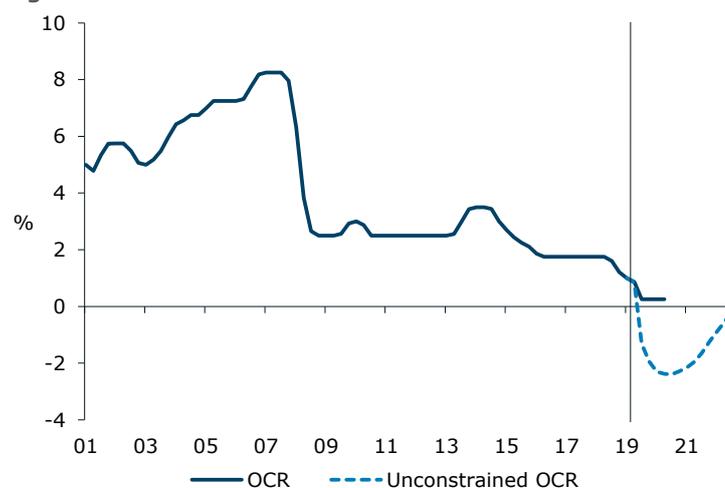
The \$60bn of QE that has been announced to date is an upper bound that the RBNZ has put on its large-scale asset purchases (LSAPs) over 12 months. This "limit" is a signal of the stance of monetary policy. It indicates the RBNZ's appetite to purchase assets cumulatively, over time, in order to keep the yield curve low and flat to stimulate the economy.

QE works to a large degree (though not entirely) through signalling (see [question 3](#)). This is why markets have tended to respond when QE is announced, rather than when purchases take place. It is this expression of the RBNZ's willingness to respond that drives the yield curve lower, particularly initially. In fact, not all of these purchases may actually be needed in practice.

So, how does the RBNZ decide how its guidance and signalling should evolve? Based on their assessment of the economic outlook (and impacts on the labour market and inflation), the RBNZ determines how much stimulus is required. This is expressed and communicated in the Monetary Policy Statement in terms of an "unconstrained OCR" (figure 5). This RBNZ says this "demonstrates the broad level stimulus needed to achieve the Reserve Bank's monetary policy objectives, much like the OCR projection demonstrated in the past".

A negative unconstrained OCR "does not necessarily represent a negative OCR" because the stimulus could also be generated by QE or other tools. In order to achieve this level of stimulus with QE, the RBNZ has to estimate what volume of purchases they need to signal in order to see that happen.

Figure 5. Unconstrained OCR



Source: RBNZ

Although the RBNZ has recently expanded the amount of QE it is willing to undertake to \$60bn (from \$33bn), we expect that it will be scaled up to \$90bn at the August MPS. And it could happen earlier should markets become dysfunctional. We expect that the RBNZ will come to the assessment that more stimulus is required to achieve their objectives (for the reasons outlined in [question 5](#)), implying a lower “unconstrained OCR” and a need for guidance to be scaled up.

Such a change in policy stance simply requires sign-off from the MPC, since the RBNZ is now indemnified by the Government to purchase up to 50% of outstanding nominal NZGBs and 30% of outstanding inflation-linked NZGBs and Local Government Funding Agency (LGFA) bonds. On current bond issuance guidance, the amount of bonds the RBNZ will be indemnified to purchase will reach around \$90bn by mid-2022.

Should this occur, this \$90bn “limit” would be the new upper bound of what the RBNZ is willing to purchase, cumulatively, over time. However, they may not have to actually conduct all of these purchases depending on how markets and a range of factors evolve (discussed next).

The RBNZ’s purchases

Under QE the RBNZ signals its monetary policy stance through its willingness to conduct purchases, cumulatively, over time. Currently this is set at a \$60bn limit over 12 months.

However, purchases themselves are determined week by week. The RBNZ issues its LSAP schedule each Friday, and can adjust the pace and frequency of purchases based on market conditions. Lifting the pace of purchases would put more direct downward pressure on yields, but, on the other hand, does use up “ammo” faster. The RBNZ therefore aims to be “efficient” with its purchases.

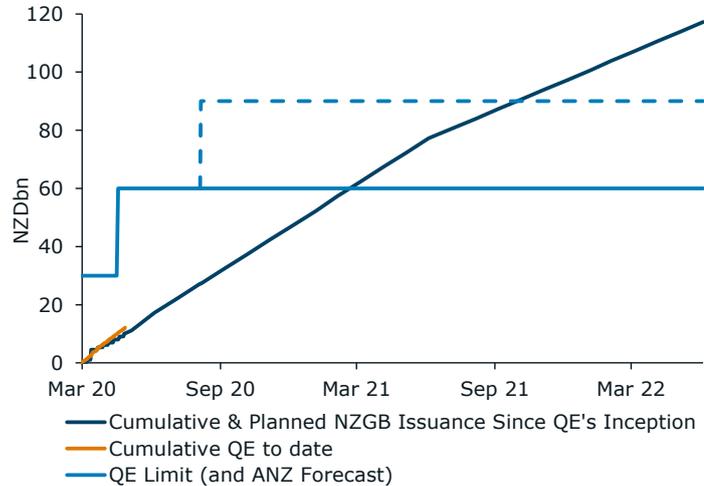
By the end of May 2020, the RBNZ had undertaken around \$14bn of purchases, only a fraction of their current \$60bn limit.

So far, the RBNZ has consistently purchased more bonds each week than the Treasury has issued (figure 6). We expect that this will continue. It is crucial that the RBNZ keeps the yield curve low and flat by offsetting the impact of concerns about how future bond issuance will be absorbed.

There has been extra upward pressure on yields since the Government Budget in May, with more bonds now expected to be issued in coming years than previously expected. Most of this higher forecast level of Government bond issuance can still

be absorbed within the newly increased \$60bn QE programme, but there will come a time (on current projections, around March next year) when that balance will change as cumulative issuance pushes up against the \$60bn QE limit.

Figure 6. NZGB issuance and QE

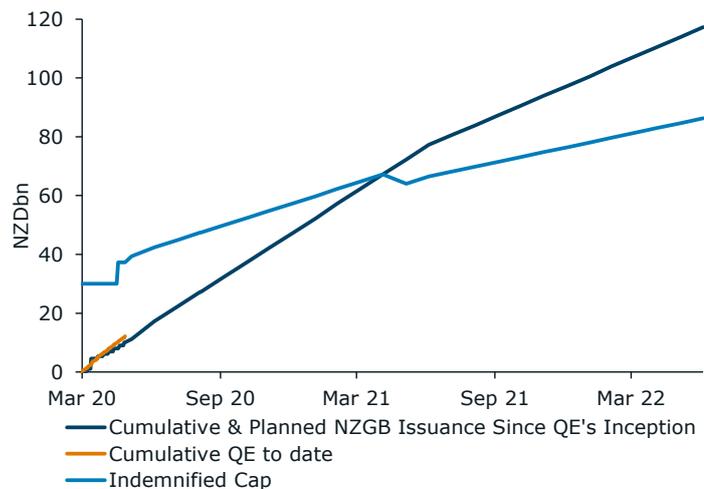


Source: Bloomberg, RBNZ, ANZ Research

The RBNZ's purchases are constrained by its "indemnity cap". Purchasing bonds exposes the RBNZ to valuation risks (the market value of the bonds it buys changes as prices fluctuate) but the Finance Minister has indemnified the Bank for any losses. At the moment, the indemnity cap allows the RBNZ to purchase up to 50% of outstanding nominal NZGBs and 30% of outstanding inflation-linked NZGBs and LGFA bonds. Provided the RBNZ's purchases are within this cap at any given point in time, the RBNZ can adjust its guidance and purchases as it sees fit to achieve its objectives. This cap is likely to have been considered the portion beyond which RBNZ purchases would start to distort the market.

The value of purchases consistent with the indemnity cap changes over time, as bonds on issue increase. The indemnity cap for NZGBs (nominals and inflation-linked bonds) stands at around \$39bn, but it will grow as outstanding bonds grows (figure 7).

Figure 7. NZGB issuance, QE and indemnified cap (NZGBs only)



Source: Bloomberg, ANZ Research

On current bond issuance guidance, the eventual cap projected based on this indemnity is technically \$86bn of NZGBs by the end of fiscal year 2021/22. However, LGFA issuance is part of the mix too. Should purchases be scaled up to

a \$90bn limit (as we expect), we expect that purchases will fall comfortably within the indemnity cap, at least for the foreseeable future, with purchases taking place over a number of years (rather than the 12 months indicated currently).

Over time, these purchases will be determined by a number of factors:

- How the outlook evolves: if more (less) stimulus is needed over time, then this could see guidance and the pace of purchases increased (lowered).
- The path of yields. Perhaps counter-intuitively, if the market thinks that the RBNZ has “got this”, yields could fall further, potentially reducing the amount of actual purchases needed in the long run.
- Estimates of stimulus. If signalling and purchases have more of an effect than anticipated, the pace of purchases may be able to be slower.
- The pace of issuance: if the Government issues more bonds than expected, then this will put upward pressure on yields and could necessitate a faster pace of purchases than otherwise.
- What other monetary policy tools are introduced over time: if the RBNZ decided to eventually pull the trigger on the likes of taking the OCR negative, then stimulus might be achieved through this tool in addition to or rather than through QE, potentially necessitating fewer purchases.

The RBNZ’s approach to QE

Over time, the RBNZ’s approach to QE may have to adapt. Our Government bond market is small, so there are limits to the purchases the RBNZ can undertake, given the indemnity caps (above) and the need to limit market distortions. Currently, NZGBs on issue total \$86bn, forecast to rise to \$141bn by June 2021.

The RBNZ’s indemnity caps represent a limit beyond which it is considered that further RBNZ purchases will start to distort the market, due to the bond market’s small size. This is a key constraint, which limits how big the QE programme could become in New Zealand. And it is fair to say that QE would have evolved quite differently here if our bond market were bigger.

Although the RBNZ’s indemnity caps may become a constraint at some point, this wouldn’t be game over for QE, or mean it had run out of ammo. The RBNZ would simply have to adapt its programme to include more assets, or other tools might be required, and there are plenty of other options at its disposal. We intend to address this in a future publication discussing longer-term issues.

Although the size of the programme may run up against constraints, this doesn’t necessarily mean that QE is more or less *effective* in New Zealand. On the one hand, a small market means that it takes a smaller volume of purchases to influence yields (than in, say, the US, where the Treasury market is huge). But on the other hand, the size of the market limits how much liquidity can be provided to the market through that channel. At this stage we are assuming that these considerations are largely offsetting. But how the overall effectiveness of QE in New Zealand compares with other countries is an open question to be borne out in the data - though even in the fullness of time, there will never be a counterfactual to measure against.

For now, we are running with the rough rule of thumb that \$10bn of purchases is equivalent to an OCR reduction of 50bps. However, this impact may reduce as bond issuance increases (because it becomes harder to lower yields) or increase as purchases rise (because more liquidity is entering the system). The impact of QE can vary over time and depends on circumstances.

More generally, the RBNZ might also choose to adapt its approach as it continually reviews the mix of tools at its disposal, and their relative costs, benefits, risks and effects. For example, the RBNZ might decide that it wants to

take the OCR negative, once the financial system is ready (and other hurdles are met). We think this is a bad idea and the hurdle to do so is high for a number of reasons (see [question 1](#) and our [FAQ](#)), but nonetheless we cannot rule it out. If a negative OCR was used, then the RBNZ might decide to put less emphasis on QE, or reduce its scope.

More likely, in our opinion, is the possibility that QE is adapted to give it increased flexibility and ammunition. To do this, the RBNZ might decide to adapt the QE programme to increase its impact by including other securities, like foreign assets, corporate bonds, or mortgage-backed securities, though each of these would also come with their own risks.

Including foreign assets has been emphasised as a possibility by the RBNZ recently, and we think this has some merit, especially if QE has been exhausted and we're not ready for negative rates. Although it wouldn't have a direct impact on domestic yields, including foreign assets in the QE programme would allow the RBNZ to purchase more assets and expand liquidity further. It would also have a direct impact, lowering the exchange rate (because the RBNZ would be selling NZD to buy assets in another currency). If this approach was used, we expect the RBNZ would do this by purchasing short-term US Treasury bonds, in addition to those assets it currently purchases.

[Click here to return to the list of questions.](#)

5. Why is another expansion of QE necessary? Why \$90bn?

We expect that the RBNZ will expand their QE programme from \$60bn to \$90bn at the August MPS (see [question 4](#) for more on how we think QE could evolve). The QE programme was only recently expanded from \$33bn to \$60bn at the May MPS. So why is a further expansion necessary?

In our view there are four key reasons:

- The RBNZ will want to signal that it is unquestionably responsive;
- The macroeconomic outlook is bleak, with clear downside risks;
- In this light, it's better to do too much than too little;
- Fiscal support means more bond issuance, which in turn means the RBNZ has its work cut out to keep bond yields low.

We consider each in turn.

The RBNZ wants to signal that it is unquestionably responsive

By the time we reach the August MPS, economic conditions will have deteriorated. To some extent this is already widely expected, but by then it will become crystal clear that the crisis has had a large negative impact on the economy and the labour market in particular. Business defaults and job losses will unfortunately be more widespread.

Even if it is expected, in this poor economic situation with confidence and inflation expectations under downward pressure, we think the RBNZ will want to do what it can to work against such pessimism and shore up expectations about the outlook.

To do that they need to send a clear signal: that they will be unquestionably responsive and do whatever it takes to achieve its objectives. The RBNZ cannot offset the economic impacts entirely, but they can have an enormous effect on the outlook and especially expectations. There needs to be no question of their resolve if they are to have maximum impact.

They will want to make this abundantly clear that they've "got this", especially since a large part of the effects of QE work through signalling (see [question 3](#)).

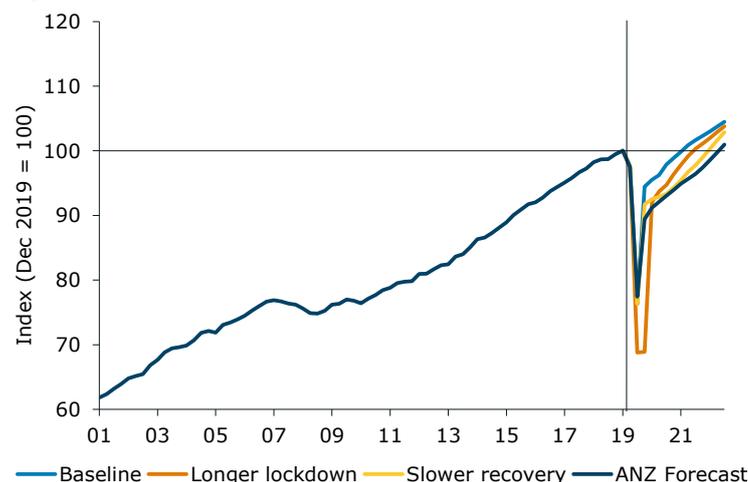
This will provide assurance to the market that the RBNZ is always one step ahead. We estimate that \$90bn is about as much NZGBs as the RBNZ can purchase cumulatively over the next few years without distorting markets. Moving to this upper bound would signal an unlimited willingness and flexibility within the indemnity caps, providing an enormous amount of flexibility in its purchases. Such signalling could also see the market move more, and thereby actually reduce the need for purchases in the long run (see [question 4](#)).

The outlook is bleak, with clear downside risks

The RBNZ is fully aware that the economic outlook is bleak and they put a lot of emphasis on downside risks in the May MPS. They did not emphasise their baseline set of projections, but nonetheless, they do form a useful benchmark. In our view, the outlook is more in line with the RBNZ's "slower recovery" scenario (figure 8) than the baseline. We think that the recovery will be slow, and slower than they expect (as we have discussed in our [ANZ Quarterly Economic Outlook](#)).

We think that this more negative outlook will become evident in coming months, with a less-pronounced bounce back in high-frequency activity indicators than the RBNZ expects. This will reinforce uncertainty about the pace of recovery and further ignite concerns about downside risks, encouraging the RBNZ to do more.

Figure 8. GDP outlook under RBNZ scenarios and ANZ forecasts



Source: RBNZ, ANZ Research

It's better to do too much than too little

Right now, the path of least regrets is to err towards doing more. There is little downside to expanding QE to \$90bn, but big costs of doing too little. This rests on the fact that the outlook is bleak, with inflation and employment set to be well away from target, and risks are clearly to the downside.

The RBNZ is very conscious of this and has made it very clear that downside risks are much greater and more pressing than upside ones at the moment. We agree with that sentiment entirely.

It's not just the fact that economic conditions could end up worse (we think they will); the stakes are also very high if they do. We see unemployment getting well away from levels consistent with full employment and it will take a long time to recover. Doing too little would cost jobs, and this could leave long-lasting scars on spending and confidence. Meanwhile inflation is set to fall below the RBNZ's target range, and inflation expectations are falling. There is a risk that these become stubbornly low and entrenched, further jeopardising the RBNZ's ability to achieve its targets. On the other hand, no one is worried about an overshoot in GDP and inflation right now – maybe many years in the future, but not now.

It is true that the RBNZ cannot offset the impacts of a health crisis; economic pain is inevitable. But it can help. This means that there is little downside to doing everything possible with QE, subject to current constraints, to shore up the outlook. Moving to a \$90bn limit would signal an unlimited willingness and flexibility within the indemnity caps. As already mentioned, sending a clear signal to the market that the RBNZ has 'got this' will allow QE as it stands to generate maximum effect.

Doing more with other tools is also possible, and could be needed down the track, but will present different trade-offs and potentially more risks. Relative to alternative tools like negative policy rates, QE is effective, easy and low cost, meaning there is very little downside to doing more, subject to constraints. To us it makes sense to maximise the impact of the QE programme as it stands first.

The RBNZ has its work cut out to keep yields low

As discussed in [question 3](#), one of the key ways that QE works is by pushing yield curves lower and flatter. In order to do this, the RBNZ needs to soak up (or be expected to soak up) significant issuance in the market.

At the Budget, the Government signalled a much larger amount of upcoming bond issuance than previously expected. This increased supply poses upside risks to yields, meaning that the RBNZ will need to have the optionality (and appetite) to absorb more issuance, in order to keep yields low, or indeed push them lower still. Based on our calculations, expanding the QE limit to \$90bn would be sufficient to absorb issuance subject to the RBNZ's indemnity caps (see [question 4](#)), and would send a clear signal to markets that that is the case.

[Click here to return to the list of questions.](#)

Appendix: A timeline of QE in New Zealand

QE was thrust on New Zealand very quickly. Here is a timeline of key events:

23 January 2020: China imposes a lockdown on Wuhan and other cities in Wuhan province.

3 February: New Zealand places entry restrictions on foreign nationals who have come from or transited through mainland China, requiring arriving persons to self-isolate for 14 days.

6 February: Chartered flight carrying New Zealand evacuees from Wuhan arrives in Auckland.

12 February: RBNZ leaves OCR unchanged at 1.00%. Acknowledges that “the COVID-19 (coronavirus) outbreak is an emerging downside risk”. However, the Bank “assumes the overall economic impact of the coronavirus outbreak in New Zealand will be of a short duration, with most of the impacts in the first half of 2020” adding that “economic growth is expected to accelerate over the second half of 2020 driven by monetary and fiscal stimulus, and the high terms of trade”.

28 February: New Zealand’s first case of COVID-19 is detected.

4 March: US Federal Reserve cuts Fed Funds rate by 0.50% to 1.00%.

10 March: RBNZ published its [Principles](#) document in March, outlining how it would deploy alternative monetary policy tools if it needed to. It says “the Reserve Bank of New Zealand has not, and still does not, need to use alternative monetary policy instruments to the OCR. But it is best to be prepared”.

11 March: WHO declares COVID-19 an official pandemic.

14 March: New Zealand Government announces that all persons entering the country must self-isolate for 14 days. Tourists flouting the quarantine order are threatened with deportation.

16 March: RBNZ cuts OCR to 0.25% at 8.00am NZT. The announcement is made before markets open following an emergency meeting of the RBNZ Monetary Policy Committee over the weekend. Two hours later (5.00pm Sunday New York time), the US Federal Reserve cuts the Fed Funds rate to 0.25% and pledges to restart its QE programme.

17 March: The Government announces a \$12.1bn fiscal package to support the economy through COVID-19.

18 March: Two days after the OCR is cut, yields on NZGBs start to rise precipitously (figure 3) largely on fears of a budget blowout following the previous day’s announcements. The RBNZ announces the following day that they were “in the market” supporting liquidity.

19 March: New Zealand closes its border to all persons except New Zealand citizens and permanent residents.

23 March: At 8.00am the RBNZ launches its \$30bn LSAP QE programme. Markets had been expecting it, and like the prior Monday’s OCR cut, it is announced before markets open following an emergency meeting of the RBNZ Monetary Policy Committee over the weekend. Later in the day, New Zealand moves into Alert Level 3 and is given 48 hours warning that it will then go into Alert Level 4 (full lockdown) for 4 weeks.

24 March: Mortgage holiday and business finance support schemes announced.

30 March: RBNZ announces Corporate OMO and repurchase of NZGB May 2021 bonds.

6 April: RBNZ announces that it is in the market offering purchase LGFA bonds in small scale to support market functioning.

7 April: RBNZ adds \$3bn of LGFA bonds to the LSAP programme.

30 April: RBNZ suspends LVR restrictions for 12 months.

13 May: RBNZ expands LSAP to \$60bn and leaves OCR at 0.25%, reiterating earlier forward guidance around leaving the OCR at that level for at least 12 months.

Additional information: During the first week of the LSAP programme (the last week of March), the RBNZ signalled that it would purchase bonds at a \$750m per week pace, which it said could be varied depending on market conditions. This turned out to be insufficient to contain NZGB yields, which started rising again as the market started to become concerned that NZGB issuance (ie Government borrowing) would start to increase rapidly. On 31 March, the Treasury took the unusual step of delaying the announcement of its Q2 issuance schedule till the following day (1st April), whereupon it said it would increase its borrowing requirement for the full fiscal year (ended June 30th) by \$12bn to \$25bn, \$17bn of which would be required in Q2 alone. Markets reacted badly, but were reassured two days later when the RBNZ increased the pace of its purchases to a \$1.35bn per week pace, which slightly exceeded the "run rate" of issuance over the quarter. This signalling was sufficient to contain yields, and the yield curve has moved gradually lower and flatter since then, which is of course the whole point of QE.

As QE got underway and was showing signs of success in the NZGB market, it was another story in credit markets where spreads were widening. This coincided with the Local Government Funding Agency's (LGFA) market announcement that it was looking to place a new bond to replace its maturing April 2020 bond. While the RBNZ's decision to add LGFA into the QE programme on 7 April was not directly related to LGFA's decision to seek new funding that week, as an important agency responsible for helping meet the funding needs of local authorities, it was an obvious candidate for inclusion into the LSAP programme, especially as the "trickle down" impact had not yet been seen across credit markets in general (LGFA is still considered a "credit" because its debt is not explicitly government guaranteed). Had we been where we are now (mid-May 2020), with credit spreads contained by the trickle-down effect of additional liquidity, it is possible that the RBNZ would not have needed to add LGFA into the LSAP programme.



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