

New Zealand Weekly Focus

18 May 2020



This is not personal advice.
It does not consider your
objectives or circumstances.
Please refer to the
Important Notice.

Contents

Economic overview	2
FX/rates overview	10
Data event calendar	12
Local data watch	14
Key forecasts	15
Important notice	17

NZ Economics Team

Sharon Zollner Chief Economist

Telephone: +64 27 664 3554
sharon.zollner@anz.com

David Croy Strategist

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

Natalie Denne Desktop Publisher

Telephone: +64 21 253 6808
natalie.denne@anz.com

Liz Kendall Senior Economist

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

Susan Kilsby Agriculture Economist

Telephone: +64 21 633 469
susan.kilsby@anz.com

Kyle Uerata Economic Statistician

Telephone: +64 21 633 894
kyle.uerata@anz.com

Miles Workman Senior Economist

Telephone: +64 21 661 792
miles.workman@anz.com

Contact
research@anz.com

Follow us on Twitter
[@sharon_zollner](https://twitter.com/sharon_zollner)
[@ANZ_Research \(global\)](https://twitter.com/ANZ_Research)

What a week

Economic overview

Last week saw three big developments. The country took an enormous step towards normality by moving into Alert Level 2; the RBNZ at its Monetary Policy Statement scaled up QE to \$60bn and left all other tools on the table; and the Government delivered a truly massive Budget, featuring a big public housing build, a targeted extension of the wage subsidy program, and a big ramp-up in health spending – and more to come, with a lot of funding as yet unallocated. We are now forecasting a further scaling-up of QE at the August MPS to a \$90bn limit. This will help to absorb the bigger-than-expected program of Government bond issuance to fund all that spending. The RBNZ has received an indemnity from the Government to increase QE as outstanding bonds grow, so the hurdle has been lowered, but an expansion will still need sign-off from the Monetary Policy Committee. We expect this will happen at the August MPS, if not earlier.

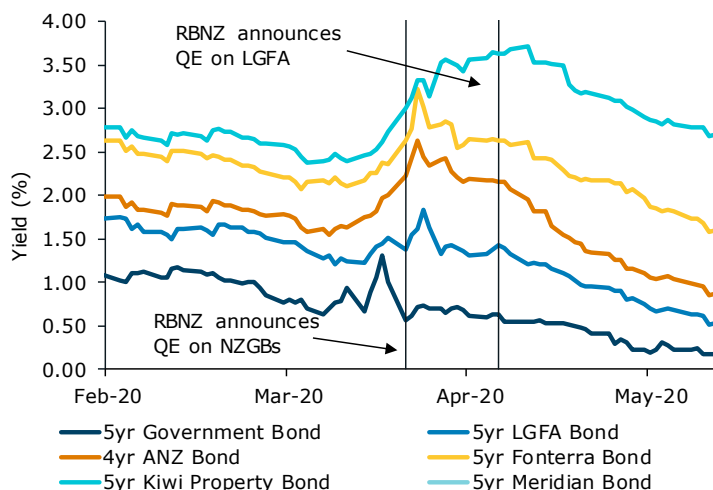
FX/rates overview

Last week's Budget flagged significantly more bond issuance than we and the market were expecting. Future issuance is based on forecasts that have conservative buffers built in, but the market still has to absorb it all. The RBNZ's newly increased QE programme doesn't quite have the capacity to absorb all of next year's issuance, but it could if it were increased, as we expect it to be (probably in August). Keeping the NZGB curve low and flat remains a priority for the RBNZ and it remains a key element in our forecasts. The threat of a negative OCR (next year) and potential QE purchases of foreign assets are significant headwinds for the NZD, as is the very real potential for a real souring of risk appetite as global data continues to shock to the downside..

Chart of the week

We expect the Reserve Bank's LSAP (QE) programme to be expanded to \$90bn at the August Monetary Policy Statement to head off any upward pressure on the yield curve from the Government's expanded debt issuance program.

Yields on selected New Zealand 4-5 year wholesale bonds



Source: Bloomberg, RBNZ



Economic overview

We now expect QE to be expanded to \$90bn in August.

Summary

Last week saw three big developments. The country took an enormous step towards normality by moving into Alert Level 2; the RBNZ at its Monetary Policy Statement scaled up QE to \$60bn and left all other tools on the table; and the Government delivered a truly massive Budget, featuring a big public housing build, a targeted extension of the wage subsidy program, and a big ramp-up in health spending – and more to come, with a lot of funding as yet unallocated. We are now forecasting a further scaling-up of QE at the August MPS to a \$90bn limit. This will help to absorb the bigger-than-expected program of Government bond issuance to fund all that spending. The RBNZ has received an indemnity from the Government to increase QE as outstanding bonds grow, so the hurdle has been lowered, but an expansion will still need sign-off from the Monetary Policy Committee. We expect this will happen at the August MPS, if not earlier.

Forthcoming data

Global Dairy Trade auction (Wednesday 20 May, early am). There are mixed pricing signals across commodities and delivery periods but overall prices are expected to tick down again by about 2.5%. Offerings of whole milk powder for delivery in June and July have increased, signalling some combination of a smaller impact from the drought on milk supply, a push to sell more product while prices are still strong, and/or a desire to minimise stocks at balance date.

Food Price Index – April (Wednesday 20 May, 10:45am). Food prices are usually pretty stable in April. But this April will be different. Grocery prices were likely a little stronger than usual, while restaurant meals were not traded at all. Stats NZ has had to impute some prices. It'll take another month or two for the dust to settle.

ANZ Monthly Inflation Gauge – May (Wednesday 20 May, 1:00pm).

Retail Trade Survey – Q1 (Friday 22 May, 10:45am). Spending patterns were normal for most of Q1, but things started to change towards the end there. Some people stocked up on groceries and DIY materials ahead of the lockdown, but at the same time began to question their discretionary spending decisions as reality began to set in that recession is looming. We've pencilled in a 0.2% q/q rise in sales volumes. Weakness in Q2 will be unprecedented.

Performance Services Index – April (Monday 18 May, 10:30am). Like the Performance of Manufacturing Index, it's not going to be pretty.

What's the view?

Last week was rather busy on the macroeconomic front, one could say. New Zealand graduated into Alert Level 2, enabling many more retail and hospitality businesses to open in something resembling, if not quite, normality. The RBNZ at its Monetary Policy Statement scaled up its quantitative easing (QE) program as expected and struck a dovish tone, expressing its willingness to do more and keeping future options – including negative interest rates – on the table. Completing the trifecta for the week was the Government delivering an unprecedentedly large Budget in the face of the current COVID-19 crisis, with a much bigger bond issuance programme than expected to accompany it.

It was certainly a big week, but most of it was broadly in line with our expectations and in light of the giant uncertainty surrounding any macroeconomic forecast at the moment, none of it warrants a revision to our GDP growth forecasts. However, in light of the giant government bond issuance program unveiled at the Budget, we now expect the RBNZ's QE programme to be scaled up to a limit of \$90bn. This is in order to keep the yield curve low and flat, in order to keep debt-servicing costs low and provide further assistance to the economic recovery.

Last week was big, but our views have not changed much.

The MPS was as expected, with a dovish tone.



Economic overview

The RBNZ stand ready to do more, but are happy with the impact of QE so far.

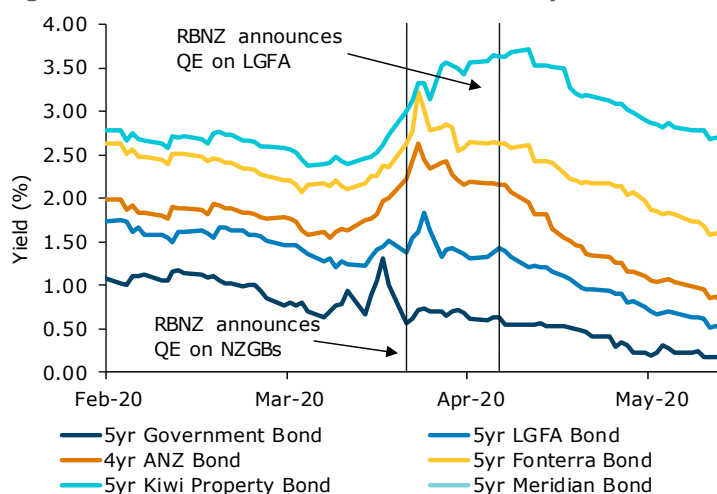
Expanded QE, but more to come

At the [MPS last week](#) the RBNZ roughly doubled its QE programme from \$33bn to \$60bn, as expected. Purchases will remain largely oriented to purchases of nominal New Zealand Government bonds (NZGBs), but will now also include a small amount of inflation-linked bonds, along with a small amount of bonds from the Local Government Funding Agency (LGFA).

In its Statement, the RBNZ made it clear that it is, unsurprisingly, worried about the economic outlook and potential downside risks, and that they are willing to do more to stimulate the economy. They noted that, "the LSAP programme can be scaled as needed in future," and, "there are policy tools available that have not yet been used". They do have plenty of options available, and have left the door open for negative policy rates down the track, although both their forward guidance phrasing and their published OCR forecasts rule it out before March 2021. But for now, QE remains the tool of choice. At his appearance before the Finance and Expenditure Committee Governor Orr said that QE was easy, effective and had the least distortions. We agree that it is the right approach, for now at least.

The RBNZ expressed satisfaction regarding the effectiveness of their QE to date (see our [FAQ](#) for more on how QE works). Clear signalling of the RBNZ's future asset purchases have had a clear impact on markets, with the currency lower, bond curves flatter, and lower across a range of outstanding bonds (figure 1).

Figure 1: Yields on selected New Zealand 4-5 year wholesale bonds



Source: Bloomberg, RBNZ

However, the bond market now faces a challenge, with the Budget revealing a significantly larger amount of issuance than expected, particularly over the next 12 months (see Budget reflections, page 6). The need to absorb it all means a further ramp-up is likely, even though the QE program has only just been scaled up.

In the short term, the RBNZ may choose to front-load purchases with the current \$60bn limit, if the upward pressure on yields seen after the Budget persists. They can also conduct purchases to assist with market functioning and soothe market concerns.

But by August, we expect the asset purchase programme to be expanded to \$90bn. This would allow the RBNZ even greater flexibility to absorb issuance and keep the yield curve sustainably low and flat in order to support the economy (see FX/Rates section on page 10 for a fuller discussion). The RBNZ has expressed a strong willingness to do what it can, and we think they will remain cognisant of downside risks, as they were in the MPS last week. We expect the expansion to happen at the August MPS, if not earlier. A Monetary Policy Statement release is a logical time to do it, alongside the release of economic forecasts, and also when the Monetary Policy Committee (MPC) is

We expect the QE programme to be scaled up again, to \$90bn, at the August MPS.



Economic overview

gathered. However, we have no doubt that the RBNZ would not hesitate to expand the programme earlier should the economic outlook deteriorate or financial conditions tighten materially. An OCR Review or even inter-meeting move is possible, especially if bond markets become dysfunctional. Such a change in policy stance now 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. This cap is likely to have been considered the portion beyond which RBNZ purchases would start to distort the market.

On current bond issuance guidance, the eventual cap projected based on this indemnity is technically \$86bn of NZGBs. However, LGFA issuance is part of the mix too. Our expectation of an expansion of QE to \$90bn would be an upper bound for total purchases over time depending on what is necessary, and it has the advantage of providing extra flexibility. The RBNZ's actual purchases would simply need to fall within the indemnity cap at any given point in time. Should \$90bn exceed the existing caps for which they are indemnified, it would leave open the option of purchasing short-term US Treasury bonds with the remainder, thereby placing downward pressure on the NZD.

Significant stimulus, but this crisis is big

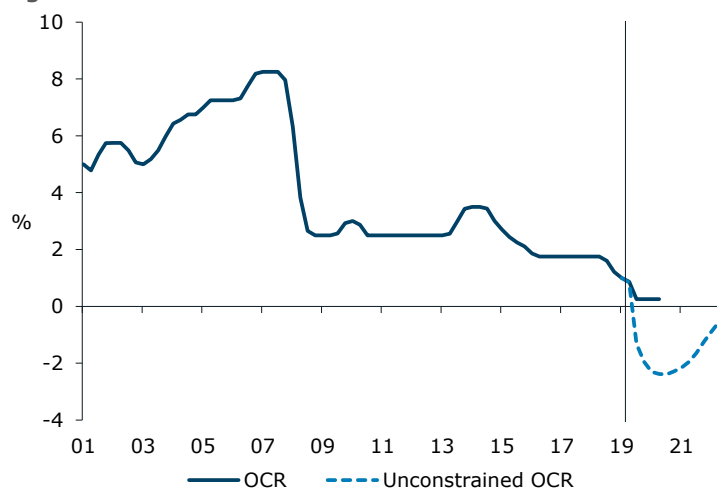
The RBNZ's estimates of stimulus provided to date is significant, but we think more makes sense, given the magnitude of the current crisis. At the MPS, the RBNZ estimated that the overall stance of monetary policy taking into account both conventional and unconventional tools was equivalent to an "unconstrained OCR" of -1.3% over the June quarter (figure 2).

The "unconstrained OCR" is a new concept, which the Reserve Bank said "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.

The new "unconstrained OCR" shows significant stimulus for a long time.

It doesn't necessarily imply a negative OCR

Figure 2. Unconstrained OCR



Source: RBNZ

The unconstrained OCR is in practice similar to the notion of the Shadow Short Rate (SSR) that we have often referred to, which sat at -1.9% at the end of April. This is the OCR that would have resulted in the observed yield curve. However, the RBNZ will use a suite of measures to estimate the "unconstrained" OCR. They are expected to publish their suite of estimates soon, including conceptual differences between them.

The RBNZ's projects the unconstrained OCR to drop to -2.4%, based on the stimulus that has been put in place to date. However, we think that even more stimulus will be required. The current "unconstrained" OCR projection shows a total drop of ~350bps –



Economic overview

The odds of overdoing the stimulus seem remote.

still shy of the 575bp drop in the OCR in the GFC, and this shock is bigger. It's possible that even more stimulus is effectively delivered than shown here, with bond curves moving lower and flatter in anticipation of future purchases and as the risk of negative rates is being priced in. But the surge in coming bond issuance now reduces that risk, and could work against the RBNZ's intentions of reducing broader debt-servicing costs. Erring towards providing even more stimulus makes sense.

We are working on a rule of thumb that \$10bn of purchases is equivalent to a 50bp drop in the OCR, meaning that another \$30bn expansion of the programme to \$90bn could provide an additional 150bps of stimulus (see our [FAQ](#) for more details). The risk of too much monetary stimulus seems remote at this point, as downside risks certainly remain front of mind. That said, risks are not all one way, and nor has everything followed the worst case scenario in the past month, with the virus in retreat, the lockdown at the shorter end of expectations, and New Zealand's commodity prices holding up relatively well. The most important economic data continues to be whether we are seeing community transmission of COVID-19. So far so good, touch wood.

Keeping options open

Beyond QE, the RBNZ is keeping its options firmly open should even more stimulus be required. One of its options is purchasing foreign assets (presumably US Treasury bonds), which would lower the exchange rate. The exchange rate channel appears to be a favoured method for transmitting stimulus, so we expect this would be the next cab off the rank after increasing and expanding the QE programme further. Typically, the NZD plummets like a stone in times of global woe, since New Zealand as a small, open commodity exporter is seen as very exposed to the slowdown. But this time round, it's far from clear that we are going to be worse off than anyone else, and so the exchange rate has remained quite robust.

The RBNZ has other options open to them.

The RBNZ also left open the possibility of taking the OCR negative, but cemented expectations that it would not be this year, with very clear forward guidance reiterating that the OCR would remain unchanged at 0.25% until at least March 2021. The OCR forecast stopped there, unusually, reflecting that the RBNZ wanted to leave open the option of negative rates but was not willing to commit to it at this stage.

Negative rates haven't been ruled out, but it won't be this year.

We think this is wise: negative rates are a risky proposition but keeping open the threat of them will help dampen short interest rates in the meantime, maximising monetary stimulus. Market pricing has quickly factored in a small chance of cuts. There are about 15bps of cuts priced by the end of this year, and about 28bps in April 2021. We can't rule out negative rates next year, but they are not our central expectation at this stage.

There are many hurdles to negative rates.

As we talked about in our last [ANZ Weekly Focus](#), there are many hurdles to pulling the trigger on negative rates, and the reluctance expressed by other central banks last week reinforces that. Last week Fed Chairman Powell said that the Fed's view on negative rates hasn't changed and it isn't something the Fed is looking at. The RBA, too, has not expressed any desire to take the plunge on negative rates. At the Financial and Expenditure Committee, Governor Orr described QE as easier, effective and less distortionary than other tools. We would describe negative rates as the exact opposite of that. And indeed, comments from Orr solidified the view that negative policy rates will be the last cab off the rank.

But they may still end up there.

But we can't rule out that the RBNZ will decide to pull the trigger in time. If push came to shove and the economy really needed more stimulus but other tools had run out of runway, then a negative OCR could be in play – risks, distortions and all. Let's hope it doesn't come to that.

Risks in both directions, but skewed to the downside

The RBNZ's baseline forecast (which they did not put much weight on) is more optimistic than ours (figure 3). The RBNZ also showed scenarios in which the economic impacts might be worse and more stimulus might be required, with their view of the risks



Economic overview

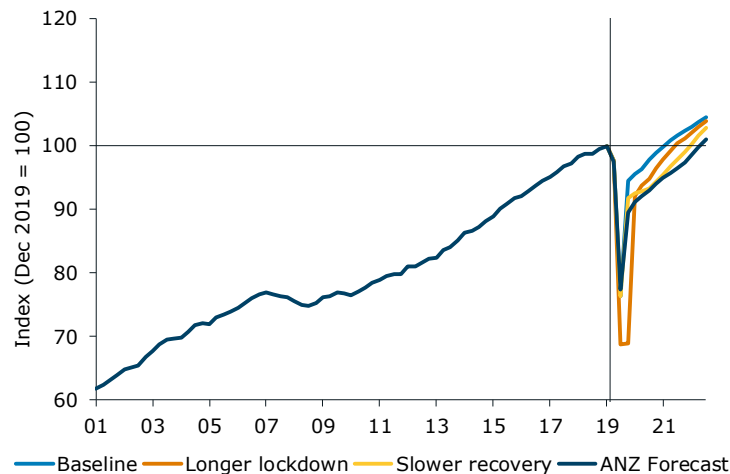
Risks are skewed to the downside.

With more stimulus in time.

squarely to the downside. Our forecasts are more consistent with the slow recovery scenario. But for the RBNZ, there are some small upside risks too: the RBNZ's baseline assumes Alert Level 2 for ten months and no trans-Tasman bubble. Stimulus could also be more effective than previously assumed.

But overall, we see the QE program needing to be scaled up again to \$90bn by August, due to both downside growth risks and upside risks to the yield curve from the tsunami of bond issuance on its way. But we remain of the view that QE will be the tool of choice to respond for the foreseeable future.

Figure 3. GDP outlook under RBNZ scenarios and ANZ forecasts



Source: RBNZ, ANZ Research

Budget reflections

Budget 2020 was big – \$50bn big! Spending was around ten times what had been envisaged before this crisis happened. Key new spending initiatives included a targeted extension to the wage subsidy, a ramp-up in public housing, and increased spending on infrastructure, including on public transport, but there are plenty more decisions and announcements to come. The Government still has around \$20bn up its sleeve.

Jobs remain a focus and the extension of the wage subsidy was key here. To qualify, firms now need to demonstrate that their revenue has at least halved as a result of COVID-19 – a hurdle most firms in say, hospitality, could easily clear. The Government estimates the extension (for 8 weeks) will cost around \$3.2bn, compared to the original package's cost of around \$11bn so far.

There are unpalatable trade-offs in deciding how far to extend the scheme – the firms most in need of assistance are often also the ones least likely to make it, and there is little to be gained from using taxpayer money to defer the inevitable. The Government's chosen approach will waste some money, save some firms, and save some jobs. We will never know the balance.

But one thing that is clear is that this is no normal recession. Look at monthly Australian labour market data (in New Zealand it is quarterly). Nearly 600,000 jobs were lost in April (figure 4, over). It's not hard to see why saving jobs is a huge priority.

There is a real trade-off between fast policy and good policy; and also between maximising short-term employment and maximising longer-term wellbeing, which requires productivity growth. We learned in the 1970s and 1980s that focusing on jobs as an end in themselves does not lead to good outcomes. We do not want to start digging holes and filling them in. That said, limiting unemployment is a powerful way to limit the bad social outcomes (such as poverty, mental health, general health, domestic violence and other crimes) that typically accompany severe economic downturns.

The Budget was massive.

Jobs remain a focus and rightly so.

Extending the wage subsidy brings unavoidable trade-offs into focus...

Jobs cannot be an end in themselves; productivity drives long-term wellbeing.



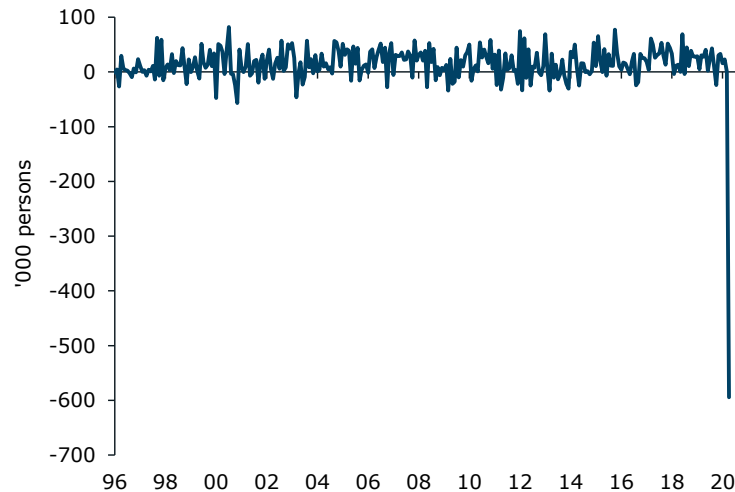
Economic overview

...but this is not a normal recession for the labour market.

Minimum wage rises are very risky when unemployment rate is high

It's the perfect time to build more public housing.

Figure 4. Australia employment change

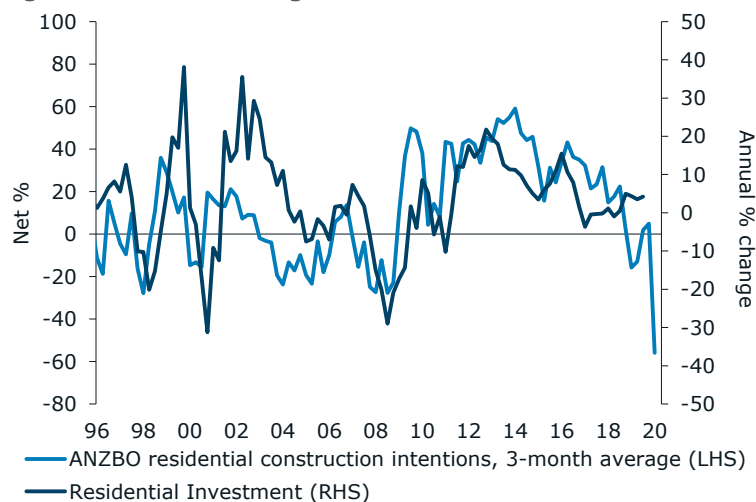


Source: Australian Bureau of Statistics

In time, therefore, we suspect the Government will need to do more than throw money at the unemployment problem – addressing policy. Further minimum wage rises are likely to directly reduce household incomes, with a large negative impact on employment outcomes outweighing the positive impact for those still employed. Indeed, this is why the Government made future minimum wage increases conditional on the state of the economy in the first place. Alternative means of supporting incomes that don't sever the link to the labour market would be preferable at such times, using the tax and transfer system. Even here, though, there are trade-offs: if moves are made that are difficult to reverse, it will be a lot more difficult to get the books back into the black, meaning even more unpleasant choices down the track. This Budget did a pretty good job of avoiding that trap in the circumstances.

The decision to ramp up public housing supply is a very sensible one. The need is undeniable and is set to grow. And the timing is perfect, with a lot of capacity likely to open up in the home-building construction sector meaning work can be done at a more acceptable speed and cost than is possible during housing booms. Residential building intentions in our Business Outlook survey suggest builders are expecting a bigger hole in activity than was seen following the Global Financial Crisis, though of course the situation is highly uncertain and there may be some undue pessimism (figure 5).

Figure 5. ANZBO building intentions and residential investment



Source: Statistics NZ, ANZ Research

Note Last actual is average of April and preliminary May, rather than 3-month average



Economic overview

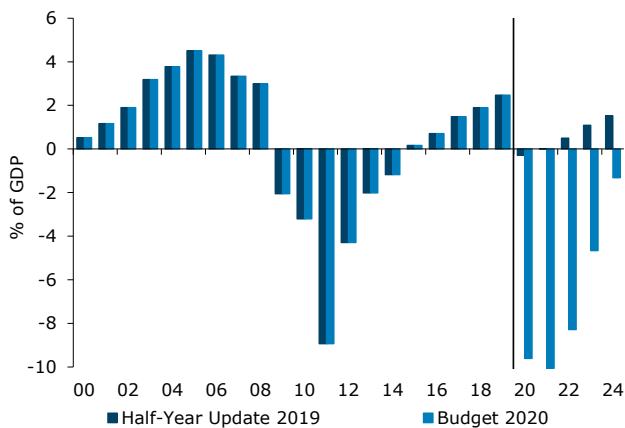
Few would argue with a big ramp-up in spending on health.

The debt and deficit numbers are huge.

We'd also give the big tick to the plan to ramp up spending on health to address both long-running capacity issues and the lengthy waitlists caused by the lockdown, and also the decision to massively scale up the free school lunch program from 8,000 to 200,000. With the unemployment rate set to rise sharply, the need is undeniable and the evidence of the link between nutrition and learning is very clear.

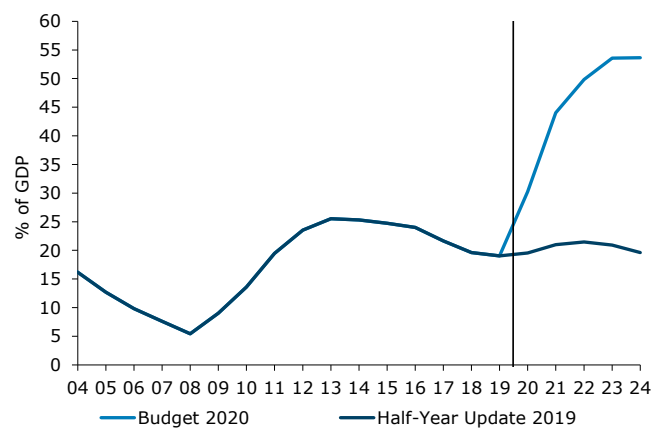
Financial markets are most interested in the government debt profile and how it will be funded. With such a huge spend-up the deficit (figure 6) and net debt (figure 7) profiles are pretty dramatic. However, the Treasury's underlying forecasts optimistically show employment back at pre-COVID levels within two years. We therefore see risks as skewed towards even larger deficits and even higher debt.

Figure 6. Total Crown OBEGAL



Source: The Treasury

Figure 7. Core Crown net debt



Source: The Treasury

We are going deep into the red.

The Government has given itself time to make well-informed decisions. Use it wisely.

Total borrowings are forecast to grow from \$110.2 billion in 2019 to \$317.3bn in 2024. At the Half-Year Update this was forecast at \$145.3bn in 2024. Total borrowings aren't part of the Government's suite of fiscal strategy indicators, but it's a very important metric from both the taxpayers' and rating agency's perspective. That's because it captures the spending decisions made outside of the core Crown accounts (such as by Housing New Zealand), for which we are all potentially on the hook.

To fund it all, New Zealand Debt Management (NZDM) have lifted their bond issuance guidance – significantly! Total issuance of \$190 billion over 2020-2024 is \$45 billion higher than we expected. There is no change to the current fiscal year's guidance of \$25 billion. Debt Management have also lifted the \$12 billion tranche in existing nominal bond lines to \$18bn. As discussed above, we see the sharp increase in forecast issuance as driving another expansion of the RBNZ's LSAP (QE) programme.

The bazooka budget would have been an absolute scramble to put together. Indeed, the Minister of Finance revealed that spending decisions were still being made on Monday last week! Leaving a big chunk of spending unallocated is certainly handy in an election year but it is also pragmatic. It allows time for proper analysis of costs and benefits of different potential spends, and also flexibility to adapt to what is still a highly uncertain situation.

One day we're going to have to pay for all this. But for now, it's all hands to the pump, and pragmatism over perfection. As we catch our breath, making it up as we go along needs to give way to careful, transparent analysis of how best to spend our limited fiscal resources. The Government has given itself time to do that in this Budget by leaving a big chunk of spending unallocated. That time, and that money, needs to be spent wisely.



Economic overview

Local data

ANZ Business Outlook Flash – May. Business confidence jumped 21 points to -46%. Own activity lifted 13 points; net 42% of firms expect lower activity in the year ahead.

ANZ Truckometer – April. The Light Traffic Index fell 71.1% m/m, while the Heavy Traffic fell 45.0% m/m. This will mark the low point.

RBNZ Monetary Policy Statement – May. The RBNZ expanded QE from \$33bn to \$60bn as expected and struck a dovish tone, keeping its options open.

Rental Price Index – April. The stock measure (which aligns closely with the CPI) lifted a strong 0.4% m/m, but this measure is slow moving. The flow measure contracted 1.8%. This measure is a better signal for a turning point in the market, and suggests very weak pipeline inflation pressures.

Net migration – March. This showed the net migration profile continuing to increase; expect revisions and a fast drop, with inflows having stopped abruptly.

New Zealand Budget Economic and Fiscal Update. An unprecedented response to an unprecedented situation looks set to see spending and debt levels ramp up (see commentary above).

REINZ housing market data – April. House sales fall 74.8% m/m, down 75.6% compared to April last year. House prices dipped 1.1% m/m.

Performance of Manufacturing Index – April. Record low of 26.1 under lockdown.

What you may have missed

Please [contact us](#) if you would like to be added to the distribution list for any of these publications. Otherwise click on the links below to view reports.

- [Budget 2020 Review – Big umbrella](#)
- [RBNZ MPS Review – Putting it all on the table](#)
- [ANZ NZ Truckometer – STOP](#)
- [ANZ NZ Business Outlook Preliminary – Dusting ourselves off](#)

The ANZ heatmap

Variable	View	Comment	Risks around our view
GDP	-5.5% y/y for 2021 Q1	Highly uncertain and with a slow recovery. Downside risks loom. Our expectation for more QE provides some modest upside.	
Unemployment rate	8.1% for 2021 Q1	The labour market is set to deteriorate rapidly, with the unemployment rate set to rise significantly.	
Monetary policy	OCR at 0.25% in June 2021	A 0.25% OCR is here for the rest of the year. We see QE being expanded and have pencilled in \$90bn by August for now.	
CPI	0.9% y/y for 2021 Q1	Inflation is currently around where it needs to be, but is set to slip and remain weak as the slowdown takes hold.	



QE was increased but so too was the bond programme.

Lower and flatter remains the key theme in interest rate markets.

QE has ample capacity as it stands, and it will get ramped up.

Summary

Last week's Budget flagged significantly more bond issuance than we and the market were expecting. Future issuance is based on forecasts that have conservative buffers built in, but the market still has to absorb it all. The RBNZ's newly increased QE programme doesn't quite have the capacity to absorb all of next year's issuance, but it could if it were increased, as we expect it to be (probably in August). Keeping the NZGB curve low and flat remains a priority for the RBNZ and it remains a key element in our forecasts. The threat of a negative OCR (next year) and potential QE purchases of foreign assets are significant headwinds for the NZD, as is the very real potential for a real souring of risk appetite as global data continues to shock to the downside.

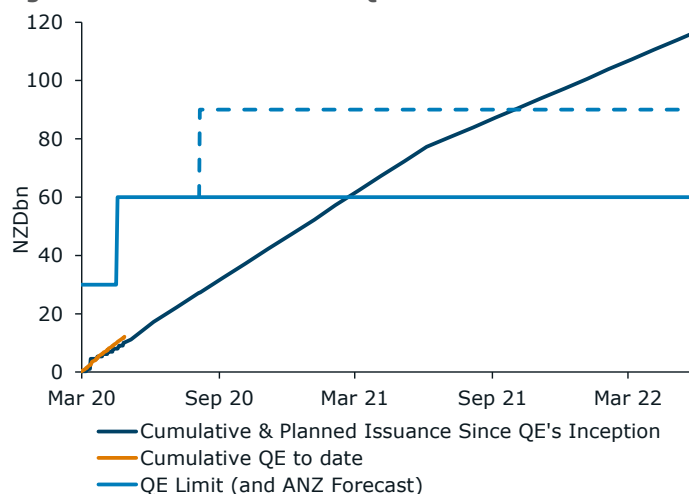
Last week's MPS and Budget created significant volatility mid-week. The NZGB yield curve flattened after the RBNZ increased the size of its LSAP QE programme on Wednesday to \$60bn, only to go higher and steeper the following day with the Budget flagging a much higher than expected \$60bn fiscal 2020/21 bond programme. Although by week's end some calm had returned to the market, the curve ended above recent lows. While such volatility is unhelpful, at a high level the fact that yields have since come back down is encouraging given that the whole point of QE is to get the risk-free NZGB curve lower and flatter, and to drive down borrowing costs for the Crown and others.

Looking ahead, the "gradually lower and flatter theme" remains a key expectation of ours, and we think it will be driven by both a further expansion of the QE programme and the practical reality that even within existing limits, the RBNZ has ample firepower to absorb issuance and keep a lid on NZGB yields for quite some time yet, and we doubt they want to see progress to date undone.

To date, the volume of QE has exceeded the volume of issuance and that's the case this week too, with \$1.35bn of buying and \$1.05bn of issuance. We expect that the RBNZ will look to continue to exceed issuance with its purchases for the time being. Recent increases in yields suggests that RBNZ purchases will be even more front-loaded than they would otherwise have been, to push the curve lower and flatter and soothe concerns about future issuance.

Most of the scheduled 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 1).

Figure 1: NZGB Issuance and QE

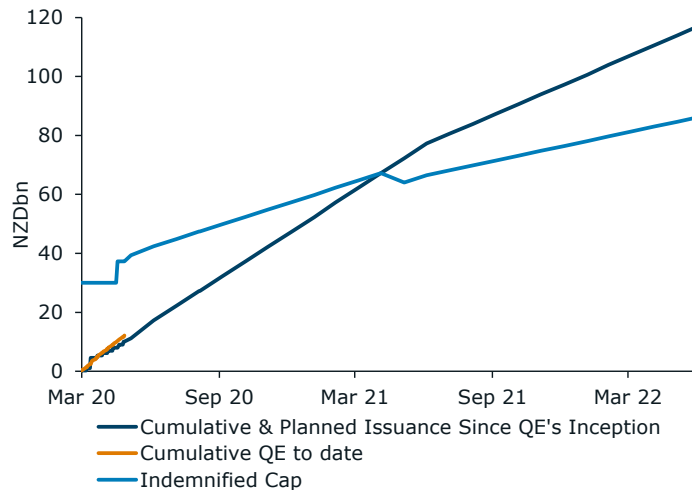


Source: Bloomberg



However, as we noted last week, the RBNZ has been indemnified by the Minister of Finance to purchase up to 50% of outstanding nominal NZGBs and 30% of outstanding inflation-linked NZGBs. At the moment, that indemnity “cap” for NZGBs stands at around \$38bn, but it will obviously grow as outstandings grow, eventually reaching around \$86bn by the end of fiscal 2021/22 (figure 2).

Figure 2: NZGB Issuance, QE and Indemnified Cap (NZGBs only)



Source: Bloomberg

Among other things, this already-granted indemnity indicates how much capacity the RBNZ has to buy bonds going forward, even though technically increasing the size of the QE programme is a decision that would need to be made by the RBNZ’s Monetary Policy Committee (MPC). Given the headroom available in the current QE programme and the size of the indemnity as it stands, the market can be assured that the RBNZ has still “got this”, as the saying goes.

Some of these considerations stand behind our expectation that the RBNZ’s LSAP QE programme will be expanded to \$90bn in August, as we note on page 3. Some readers may be asking why QE needed to be expanded last week (and why we’re calling for a further expansion in August) given that the RBNZ has only purchased around \$11bn of bonds so far. The answer lies in signalling. Markets are particularly sensitive to the balance of risks (or in this case future supply and demand), and by signalling an intention to do more (or “as much as it takes”) the RBNZ can more effectively head off any potential bond issuance-driven blowout in yields.

Foreign asset purchases are not a core part of our forecast, but the RBNZ has flagged it as a possibility if need be (along with a lower, negative OCR). Buying foreign assets would still see system cash balances grow, further flooding the banking system with liquidity. This in turn would have a knock-on impact across local credit markets. And if we ever reach that point, the RBNZ will have purchased such a large quantity of bonds that they are likely to have materially further flattened the NZGB curve.

For currency markets, we believe the threat of a negative OCR and foreign asset purchases represent significant headwinds, especially with key members of the US Federal Reserve not favouring a negative Fed Funds rate. Although the threat seems some way off and unlikely at this point, the RBNZ has asked local banks to get ready for a lower/negative OCR, and the Governor has made no bones about the fact that he is open to it as a policy action down the track. In our view, that makes OCR cuts a real possibility, even if they are not our central view at this stage. And if they were needed, it wouldn’t be until next year – and much can happen between now and then. We are also mindful of the NZD’s sensitivity to swings in risk appetite. Although it is difficult to put a precise time horizon on when we might see risk appetite re-align with the real economic outlook, we think we will see an adjustment over coming months.

QE to \$90bn in August.

NZD faces headwinds.



Data calendar

Date	Country	Data/event	Mkt.	Last	NZ time	
18-May	NZ	Performance Services Index - Apr	--	--	10:30	
	JN	GDP SA QoQ - Q1 P	-1.1%	-1.8%	11:50	
	JN	GDP Annualized SA QoQ - Q1 P	-4.5%	-7.1%	11:50	
	JN	GDP Nominal SA QoQ - Q1 P	-1.3%	-1.5%	11:50	
	JN	GDP Deflator YoY - Q1 P	0.7%	1.2%	11:50	
19-May	US	NAHB Housing Market Index - May	34.0	30.0	02:00	
	NZ	PPI Input QoQ - Q1	--	0.1%	10:45	
	NZ	PPI Output QoQ - Q1	--	0.4%	10:45	
	AU	ANZ-RM Consumer Confidence Index - 17-May	--	90.3	11:30	
	AU	RBA Minutes of May Policy Meeting	--	--	13:30	
	NZ	Non Resident Bond Holdings - Apr	--	49.9%	15:00	
	JN	Industrial Production MoM - Mar F	--	-3.7%	16:30	
	JN	Industrial Production YoY - Mar F	--	-5.2%	16:30	
	UK	Claimant Count Rate - Apr	--	3.5%	18:00	
	UK	Jobless Claims Change - Apr	--	12.2k	18:00	
	UK	Average Weekly Earnings 3M/YoY - Mar	2.6%	2.8%	18:00	
	UK	Weekly Earnings ex Bonus 3M/YoY - Mar	2.6%	2.9%	18:00	
	UK	ILO Unemployment Rate 3Mths - Mar	4.3%	4.0%	18:00	
	UK	Employment Change 3M/3M - Mar	61k	172k	18:00	
	EC	Construction Output MoM - Mar	--	-1.5%	21:00	
	EC	Construction Output YoY - Mar	--	-0.9%	21:00	
	GE	ZEW Survey Expectations - May	30.0	28.2	21:00	
	GE	ZEW Survey Current Situation - May	-87.6	-91.5	21:00	
	EC	ZEW Survey Expectations - May	--	25.2	21:00	
	UK	CBI Trends Total Orders - May	-50	-56	05/26	
	UK	CBI Trends Selling Prices - May	--	-11	05/26	
	20-May	US	Housing Starts - Apr	923k	1216k	00:30
		US	Housing Starts MoM - Apr	-24.1%	-22.3%	00:30
		US	Building Permits - Apr	1000k	1350k	00:30
		US	Building Permits MoM - Apr	-25.9%	-7.0%	00:30
		NZ	Food Prices MoM - Apr	--	0.7%	10:45
		AU	Westpac Leading Index MoM - Apr	--	-0.84%	12:30
NZ		ANZ Monthly Inflation Gauge - Apr	--	0.1%	13:00	
AU		Skilled Vacancies MoM - Apr	--	-5.3%	13:00	
UK		CPI MoM - Apr	-0.1%	0.0%	18:00	
UK		CPI YoY - Apr	0.9%	1.5%	18:00	
UK		CPI Core YoY - Apr	1.4%	1.6%	18:00	
UK		RPI MoM - Apr	0.1%	0.2%	18:00	
UK		RPI YoY - Apr	1.6%	2.6%	18:00	
UK		RPI Ex Mort Int.Payments (YoY) - Apr	1.8%	2.7%	18:00	
UK		PPI Input NSA MoM - Apr	-4.2%	-3.6%	18:00	
UK		PPI Input NSA YoY - Apr	-8.6%	-2.9%	18:00	
UK		PPI Output NSA MoM - Apr	-0.5%	-0.2%	18:00	
UK		PPI Output NSA YoY - Apr	-0.4%	0.3%	18:00	
UK		PPI Output Core NSA MoM - Apr	-0.1%	0.3%	18:00	
UK		PPI Output Core NSA YoY - Apr	0.6%	0.9%	18:00	
EC		ECB Current Account SA - Mar	--	€40.2B	20:00	
UK		House Price Index YoY - Mar	1.5%	1.1%	20:30	

Continued on following page



Data calendar

Date	Country	Data/event	Mkt.	Last	NZ time	
20-May	EC	CPI YoY - Apr F	0.4%	0.7%	21:00	
	EC	CPI MoM - Apr F	0.3%	0.3%	21:00	
	EC	CPI Core YoY - Apr F	0.9%	0.9%	21:00	
	US	MBA Mortgage Applications - 15-May	--	0.3%	23:00	
21-May	EC	Consumer Confidence - May A	-23.4	-22.7	02:00	
	US	FOMC Meeting Minutes - 29-Apr	--	--	06:00	
	AU	CBA PMI Mfg - May P	--	44.1	11:00	
	AU	CBA PMI Services - May P	--	19.5	11:00	
	AU	CBA PMI Composite - May P	--	21.7	11:00	
	JN	Trade Balance - Apr	-¥560.0B	¥5.4B	11:50	
	JN	Trade Balance Adjusted - Apr	-¥777.4B	-¥190.0B	11:50	
	JN	Exports YoY - Apr	-23.1%	-11.7%	11:50	
	JN	Imports YoY - Apr	-13.2%	-5.0%	11:50	
	JN	Jibun Bank PMI Mfg - May P	--	41.9	12:30	
	JN	Jibun Bank PMI Services - May P	--	21.5	12:30	
	JN	Jibun Bank PMI Composite - May P	--	25.8	12:30	
	NZ	Credit Card Spending MoM - Apr	--	-9.1%	15:00	
	NZ	Credit Card Spending YoY - Apr	--	-8.2%	15:00	
	UK	Markit PMI Manufacturing SA - May P	35.0	32.6	20:30	
	UK	Markit/CIPS Services PMI - May P	22.1	13.4	20:30	
	UK	Markit/CIPS Composite PMI - May P	25.0	13.8	20:30	
	22-May	US	Philadelphia Fed Business Outlook - May	-40.0	-56.6	00:30
		US	Initial Jobless Claims - 16-May	2425k	2981k	00:30
		US	Continuing Claims - 9-May	23500k	22833k	00:30
		US	Markit Manufacturing PMI - May P	38.0	36.1	01:45
US		Markit Services PMI - May P	32.3	26.7	01:45	
US		Markit Composite PMI - May P	--	27.0	01:45	
US		Leading Index - Apr	-5.7%	-6.7%	02:00	
US		Existing Home Sales - Apr	4.30M	5.27M	02:00	
US		Existing Home Sales MoM - Apr	-18.4%	-8.5%	02:00	
NZ		Retail Sales Ex Inflation QoQ - Q1	-1.5%	0.7%	10:45	
JN		Natl CPI YoY - Apr	0.1%	0.4%	11:30	
JN		Natl CPI Ex Fresh Food YoY - Apr	-0.1%	0.4%	11:30	
UK		Retail Sales Ex Auto Fuel YoY - Apr	-18.9%	-4.1%	18:00	
UK		Retail Sales Ex Auto Fuel MoM - Apr	-15.0%	-3.7%	18:00	
UK		Retail Sales Inc Auto Fuel MoM - Apr	-15.5%	-5.1%	18:00	
UK		Retail Sales Inc Auto Fuel YoY - Apr	-21.2%	-5.8%	18:00	
UK		Public Finances (PSNCR) - Apr	--	£7.2B	18:00	
UK		Public Sector Net Borrowing - Apr	£49.6B	£2.3B	18:00	
UK		PSNB ex Banking Groups - Apr	£40.0B	£3.1B	18:00	
GE		Markit/BME Manufacturing PMI - May P	39.0	34.5	19:30	
GE		Markit Services PMI - May P	26.0	16.2	19:30	
GE		Markit/BME Composite PMI - May P	32.3	17.4	19:30	
EC		Markit Manufacturing PMI - May P	38.0	33.4	20:00	
EC		Markit Services PMI - May P	24.5	12.0	20:00	
EC		Markit Composite PMI - May P	24.0	13.6	20:00	

Key: AU: Australia, EC: Eurozone, GE: Germany, JN: Japan, NZ: New Zealand, UK: United Kingdom, US: United States, CH: China.

Source: Dow Jones, Reuters, Bloomberg, ANZ Bank New Zealand Limited. All \$ values in local currency.

Note: All surveys are preliminary and subject to change



Local data watch

Date	Data/event	Economic signal	Comment
Wed 20 May (early am)	GlobalDairyTrade auction	Weaker	Increased offerings and a weak global outlook are expected to keep dairy prices trending down.
Wed 20 May (10:45am)	Food Price Index – April	Uncertain	Higher demand for groceries and necessities; zero supply of restaurant meals. It's all pretty uncertain.
Wed 20 May (1:00pm)	ANZ Monthly Inflation Gauge – April	--	--
Fri 22 May (10:45am)	Retail Sales – Q1	On a cliff edge	Q1 sales volumes will likely show a few cracks around the edges, but nothing compared to what's coming in Q2.
Tue 26 May (10:45am)	Overseas Merchandise Trade – April	Holding up	Goods exports have been holding up well. Imports have tailed off owing to supply disruptions and a weak domestic demand pulse. We see this theme continuing.
Tue 26 May (3:00pm)	RBNZ new mortgage lending data – April	Won't last	The recent surge in mortgage credit to help some households through will show up in the April numbers, but strength is not set to last as the housing market turns and caution settles in.
Wed 27 May (09:00am)	RBNZ Financial Stability Report – May	Changed	The global economy is materially weaker, and that could expose financial market vulnerabilities. Weakness in the property market and associated risks may also be a theme. At least the NZD is down and dairy prices haven't fallen too much, yet.
Thu 28 May (1:00pm)	ANZ Business Outlook – May	--	--
Fri 29 May (10:00am)	ANZ Roy Morgan Consumer Confidence – May	--	--
Fri 29 May (3:00pm)	RBNZ sectoral lending data – April	Working capital	Credit growth was strong in April, with working capital loans helping to fill the gap for many businesses. Expect a short-term spike to credit growth, but a softer pulse on the other side.
Tue 2 Jun (10:45am)	Terms of Trade – Q1	Up a little	The terms of trade are expected to improve slightly in Q1, as export returns held relatively well, while import prices eased.
Tue 2 Jun (10:45am)	Building Consents – April	Drop	Building consents look set to drop considerably in April, but the recent pipeline of work should keep construction going for a while. The question is how many projects will be cancelled. Weak demand will weigh medium term.
Wed 3 Jun (early am)	GlobalDairyTrade auction	Weaker	Prices are expected to fall further at the first auction of the new NZ dairy production season. Returns are expected to ease further into Q3.
Thu 4 Jun (1:00pm)	ANZ Commodity Price Index – May	--	--
Mon 8 Jun (10:45am)	Work Put In Place – Q1	Tools down	Solid activity early in the quarter will be offset by the halt in activity as lockdown began.
Tue 9 Jun (10:00am)	ANZ Truckometer – May	--	--
Wed 10 Jun (10:45am)	Economic Survey of Manufacturing – Q1	Was steady	Manufacturing activity was holding pretty steady and then lockdown hit at the very end of the quarter.
10 -17 Jun	REINZ housing data – May	Bumpy	The housing market was bank on line in May, so expect sales to rebound some, but weakness in prices is expected to emerge.
Thu 11 Jun (10:45am)	Electronic Card Transactions – May	Up	Expect a bounce as some spending comes back, but even if growth is strong, the trend is set to be lower.
Fri 12 Jun (10:45am)	Food Price Index – May	Uncertain	Some prices had to be imputed in April, and that would have continued into the first half of May.
Fri 12 Jun (10:45am)	Rental Price Index – May	Wither	Fewer international visitors and rent freezes. Is this historically significant driver of domestic inflation about to wither?
Mon 15 Jun (10:45am)	Net Migration – April	Nope	Visitor arrivals have fallen to close to zero with borders closed, so there will be nothing to see here -- literally.
Mon 15 Jun (1:00pm)	ANZ Monthly Inflation Gauge – May	--	--
Wed 17 Jun (early am)	GlobalDairyTrade auction	Weaker	The downward trend on prices is expected to continue through the winter months.
On balance		Data watch	Risks are clearly tilted to the downside, with global developments evolving rapidly.



Key forecasts and rates

	Dec-19	Mar-20	Jun-20	Sep-20	Dec-20	Mar-21	Jun-21	Sep-21	Dec-21
GDP (% qoq)	0.5	-2.5	-20.6	15.5	2.0	1.0	1.0	1.0	1.0
GDP (% yoy)	1.8	-1.2	-21.6	-10.1	-8.8	-5.5	20.2	5.1	4.1
CPI (% qoq)	0.5	0.8	-0.4	0.1	-0.1	0.5	0.2	0.3	-0.2
CPI (% yoy)	1.9	2.5	1.6	1.0	0.4	0.1	0.7	0.9	0.8
Employment (% qoq)	0.0	0.7	-6.0	-2.5	2.5	2.0	0.7	0.9	1.0
Employment (% yoy)	1.0	1.6	-5.1	-7.7	-5.4	-4.2	2.6	6.2	4.7
Unemployment Rate (% sa)	4.0	4.2	7.6	10.5	9.4	8.1	8.0	7.7	7.1

	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20
Retail ECT (% mom)	-0.1	1.1	0.2	-0.3	2.8	-0.6	-1.1	1.7	-4.6	-46.8
Retail ECT (% yoy)	2.0	3.1	0.6	1.6	5.1	3.9	4.2	8.6	-1.8	-47.5
Car Registrations (% mom)	5.6	-0.7	4.4	-6.6	0.3	1.2	-6.1	9.1	-30.6	-88.7
Car Registrations (% yoy)	-5.4	-5.2	4.7	-6.6	3.0	5.6	-3.5	-0.3	-31.1	-92.5
Building Consents (% mom)	-1.5	0.8	7.5	-1.7	-8.3	10.5	-3.3	5.7	-21.3	--
Building Consents (% yoy)	18.1	12.3	24.3	18.9	8.6	18.0	1.4	5.1	-13.4	--
REINZ House Price Index (% yoy)	1.6	2.7	3.2	3.9	5.5	6.5	6.9	8.5	9.1	8.5
Household Lending Growth (% mom)	0.5	0.6	0.5	0.5	0.6	0.6	0.6	0.6	0.2	--
Household Lending Growth (% yoy)	5.9	6.0	6.1	6.2	6.3	6.5	6.6	6.7	6.4	--
ANZ Roy Morgan Consumer Conf.	116.4	118.2	113.9	118.4	120.7	123.3	122.7	122.1	106.3	84.8
ANZ Business Confidence	-44.3	-52.3	-53.5	-42.4	-26.4	-13.2	..	-19.4	-63.5	-66.6
ANZ Own Activity Outlook	5.0	-0.5	-1.8	-3.5	12.9	17.2	..	12.0	-26.7	-55.1
Trade Balance (\$m)	-732	-1642	-1310	-1038	-786	380	-396	531	672	--
Trade Bal (\$m ann)	-5516	-5591	-5321	-5055	-4837	-4467	-3927	-3302	-3456	--
ANZ World Comm. Price Index (% mom)	-1.4	0.3	0.0	1.2	4.3	-3.4	-1.4	-2.1	-2.0	-1.1
ANZ World Comm. Price Index (% yoy)	-0.5	0.9	3.4	7.2	12.4	8.7	5.1	0.1	-5.8	-9.2
Net Migration (sa)	5010	5390	5160	5760	4880	6640	7010	8280	9700	--
Net Migration (ann)	51842	52981	53626	55468	55940	58556	62177	66515	71456	--
ANZ Heavy Traffic Index (% mom)	2.3	-3.5	3.4	2.7	-1.5	-2.6	4.7	-3.2	-8.0	-45.0
ANZ Light Traffic Index (% mom)	1.4	0.3	-0.3	0.2	0.9	-2.2	2.9	-0.8	-29.3	-71.1
ANZ Monthly Inflation Gauge (% mom)	0.5	0.3	0.3	0.3	0.1	0.4	0.6	0.2	0.1	--

Figures in bold are forecasts. mom: Month-on-Month; qoq: Quarter-on-Quarter; yoy: Year-on-Year



Key forecasts and rates

FX rates	Actual			Forecast (end month)					
	Mar-20	Apr-20	Today	Jun-20	Sep-20	Dec-20	Mar-21	Jun-21	Sep-21
NZD/USD	0.594	0.613	0.593	0.57	0.53	0.55	0.57	0.59	0.60
NZD/AUD	0.976	0.936	0.925	0.95	0.98	0.98	0.95	0.97	0.97
NZD/EUR	0.543	0.563	0.549	0.55	0.53	0.56	0.58	0.59	0.58
NZD/JPY	64.55	65.30	63.54	63.8	59.4	61.6	63.8	66.1	67.2
NZD/GBP	0.481	0.489	0.491	0.47	0.45	0.47	0.48	0.48	0.48
NZ\$ TWI	68.40	69.24	67.56	67.1	64.6	66.7	68.2	69.9	70.2
Interest rates/QE	Mar-20	Apr-20	Today	Jun-20	Sep-20	Dec-20	Mar-21	Jun-21	Sep-21
NZ OCR	1.00	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
LSAP (\$bn)	30	33	60	60	90	90	90	90	90
NZ 90 day bill	0.49	0.27	0.27	0.32	0.32	0.32	0.32	0.32	0.32
NZ 10-yr bond	1.08	0.88	0.64	0.75	1.00	1.25	1.50	1.50	1.50
US Fed funds	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
US 3-mth	1.45	0.69	0.38	0.40	0.40	0.40	0.40	0.40	0.40
AU Cash Rate	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
AU 3-mth	0.37	0.10	0.10	0.20	0.20	0.20	0.25	0.28	0.28

	15-Apr	11-May	12-May	13-May	14-May	15-May
Official Cash Rate	0.25	0.25	0.25	0.25	0.25	0.25
90 day bank bill	0.44	0.26	0.26	0.26	0.28	0.27
NZGB 05/21	0.27	0.10	0.10	0.10	0.09	0.08
NZGB 04/23	0.37	0.09	0.11	0.06	0.08	0.08
NZGB 04/27	0.79	0.40	0.41	0.33	0.34	0.32
NZGB 04/33	1.20	0.83	0.84	0.70	0.78	0.74
2 year swap	0.41	0.17	0.18	0.11	0.12	0.12
5 year swap	0.57	0.32	0.32	0.22	0.24	0.21
RBNZ TWI	68.87	69.48	68.89	68.92	67.87	68.14
NZD/USD	0.6001	0.6089	0.6101	0.6032	0.5966	0.5935
NZD/AUD	0.9495	0.9382	0.9369	0.9285	0.9287	0.9253
NZD/JPY	64.42	65.29	65.55	64.52	63.86	63.51
NZD/GBP	0.4798	0.4940	0.4942	0.4905	0.4889	0.4902
NZD/EUR	0.5502	0.5628	0.5631	0.5551	0.5528	0.5485
AUD/USD	0.6320	0.6490	0.6513	0.6496	0.6424	0.6413
EUR/USD	1.0908	1.0819	1.0835	1.0865	1.0792	1.0820
USD/JPY	107.36	107.24	107.44	106.97	107.05	107.06
GBP/USD	1.2506	1.2324	1.2347	1.2296	1.2203	1.2116
Oil (US\$/bbl)	19.87	24.14	25.78	25.29	27.56	29.43
Gold (US\$/oz)	1721.66	1700.25	1703.65	1705.50	1715.66	1743.67
NZX 50	10410	10760	10819	10788	10745	10731
Baltic Dry Freight Index	706	474	433	398	393	407
NZX WMP Futures (US\$/t)	2705	2580	2580	2580	2580	2590



Important notice

This document is intended for ANZ's Institutional, Markets and Private Banking clients. It should not be forwarded, copied or distributed. The information in this document is general in nature, and does not constitute personal financial product advice or take into account your objectives, financial situation or needs.

This document may be restricted by law in certain jurisdictions. Persons who receive this document must inform themselves about and observe all relevant restrictions.

Disclaimer for all jurisdictions: This document is prepared and distributed in your country/region by either: Australia and New Zealand Banking Group Limited (ABN11 005 357 522) (**ANZ**); or its relevant subsidiary or branch (each, an **Affiliate**), as appropriate or as set out below.

This document is distributed on the basis that it is only for the information of the specified recipient or permitted user of the relevant website (**recipients**).

This document is solely for informational purposes and nothing contained within is intended to be an invitation, solicitation or offer by ANZ to sell, or buy, receive or provide any product or service, or to participate in a particular trading strategy.

Distribution of this document to you is only as may be permissible by the laws of your jurisdiction, and is not directed to or intended for distribution or use by recipients resident or located in jurisdictions where its use or distribution would be contrary to those laws or regulations, or in jurisdictions where ANZ would be subject to additional licensing or registration requirements. Further, the products and services mentioned in this document may not be available in all countries.

ANZ in no way provides any financial, legal, taxation or investment advice to you in connection with any product or service discussed in this document. Before making any investment decision, recipients should seek independent financial, legal, tax and other relevant advice having regard to their particular circumstances.

Whilst care has been taken in the preparation of this document and the information contained within is believed to be accurate, ANZ does not represent or warrant the accuracy or completeness of the information. Further, ANZ does not accept any responsibility to inform you of any matter that subsequently comes to its notice, which may affect the accuracy of the information in this document.

Preparation of this document and the opinions expressed in it may involve material elements of subjective judgement and analysis. Unless specifically stated otherwise: they are current on the date of this document and are subject to change without notice; and, all price information is indicative only. Any opinions expressed in this document are subject to change at any time without notice.

ANZ does not guarantee the performance of any product mentioned in this document. All investments entail a risk and may result in both profits and losses. Past performance is not necessarily an indicator of future performance. The products and services described in this document may not be suitable for all investors, and transacting in these products or services may be considered risky.

ANZ expressly disclaims any responsibility and shall not be liable for any loss, damage, claim, liability, proceedings, cost or expense (Liability) arising directly or indirectly and whether in tort (including negligence), contract, equity or otherwise out of or in connection with this document to the extent permissible under relevant law. Please note, the contents of this document have not been reviewed by any regulatory body or authority in any jurisdiction.

ANZ and its Affiliates may have an interest in the subject matter of this document. They may receive fees from customers for dealing in the products or services described in this document, and their staff and introducers of business may share in such fees or remuneration that may be influenced by total sales, at all times received and/or apportioned in accordance with local regulatory requirements. Further, they or their customers may have or have had interests or long or short positions in the products or services described in this document, and may at any time make purchases and/or sales in them as principal or agent, as well as act (or have acted) as a market maker in such products. This document is published in accordance with ANZ's policies on conflicts of interest and ANZ maintains appropriate information barriers to control the flow of information between businesses within it and its Affiliates.

Your ANZ point of contact can assist with any questions about this document including for further information on these disclosures of interest.

Country/region specific information: Unless stated otherwise, this document is distributed by Australia and New Zealand Banking Group Limited (**ANZ**).

Australia. ANZ holds an Australian Financial Services licence no. 234527. For a copy of ANZ's Financial Services Guide please or request from your ANZ point of contact.

Brazil, Brunei, India, Japan, Kuwait, Malaysia, Switzerland, Taiwan. This document is distributed in each of these jurisdictions by ANZ on a cross-border basis.

European Economic Area (EEA): United Kingdom. ANZ is authorised in the United Kingdom by the Prudential Regulation Authority (**PRA**) and is subject to regulation by the Financial Conduct Authority (**FCA**) and limited regulation by the PRA. Details about the extent of our regulation by the PRA are available from us on request. This document is distributed in the United Kingdom by Australia and New Zealand Banking Group Limited ANZ solely for the information of persons who would come within the FCA definition of "eligible counterparty" or "professional client". It is not intended for and must not be distributed to any person who would come within the FCA definition of "retail client". Nothing here excludes or restricts any duty or liability to a customer which ANZ may have under the UK Financial Services and Markets Act 2000 or under the regulatory system as defined in the Rules of the Prudential Regulation Authority (**PRA**) and the FCA. ANZ is authorised in the United Kingdom by the PRA and is subject to regulation by the FCA and limited regulation by the PRA. Details about the extent of our regulation by the PRA are available from us on request.

Fiji. For Fiji regulatory purposes, this document and any views and recommendations are not to be deemed as investment advice. Fiji investors must seek licensed professional advice should they wish to make any investment in relation to this document.

Hong Kong. This publication is issued or distributed in Hong Kong by the Hong Kong branch of ANZ, which is registered at the Hong Kong Monetary Authority to conduct Type 1 (dealing in securities), Type 4 (advising on securities) and Type 6 (advising on corporate finance) regulated activities. The contents of this publication have not been reviewed by any regulatory authority in Hong Kong.

India. If this document is received in India, only you (the specified recipient) may print it provided that before doing so, you specify on it your name and place of printing.

Myanmar. This publication is intended to be general and part of ANZ's customer service and marketing activities when implementing its functions as a licensed bank. This publication is not Securities Investment Advice (as that term is defined in the Myanmar Securities Transaction Law 2013).

New Zealand. This document is intended to be of a general nature, does not take into account your financial situation or goals, and is not a personalised adviser service under the Financial Advisers Act 2008 (**FAA**).



Important notice

Oman. ANZ neither has a registered business presence nor a representative office in Oman and does not undertake banking business or provide financial services in Oman. Consequently ANZ is not regulated by either the Central Bank of Oman or Oman's Capital Market Authority. The information contained in this document is for discussion purposes only and neither constitutes an offer of securities in Oman as contemplated by the Commercial Companies Law of Oman (Royal Decree 4/74) or the Capital Market Law of Oman (Royal Decree 80/98), nor does it constitute an offer to sell, or the solicitation of any offer to buy non-Omani securities in Oman as contemplated by Article 139 of the Executive Regulations to the Capital Market Law (issued vide CMA Decision 1/2009). ANZ does not solicit business in Oman and the only circumstances in which ANZ sends information or material describing financial products or financial services to recipients in Oman, is where such information or material has been requested from ANZ and the recipient understands, acknowledges and agrees that this document has not been approved by the CBO, the CMA or any other regulatory body or authority in Oman. ANZ does not market, offer, sell or distribute any financial or investment products or services in Oman and no subscription to any securities, products or financial services may or will be consummated within Oman. Nothing contained in this document is intended to constitute Omani investment, legal, tax, accounting or other professional advice.

People's Republic of China (PRC). This document may be distributed by either ANZ or Australia and New Zealand Bank (China) Company Limited (**ANZ China**). Recipients must comply with all applicable laws and regulations of PRC, including any prohibitions on speculative transactions and CNY/CNH arbitrage trading. If this document is distributed by ANZ or an Affiliate (other than ANZ China), the following statement and the text below is applicable: No action has been taken by ANZ or any affiliate which would permit a public offering of any products or services of such an entity or distribution or re-distribution of this document in the PRC. Accordingly, the products and services of such entities are not being offered or sold within the PRC by means of this document or any other document. This document may not be distributed, re-distributed or published in the PRC, except under circumstances that will result in compliance with any applicable laws and regulations. If and when the material accompanying this document relates to the products and/or services of ANZ China, the following statement and the text below is applicable: This document is distributed by ANZ China in the Mainland of the PRC.

Qatar. This document has not been, and will not be:

- lodged or registered with, or reviewed or approved by, the Qatar Central Bank (**QCB**), the Qatar Financial Centre (**QFC**) Authority, QFC Regulatory Authority or any other authority in the State of Qatar (**Qatar**); or
- authorised or licensed for distribution in Qatar,

and the information contained in this document does not, and is not intended to, constitute a public offer or other invitation in respect of securities in Qatar or the QFC. The financial products or services described in this document have not been, and will not be:

- registered with the QCB, QFC Authority, QFC Regulatory Authority or any other governmental authority in Qatar; or
- authorised or licensed for offering, marketing, issue or sale, directly or indirectly, in Qatar.

Accordingly, the financial products or services described in this document are not being, and will not be, offered, issued or sold in Qatar, and this document is not being, and will not be, distributed in Qatar. The offering, marketing, issue and sale of the financial products or services described in this document and distribution of this document is being made in, and is subject to the laws, regulations and rules of, jurisdictions outside of Qatar and the QFC. Recipients of this document must abide by this restriction and not distribute this document in breach of this restriction. This document is being sent/issued to a limited number of institutional and/or sophisticated investors (i) upon their request and confirmation that they understand the statements above; and (ii) on the condition that it will not be provided to any person other than the original recipient, and is not for general circulation and may not be reproduced or used for any other purpose.

Singapore. This document is distributed in Singapore by the Singapore branch of ANZ solely for the information of "accredited investors", "expert investors" or (as the case may be) "institutional investors" (each term as defined in the Securities and Futures Act Cap. 289 of Singapore). ANZ is licensed in Singapore under the Banking Act Cap. 19 of Singapore and is exempted from holding a financial adviser's licence under Section 23(1)(a) of the Financial Advisers Act Cap. 100 of Singapore.

United Arab Emirates (UAE). This document is distributed in the UAE or the Dubai International Financial Centre (**DIFC**) (as applicable) by ANZ. This document does not, and is not intended to constitute: (a) an offer of securities anywhere in the UAE; (b) the carrying on or engagement in banking, financial and/or investment consultation business in the UAE under the rules and regulations made by the Central Bank of the UAE, the Emirates Securities and Commodities Authority or the UAE Ministry of Economy; (c) an offer of securities within the meaning of the Dubai International Financial Centre Markets Law (DIFCML) No. 12 of 2004; and (d) a financial promotion, as defined under the DIFCML No. 1 of 200. ANZ DIFC Branch is regulated by the Dubai Financial Services Authority (**DFSA**). ANZ DIFC Branch is regulated by the Dubai Financial Services Authority (**DFSA**). The financial products or services described in this document are only available to persons who qualify as "Professional Clients" or "Market Counterparty" in accordance with the provisions of the DFSA rules. In addition, ANZ has a representative office (**ANZ Representative Office**) in Abu Dhabi regulated by the Central Bank of the UAE. The ANZ Representative Office is not permitted by the Central Bank of the UAE to provide any banking services to clients in the UAE.

United States. Except where this is a FX- related document, this document is distributed in the United States by ANZ Securities, Inc. (**ANZ SI**) which is a member of the Financial Regulatory Authority (**FINRA**) (www.finra.org) and registered with the SEC. ANZSI's address is 277 Park Avenue, 31st Floor, New York, NY 10172, USA (Tel: +1 212 801 9160 Fax: +1 212 801 9163). ANZSI accepts responsibility for its content. Information on any securities referred to in this document may be obtained from ANZSI upon request. This document or material is intended for institutional use only – not retail. If you are an institutional customer wishing to effect transactions in any securities referred to in this document you must contact ANZSI, not its affiliates. ANZSI is authorised as a broker-dealer only for institutional customers, not for US Persons (as "US person" is defined in Regulation S under the US Securities Act of 1933, as amended) who are individuals. If you have registered to use this website or have otherwise received this document and are a US Person who is an individual: to avoid loss, you should cease to use this website by unsubscribing or should notify the sender and you should not act on the contents of this document in any way. Non-U.S. analysts: Non-U.S. analysts may not be associated persons of ANZSI and therefore may not be subject to FINRA Rule 2242 restrictions on communications with the subject company, public appearances and trading securities held by the analysts. Where this is an FX-related document, it is distributed in the United States by ANZ's New York Branch, which is also located at 277 Park Avenue, 31st Floor, New York, NY 10172, USA (Tel: +1 212 801 916 0 Fax: +1 212 801 9163).

Vietnam. This document is distributed in Vietnam by ANZ or ANZ Bank (Vietnam) Limited, a subsidiary of ANZ.

This document has been prepared by ANZ Bank New Zealand Limited, Level 26, 23-29 Albert Street, Auckland 1010, New Zealand, Ph 64-9-357 4094, e-mail nzeconomics@anz.com, <http://www.anz.co.nz>