# Quarterly Economic Outlook

## Finding potential

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## Where are we?

New Zealand's economy is well on the way to recovery. Successful virus containment meant we could come out of lockdown much faster than our trading partners. This, combined with solid labour market outcomes, has seen economic activity rebound to such an extent that some sectors are now running into capacity constraints. Our capacity indicators show that the output gap has likely closed, which is supporting inflationary pressure. Click here for more.

## Where we think we're going

With additional fiscal stimulus in the pipeline, we're now less worried about waning housing-induced momentum as the economy transitions to full employment over the years ahead. Stepping back, the supply shock has been a lot more significant than previously thought. Inflation pressures have gone beyond the traditional definition of 'transitory', and are now looking more persistent. But is 'persistent' inflation 'permanent 'inflation? The answer to that question lies in the longer-run state of affairs (possibly beyond our forecast horizon), when both the supply and demand shocks have been worked through and expectations have adjusted to the "new normal". Click here for more.

## Where we might end up

A year on from the Great Lockdown, virus risks are abating and data volatility is beginning to settle. That means we can start putting a little more weight on our central forecasts for activity. But there's a whole bunch of important inputs such as the output gap, inflation dynamics (including expectations), and the level of full employment that are difficult enough to gauge in real time, let alone forecast. This chapter presents two scenarios that could either see the RBNZ tighten faster, or not at all, over our forecast horizon. Click here for more.

## Are we there yet?

Both interest rates and the NZD are at similar levels to those prevailing at the end of February, when our last *Quarterly* was published. However, over the past three months there has been considerable volatility as markets have tested their assumptions about the economic outlook and the timing of rate hikes. With OCR cuts looking much less likely, there isn't much scope for short end interest rate volatility. But with the NZ market pricing in hikes while offshore markets price in stability by other central banks, there is certainly scope for long-end interest rate and FX volatility. Click here for more.

| Calendar Years | 2018 | 2019 | 2020 | 2021(f) | 2022(f) | 2023(f) |
|---|---|---|---|---|---|---|
| New Zealand Economy | | | | | | |
| Real GDP (ann avg % change) | 3.4 | 2.4 | -3.0 | 3.8 | 3.5 | 3.1 |
| Real GDP (ann % change) | 3.3 | 1.7 | -0.9 | 2.1 | 3.9 | 2.5 |
| Unemployment Rate (Dec quarter) | 4.3 | 4.1 | 4.9 | 4.7 | 4.0 | 3.9 |
| CPI Inflation (annual %) | 1.9 | 1.9 | 1.4 | 2.9 | 1.9 | 2.0 |
| Terms of Trade (OTI basis; ann %) | -4.8 | 7.1 | -1.7 | 1.4 | 1.9 | 1.9 |
| NZ Financial Markets (end of Dec quarter) | | | | | | |
| NZD/USD | 0.67 | 0.67 | 0.72 | 0.77 | 0.77 | -- |
| NZD/AUD | 0.95 | 0.96 | 0.94 | 0.94 | 0.94 | -- |
| NZ$ TWI | 73.4 | 73.7 | 75.2 | 78.3 | 77.3 | -- |
| Official Cash Rate | 1.75 | 1.00 | 0.25 | 0.25 | 0.75 | 1.25 |
| 90-day bank bill rate | 1.97 | 1.29 | 0.27 | 0.40 | 0.90 | 1.40 |
| 10-year government bond rate | 2.37 | 1.65 | 0.99 | 2.40 | 2.85 | 3.50 |

Source: Statistics NZ, Bloomberg, ANZ Research

# Where are we?


## Summary

New Zealand's economy is well on the way to recovery. The policy response to COVID, which stamped out the virus in New Zealand, meant that we could come out of lockdown much faster than our trading partners. This, combined with the Government's focus on keeping people attached to jobs, has seen economic activity rebound to such an extent that some sectors are now running into capacity constraints. The labour market is also in a much better space. Our capacity indicators show that the output gap has likely closed, which is supporting inflationary pressure. Bottom line: the starting point for the economy is undoubtedly stronger than we, or the RBNZ, dared hope it would be this time last year.


## Where are we?

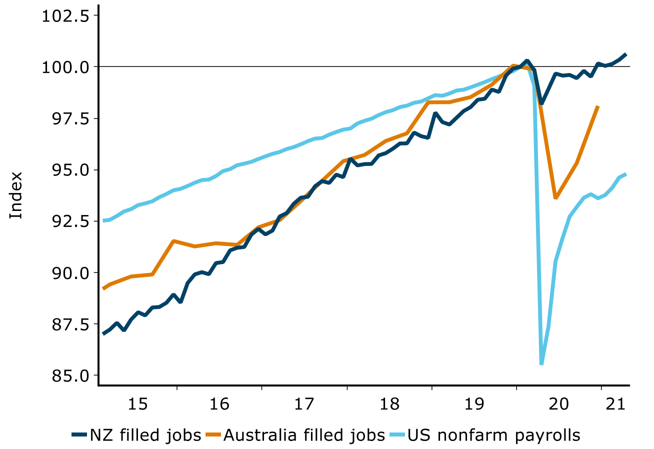
New Zealand is well on the way to economic recovery after the damage wrought by COVID-19. It's surprising to be able to say this so early – going into the crisis, every economic forecaster was expecting a large and drawn-out recession, with the possibility of deflation, a 10% unemployment rate, and an economy that would struggle to get back to pre-COVID levels of output. Looking at where we are now, it's clear that we're already through the worst of it. GDP has recovered spectacularly, and recent labour market data showed that the New Zealand's labour market is far closer to full employment than anyone could have hoped for.

### Win some

Much of New Zealand's economic resilience in the face of COVID can be attributed to our success in eliminating the virus, which has meant that we've spent the last 12 months living relatively normally. It's hard to overstate the misery that other countries that did not control the virus have gone through. Not only have our health outcomes been better, but we've also been able to restart the economy much sooner, leading to a more advanced recovery than most of our trading partners.

The focus of Government policy on keeping workers attached to their jobs has also been a key pillar of the relatively good economic outcomes. Unlike some of our trading partners, such as the US and Australia, New Zealand did not see a large drop in employment as a result of lockdown (figure 1). Some people did unfortunately lose their jobs, but in aggregate, the damage was limited. That means it was much easier to switch the economy back on after lockdown, and we've seen employment in New Zealand actually increase above pre-COVID levels in recent months. Budget 2021 showed that fiscal policy will be taking something of a back seat going forward as private sector momentum becomes the main driver of growth. But the increase in benefits should provide further tailwinds for the economy.

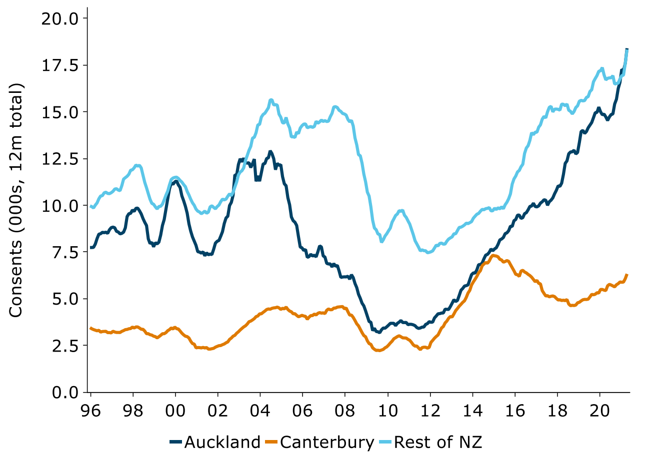
Figure 1. Employment indicators (Jan 2020 = 100)




Source: ABS, BLS, Stats NZ, Macrobond, ANZ Research

While fiscal policy has (necessarily) been the star of the show, other secondary cast members have been important too. Monetary policy played a key role early on in the crisis, with interest rates slashed and the Large Scale Asset Purchase (LSAP) programme rolled out. This helped to ease market dysfunction at the onset of the crisis, as well as providing ongoing support to the economy. The most obvious impact of monetary policy has been through the housing market. With interest rates at historic lows and the removal of loan to value ratio (LVR) restrictions, we saw house prices surge in 2020, against expectations that they would fall.

Figure 2. Dwelling consent issuance

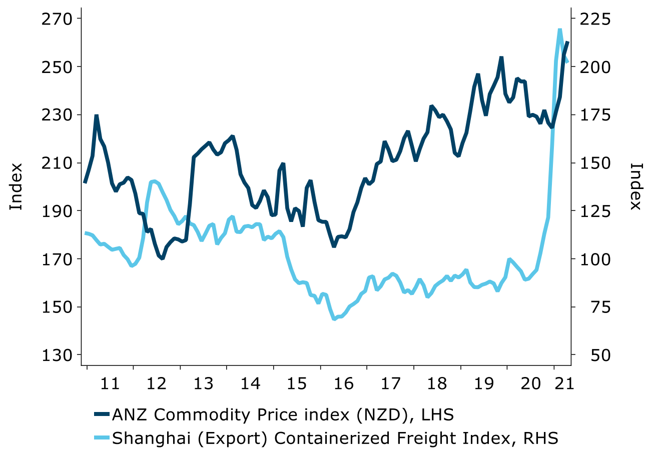



Source: Stats NZ, Macrobond, ANZ Research

For better or worse, the housing market has been the key driver of the economic rebound from lockdown. Demand for housing is still well ahead of supply (see our recent Property Focus), and this has given the construction sector an almost overwhelmingly large pipeline of work. In Q3, as we came out of lockdown, we saw construction activity soar, and recent dwelling consent issuance shows that the pipeline of work is only getting longer (figure 2).

Higher commodity prices have also been supportive for the economy, though some of the benefit from higher prices has been offset by rising shipping costs and a stronger New Zealand dollar (figure 3). Many countries are now experiencing the rapid recovery that New Zealand went through over the second half of 2020, and strong global tailwinds should support our exports sector over the coming year.

Figure 3. ANZ Commodity Price Index and Container Freight Costs (Export-Shanghai)




Source: Bloomberg, Macrobond, ANZ Research

## Lose some

It's not all good news though. While New Zealand led the world on our initial response to COVID-19, we are lagging behind on vaccinations. As of writing, only 4% of the population in New Zealand was fully vaccinated. Until we can establish herd immunity in New Zealand (~70%), the risk of returning to lockdown looms large.

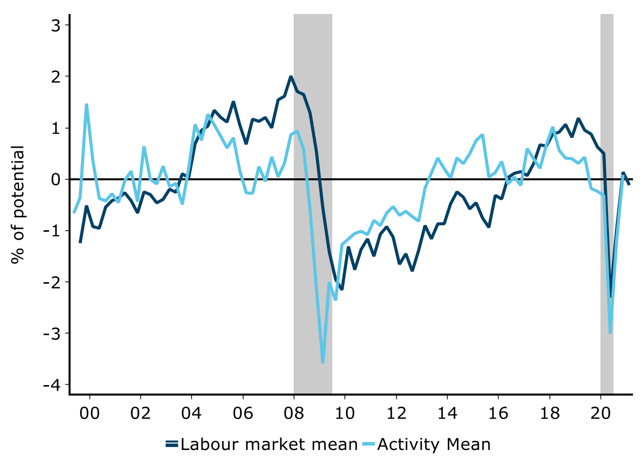
Secondly, the COVID-19 crisis has impacted the supply side of the economy by more than previously thought. The sectors that propelled New Zealand's economic recovery, in particular construction, are running into serious capacity constraints. One reason is the disruption to global supply chains caused by COVID-19. This will be temporary, but it's becoming more persistent. Figure 3 shows the steep rise in shipping costs resulting from COVID disruptions. Firms and tradespeople in New Zealand are finding it harder to import the goods they need, leading to cost overruns and delays. We can see this playing out in our ANZ Business Outlook, where both cost expectations and pricing intentions are through the roof.

In addition, the labour market is very tight, and firms are struggling to find the workers they need. It sounds strange to say that the labour market is tight, considering that at 4.7%, the unemployment rate is still well above the 4.0% low it reached pre-COVID. But the economy is massively distorted. Many of the jobs lost due to COVID were in face-to-face industries like tourism and hospitality. Jobseekers who have come from these industries likely need to re-skill and relocate to fit into vacant positions – and this process takes a long time. Skills mismatches and a closed border mean labour supply is fairly unresponsive, so from here we're likely to see stronger wage growth, rather than strong employment growth, as firms poach workers off each other.

The New Zealand economy is currently trying to grow faster than COVID-imposed restraints will sustainably allow. The next update we get on GDP will be on 17 June, for Q1. We expect that the economy moved sideways (0.0% q/q) as the lack of international tourists over the summer months weighed on our tourism sector. However, there's a lot of noise in the data right now, and a miss on either side of 0% wouldn't have any implications for our medium-term view. We'll firm up our Q1 GDP pick after all the partial indicators have been released, but for now, the 2.5% q/q rise in retail sales presents some upside.

Overall, our suite of capacity pressure indicators suggests that the output gap has closed (figure 4), and we think it's well into positive territory as we move through Q2 2021. This is contributing to the inflationary pressure that's building in the domestic economy. The big question from here is what happens next. Does inflation pressure continue to build and build, forcing the RBNZ's hand? Or, will inflationary pressures subside as a recovery in the supply side of the domestic and global economy outpaces demand? In subsequent chapters we lay out our main forecasts, as well as plausible alternative scenarios for how things could play out.

Figure 4. Capacity pressure indicators




Source: MBIE, NZIER, Stats NZ, Macrobond, ANZ Research

# Where we think we're going


## Summary

The recovery is progressing well, and with additional fiscal stimulus in the pipeline, we're now less worried about waning housing-induced momentum as the economy transitions to full employment over the years ahead. Stepping back, the supply shock has been a lot more significant than previously thought, and that's made the post-lockdown demand pulse (and monetary settings) a lot more inflationary. Inflation pressures have gone beyond the traditional definition of 'transitory', and are now looking more persistent. But is 'persistent' inflation 'permanent 'inflation? The answer to that question lies in the longer-run state of affairs (possibly beyond our forecast horizon), when both the supply and demand shocks have been worked through and expectations have adjusted to the "new normal".


## Please enter your destination…

Both the supply and demand sides of the economy have experienced significant shocks in the wake of COVID-19. With so many different forces pushing and pulling different parts of the economy from different angles (and with varying degrees of energy), it's no wonder forecast revisions over the past year have been substantial. A year has passed since the Great Lockdown, and even though the path ahead is undoubtedly better than we expected, many aspects of the outlook remain highly uncertain.

Traditionally when forecasting one starts at 'now' and works forwards. But an alternative way to think about the possible paths for the economy over the next few years is to start with the longer-run destination – ie the future hypothetical steady state where we think things are likely to land once recent shocks are worked through and assuming no further risks (upside and downside) materialise. Of course, we'll never get to a steady state as life keeps happening, but it's a neat discipline for ensuring we carefully think through everything that's going on and how it fits together.

## …for supply…

The supply side of the economy is made up of labour, capital, and how cleverly you combine them.

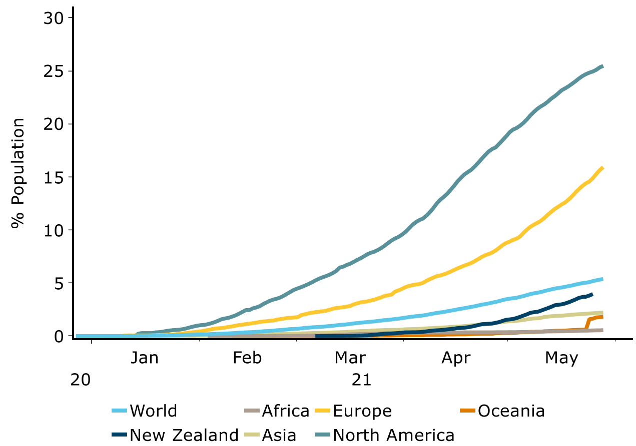
### Labour supply

Let's start with labour supply. Globally, COVID-19 has stifled labour mobility, with closed borders, travel restrictions and virus risks keeping people movements confined to relatively short distances, and in some instances keeping people away from work entirely. Even if people have been able to work, health measures such as social distancing requirements have reduced productivity and used up additional resource. In other words, both labour supply and labour productivity have experienced a negative shock. This means a given level of demand generates higher labour cost pressures than we would otherwise see.

In New Zealand, successful virus containment means the shock to domestic labour mobility and productivity has been relatively small. However, the decade or so preceding COVID-19 saw a big move towards heavy dependence on relatively cheap imported labour. From a starting point where migration-led population growth accounted for around two thirds of headline GDP growth, the shock to NZ's labour supply has also been significant (see Where are we?).

In the longer run, we assume COVID-19 will become manageable to the point that both the global labour supply and productivity shocks fully (or almost fully) dissipate. In fact, with the global vaccine rollout well underway (figure 1), global potential GDP is already beginning to lift.

Figure 1. Global vaccine rollout (full vaccination)



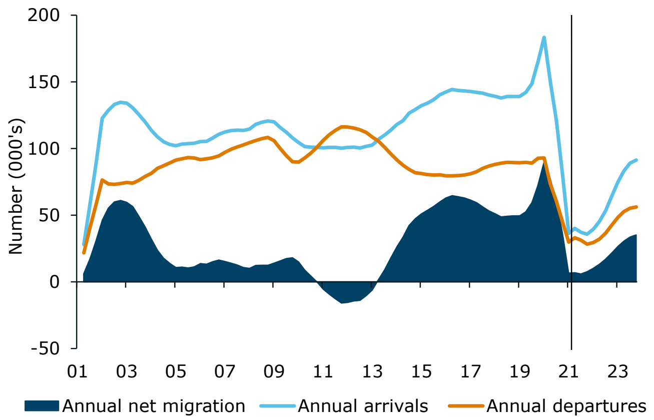

Source: Our World in Data, Macrobond

We expect New Zealand's labour supply will get a small bump once borders reopen and net migration starts to lift (importing labour has started in a small way already but we assume it will start to happen more significantly from early 2022).

However, we think NZ will come out of COVID-19 with a lower net migration impulse over the medium term than previously, due to changing Government policies. The current housing and infrastructure deficits are the legacy of unsustainable population-led growth over the preceding decade or so. As we outlined in the May Property Focus, even if the border were to stay closed indefinitely, it'd still take years to erase the housing shortage, and a return to previous levels of migration could easily see progress reversed. But what's really uncertain here is how far politicians are willing to go as they balance the social side of the ledger (chiefly housing-cost-induced poverty) against the ability for businesses to import the skilled labour they need to expand (rather than invest significant time and money required to train and incentivise domestic labour to fill these roles). More flexible housing supply would ease the trade-offs somewhat, and the Government has a key role to play there.

Getting back to migration, our assumption is that net migration will lift as border restrictions ease, reaching around 35,000 by mid- to late-2023 (figure 2). All else equal, we expect this increase will lift house prices and headline GDP growth; be neutral for the output gap overall; and be a drag on wage inflation and per capita capital investment. But we'd like to stress that this is an assumption, not a forecast. Uncertainty around the pace of the border reopening, potential changes to migration settings, the pull of a labour-hungry Australia, and the question of how many recent kiwi returnees will head off overseas as soon as it's safe to do so all suggest the plausible range for migration outcomes is very wide.

Figure 2. ANZ annual net migration assumption




Source: Statistics NZ, ANZ Research

## Capital stock and productivity

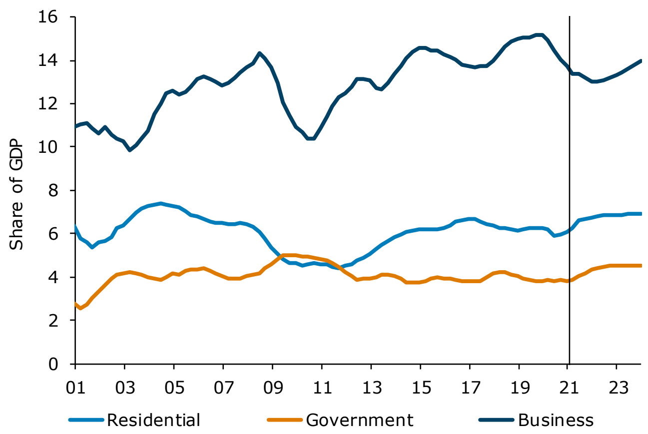
Let's turn to the capital stock, the other main input to production. Machines, IT, buildings, vehicles – that kind of thing.

Global manufacturing and shipping were caught by surprise by the strength of post-COVID goods demand. And with the demand pipeline still looking very healthy, increasing investment is the natural response – that's monetary policy working. Investing in more plant and machinery takes time, but high prices mean the incentives are certainly there.

Of course, to invest, you have to believe that the high demand and prices are going to stick around a while. Globally, a high degree of uncertainty has constrained business investment. And that suggests the capital stock, and therefore productive capacity, will be lower than otherwise for a while yet. However, we're optimistic that here in New Zealand the combination of low interest rates, solid demand, and scarcity of imported labour will see business investment turn a corner over the year ahead (figure 3). Our Business Outlook survey is telling us exactly that. And the sooner NZ businesses get clarity on the future of migration settings, the more time they will have to plan some investment in labour-saving capital.

In the longer run, we expect the economy will run on a slightly different fuel mix of capital and labour, as minimum wage rises and more restrictive migration settings incentivise less labour input and more capital. That should help give labour productivity a much-needed shot in the arm. Infrastructure, essentially government-provided capital, is also really important.

Figure 3. Investment share of GDP




Source: Statistics NZ, ANZ Research

But can productivity come out of this crisis unscathed? While it's very uncertain (and will be debated and researched by economists for years to come) we're a little sceptical it can.

On the one hand, COVID-19 has accelerated innovation around flexible working, meaning less office space (though more laptops) are required for a given level of output. And in NZ we've seen some clever innovation pop up in response to the labour supply shock, like using Light Detection and Ranging (LiDAR) scanning technology to count apples and kiwifruit, measure forest density, or assess irrigation requirements. And as noted previously, we think there's likely to be a slightly higher capital-labour ratio in the longer run in NZ, and good infrastructure investment helps too. But on the other hand, climate change, rising manufacturing costs and demographic change present challenging claims on investment resources that won't directly improve productivity. Further, the marked lift in global (not so much in NZ) firm indebtedness could leave behind more zombie companies, and less scope for offshore businesses to borrow for R&D and capital investment. That could curtail NZ's ability to boost productivity via imported goods and technology.

All up, when we consider the supply shock through the lens of the 'production function' (labour, capital, and productivity), we think there's likely to be a mix of temporary, persistent and permanent impacts. Barring another outbreak, we're confident that we're now past the worst of the supply shock (touch wood). But even the pace of the supply-side recovery could take some time to reveal itself, let alone its magnitude. It's not the easiest thing to measure.

## …and demand

Let's turn to the demand side of the economy, where in 'normal' forecasting times, 95% of the focus would lie.

### Consumption

Our medium-term anchor for household incomes is continued recovery in underlying economic momentum that supports a tightening in the labour market towards the ever-shifting and unobservable level of "maximum sustainable employment" (MSE).

The Q1 labour market data showed a further welcome decline in unemployment. We expect the unemployment rate to move broadly sideways this year as employment growth keeps up with a recovering labour force participation rate. As we move into 2022 and the economy starts to normalise, we expect employment growth to pick up (particularly as tourism starts to recover), driving the unemployment rate close to 4% (figure 4).

Figure 4. Unemployment rate outlook


Source: Stats NZ, Macrobond, ANZ Research

MSE basically captures how many people are effectively employable at a given time. Where it lands in the longer run and over our forecast horizon will depend heavily on not only labour force participation, but also the persistence and degree of skills mis-match, which will itself depends on both education and migration settings. But the bottom line is that continued tightening in the labour market alongside solid wage growth is expected to maintain a robust household demand pulse going forward.

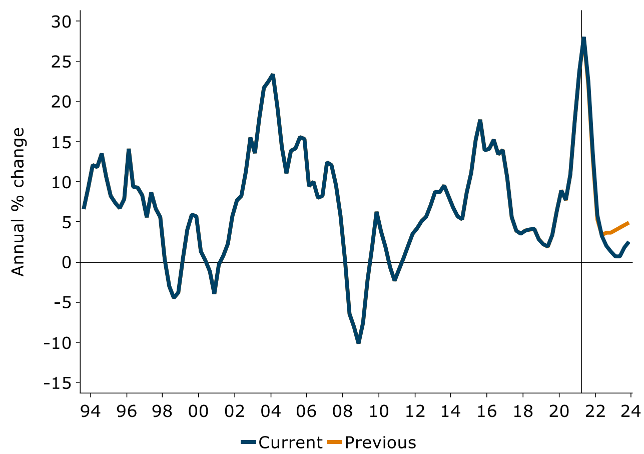
But the shock to demand has been much more complex than a lockdown and an income shock from the closed border. A significant shock to the composition of demand has also ensued. Households have not been able to spend their money on overseas holidays, and in most parts of the world (including NZ for a time) at fancy restaurants, cinemas and pubs. Globally, this has seen households spend a lot more on goods (putting pressure on the manufacturing sector) while services take a back seat.

Domestically, it appears that foregone international holiday spending has been finding its way into house renovations, spas, cars and boats. New Zealand now has a travel bubble with both Australia and the Cook Islands, though the former is looking a bit wobbly, given the rapidly deteriorating situation in Melbourne. But in the longer run, global and Kiwi demand for travel will at least partly recover. Helpfully, that implies a switch from goods production, where capacity is biting very hard, to services, where there is more slack.

### Housing market

Housing-induced momentum certainty goes a long way towards explaining the very strong recovery following the Great Lockdown (see Where are we?). But with credit and affordability constraints biting, interest rates looking like they have bottomed out, Government policies taking some heat out, and supply gradually caching up, the longer-run growth outlook for house prices isn't nearly as strong (figure 5). And the impact on broader economic momentum via both the wealth and confidence channels could be material.

Figure 5. House price outlook




Source: REINZ, Macrobond, ANZ Research

# Where we think we're going

With housing momentum already showing signs of fading, the risk that economic momentum follows suit isn't to be sniffed at. However, we think the housing market fundamentals are strong enough to put a floor under things (provided interest rates don't spike or incomes deteriorate), and the additional stimulus announced in Budget 2021 makes us a little more confident that underlying economic momentum will stay the course even if the housing market deteriorates a little faster than expected. Longer run, provided the housing supply-demand imbalance continues to be eroded as we expect, we think the housing market will be calmer. And as the OCR goes higher, we actually think house prices are likely to fall for a small time (just not enough to drive a negative annual change).

Housing demand is expected to exceed supply for a long while yet. Building activity is really struggling to grow any more, with no idle labour or materials to throw at it. From here, residential investment is expected to grow only as fast as the supply side of the equation (labour, capital/land, productivity) permits. Government policies can do a lot to help here (via freeing up land, importing builders, cutting red tape etc), but progress to date has been limited.

### Fiscal policy

Fiscal stimulus (alongside successful virus containment and monetary stimulus) has been an enormous driver of the recovery in demand to date. As fiscal stimulus reverberates across the economy, with a little more added at Budget 2021, the time to start thinking harder about the best way to rebuild fiscal buffers is fast approaching. After all, the Government's response has added more than $100 billion to the Treasury's forecast for net core Crown debt, and if that's not managed in a timely manner, the next crisis could be much harder for policy makers to respond to, especially given the monetary policy toolbox is severely depleted.

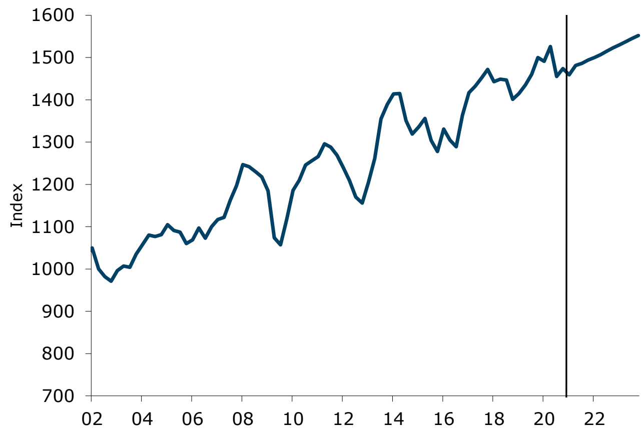
This need for consolidation drives where our longer-term expectations for fiscal settings sit. It can be argued that structurally lower interest rates suggest the debt ratio probably doesn't need to be as low as pre-crisis targets. But climate change and unfavourable population demographics (particularly if we tone down immigration) are serious medium-term fiscal challenges that we'll need fiscal capacity to address. Overall, the pace of fiscal consolidation is looking like it'll be quite gradual, with Budget 2021 showing the Government choosing to largely spend positive economic and fiscal surprises rather than bank them. It can't be questioned that there is a lot of need out there, severely exacerbated by New Zealand's unaffordable housing.

### Terms of trade

Globally, the fiscal policy response has also been significant. And with the global vaccination rollout well underway, stimulus will naturally turn from damage control to boosting the recovery (as it has in NZ). Combine that with forced savings and pent-up demand during lockdowns, and some economies (such as the US) are experiencing a very strong consumption pulse (and a lot of data volatility). Activity across our key trading partners should recover relatively quickly over the remainder of the year, and that's always good news for NZ's goods exports.

Healthy demand for New Zealand's goods exports is already reflected in our terms of trade (Figure 6). And that's despite all the cost-push pressure on import prices. In the long run, we're expecting the terms of trade will continue pushing gradually higher. That will boost national income and should encourage investment. However, the path for export sector activity probably won't be smooth. There's a lot of regulatory cost and uncertainty for the agri sector to absorb, and there's also still a lot of dairy debt out there where the strong milk price outlook provides an opportunity to deleverage (rather than scale up).

Figure 6. Terms of trade outlook




Source: Statistics NZ, ANZ Research

But perhaps the most significant potential source of volatility for some of our key export prices over the next year or so relates to the possible impact of supply disruptions on desired inventory levels, particularly when food security is a concern. It is possible that some of the recent strength in NZ (and global commodities) is not just reflective of strengthening underlying demand, but also a desire to rebuild inventories to higher levels. That suggests downside risk for prices once demand has normalised and inventories are deemed sufficiently high. But inventories are not transparent, so we've put it in the risks basket.

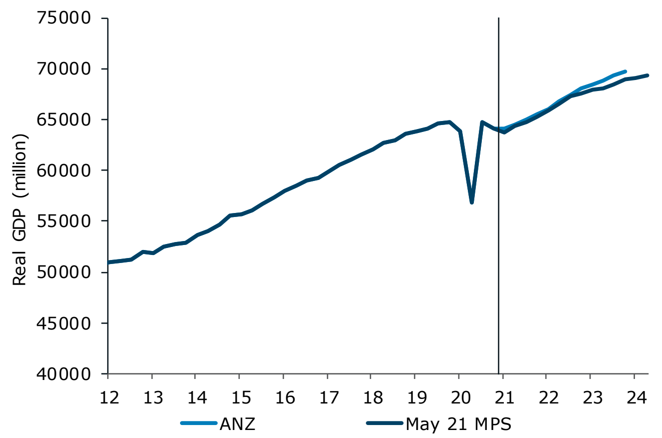
# Where we think we're going

### Adding it all together

Overall, aggregate demand is looking very strong across most pockets of the economy. The lack of international tourists is certainly being felt, but it has become hard to see at the headline level. Housing-induced momentum is slowing, but the additional fiscal stimulus gives us confidence that the economy will continue to improve and the labour market will continue to tighten. Over the longer run, we expect demand to be sustained by the tight labour market, robust income growth, and sustained improvement in economic confidence. And all that should allow for a tightening in monetary conditions. However, higher debt will likely need to be offset by structurally lower-than-otherwise interest rates, meaning we could see a shorter tightening cycle for the OCR than some expect.

In terms of our GDP forecast, we've only made cosmetic tweaks. Economic activity is expected to grow modestly over 2021, constrained by the closed border and capacity constraints (figure 7). 2022 is expected to see growth momentum accelerate as capacity lifts alongside gradually reopening borders and lifting business investment, and as the labour market continues to tighten. How this activity outlook translates into the inflation outlook very much depends on the path for potential GDP (ie the supply side).

Figure 7. GDP outlook (ANZ vs RBNZ)




Source: Statistics NZ, ANZ Research, RBNZ

## Inflation: Transitory, persistent, or permanent?

So what does it all mean for inflation?

As highlighted in Where are we?, capacity and inflation pressures have certainly been surprising on the upside of late. But can that go on forever?

As discussed, the shocks to both supply and demand will fade over coming years, leaving behind a legacy of higher debt, a lower neutral interest rate than otherwise, and possibly lower global productivity.

But the relative pace of normalisation of demand and supply will be a key determinant of how inflation evolves over the next few years. What's transitory vs persistent vs permanent?

Historically, when we've talked about transitory inflation we've meant a quarter or two of data where a policy change (such as changes in ACC levies) or perhaps a large change in the price of oil significantly adds to or subtracts from annual inflation until a year passes and it drops out of the annual calculation.

This crisis has certainly had an element of transitory inflation. Oil prices plummeted in the wake of closed borders and no travel – it was around a year ago when one infamous oil contract traded deeply negative as people were happy to pay to have oil taken away because there was nowhere to store it. Needless to say, the price of petrol plummeted and that suppressed annual headline CPI for a year. But after global oil production adjusted and demand partially recovered, the price of oil rebounded to around its 2019 average. A year on, as the historical weakness drops off the annual calculation and the rebound gets picked up, inflation will look stronger for a time. But this is just one relatively small part of what's going on – and a part that central banks and markets are well experienced at looking through.

So far so (relatively) normal. But the bulk of the supply and demand shock has gone well beyond the above definition of *transitory*. Rather, we'd classify the current situation as a *persistent* inflationary shock, which we define as having some element of inflation that's unlikely to last forever, but the shock (such as global shipping disruption and reduced labour mobility) is not limited to a quarter or two, and will therefore take longer to enter and exit the annual CPI calculation.

How long? It's looking like the global labour supply and productivity shocks could take up to two years to dissipate meaningfully (from when the pandemic started), and global supply chain and shipping bottlenecks will last at least until the end of this year. Meanwhile, the shock to the mix of demand will also likely remain until at least the end of the year. And then there's all that global fiscal stimulus, pent-up demand, and forced savings to be unleashed once restrictions on activity ease with the vaccine rollout. All of this speaks to a very strong near-term inflation pulse that should linger over 2021 and even into 2022.

But will *persistent* inflation turn into *permanent* inflation? For the medium-term outlook where the RBNZ is focused (ie 2-3 years out) inflation would need to be getting under the nails of every part of the economy via wages (you need a tight labour market for that) and general price-setting behaviour.

# Where we think we're going

Sustained rising inflation expectations are the key indicator to watch, because they can become self-fulfilling.

The RBNZ currently has a lot more power to increase rates than to cut further. So their least regrets approach is based on the conclusion that too-low inflation expectations are more of a problem than too-high ones. And indeed, the RBNZ will be cognisant of the risk that while both actual inflation and inflation expectations may lift on the back of the transitory and persistent elements of this shock, they may not hold up once both the supply and demand shocks have dissipated and deflationary dynamics begin to unfold.

And there will be some deflationary dynamics; the question is just whether they'll dominate. Current sky-high global shipping costs are not permanent, for example. Bottlenecks will be worked through and freight costs will eventually ease. In that regard, high transitory inflation in the very near term can actually represent a (transitory) downside risk to inflation later on as prices normalise again.

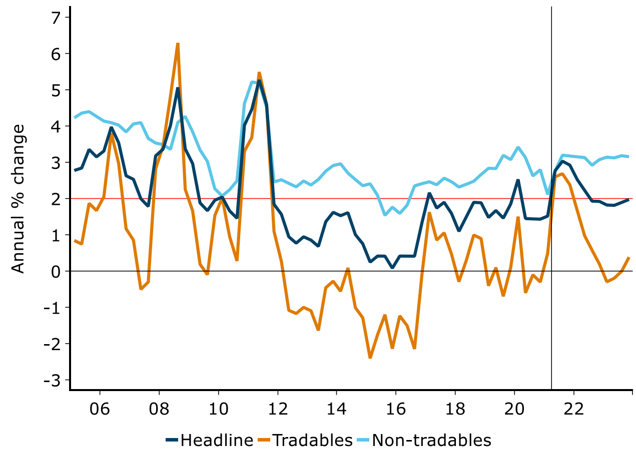
Conversely, heightened geopolitical (and therefore trade) tensions are possibly a more lasting positive inflationary risk. Indeed, globalisation and the opening up of China as the world's manufacturer is often referenced as being a key factor behind global deflationary pressures over the past 20 years. But is globalisation now going into reverse? Headlines about geopolitical tensions suggest it may be heading that way, but the data doesn't confirm it, as NZ trade with China continues to grow and NZ continues to forge ahead with more multi- and bi-lateral trade agreements.

Globally, it'll be worth keeping an eye on US trade flows as the economy recovers and supply chain bottlenecks are worked through. With US goods imports just 2.2% below their all-time high in Q4 2020 and around 1% above their 2019 average, this isn't looking like your typical cyclical downturn – particularity given these data are in the context of constrained supply and shipping disruption.

So for inflation, there is a very complicated mix of demand and supply pressures occurring both domestically and globally that still needs to be worked through. And most of it is pointing to a very strong near-term inflation impulse that'll be significantly more persistent than previously assumed.

We are forecasting headline inflation to peak at 3.0% in Q3 2021 (figure 8). This largely reflects the persistent factors we've been discussing feeding through into higher costs and prices in New Zealand over 2021, as well as a tighter labour market. For good measure, there is some transitory stuff in there too, with base effects as weak inflation in 2020 drops out of the annual calculation, and a large minimum wage rise in Q2 all helping the headline number earn a 3-handle.

Figure 8. Inflation outlook



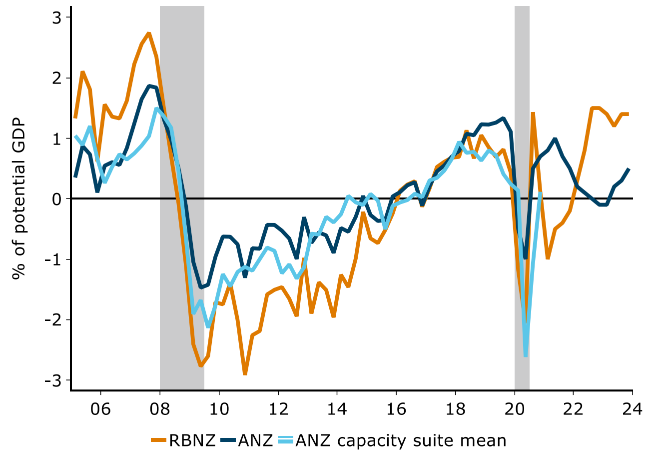

Source: Statistics NZ, Macrobond, ANZ Research

Looking beyond 2021, we expect inflation to drop a touch below 2% in late 2022 as the global supply side of the economy begins to recover. This largely reflects a drop in tradables inflation as some of the extreme global price rises (eg container costs) are unwound. We expect CPI inflation to settle at 2.0% from late 2023 once tradables prices stabilise, and non-tradables inflation continues at around 3% – a decent run rate relative to history, especially given annual tobacco excise increases will no longer add around 0.3%pts to annual non-tradable inflation from here on in.

This inflation profile reflects our judgement that the supply shock has been sufficient to see post-lockdown demand push the output gap into positive territory. But as the supply shock slowly dissipates, and the demand pulse stabilises, we expect to see capacity pressures ease and the output gap to trend lower towards zero by late 2022, before lifting as the labour market continues to tighten (figure 9). This is a significantly different profile to the RBNZ's May MPS assumption, who in our opinion are underestimating the current extent and persistence of the supply (potential GDP) shock – whole sectors of the economy are still severely hampered by COVID-related shocks.

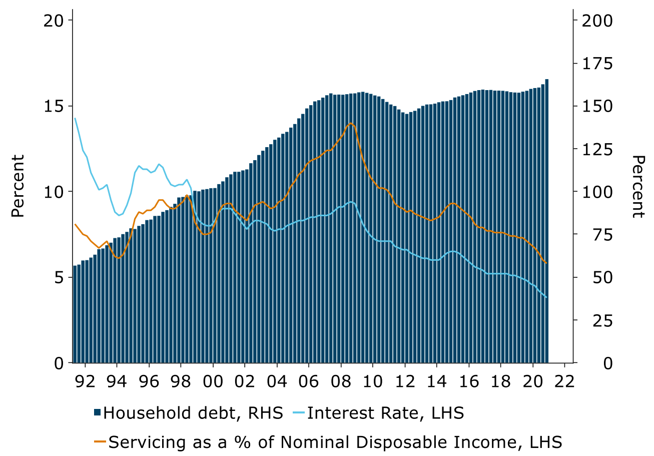
# Where we think we're going

Figure 9. Output gap




Source: Statistics NZ, RBNZ, Macrobond, ANZ Research

Figure 10. Household debt to income




Source: RBNZ, Macrobond, ANZ Research

The OCR track that is required to ensure the broader economy recovers to the point that inflation settles at 2% over the medium-term and the labour market tightens to its maximum sustainable level remains highly uncertain. While abating virus risks mean we (and the RBNZ) can start putting a little more weight on our central forecasts for activity, we are still a long way away from understanding the scale, persistence and shape of the *net* demand shock.

But what we can say, is that parts of the economy are booming, and with a touch more fiscal stimulus in the pipeline, a case can certainly be made that the "emergency" component of recent monetary stimulus could be unwound earlier rather than later. In fact, it's increasingly looking like the policy response is starting to cause volatility in output and prices, rather than stabilising them – and that could create problems later. In short: an increasing risk of a boom and bust. The least regrets approach is logical and defensible, but it doesn't rule out regrets.

One thing's for sure - when the time does come to tighten, the RBNZ will need to be careful not to be overly aggressive, given household debt levels (figure 10). And on top of this we've got tax payers (via higher Government debt), and property investors (following the removal in interest deductibility) a lot more sensitive to higher interest rates than they've ever been.

The longer-run monetary policy implication of this is a likely reduction in the neutral interest rate – something an aging population (of savers) has also slowly been supressing for decades (and will possibly do so a little more quickly with a slower net migration impulse). Indeed, once the OCR starts to lift (we're pencilling in August 2022), we think it'll be touch and go whether the neutral OCR still has a 2-handle (we think it's currently around 2%).

Unfortunately, the later the RBNZ starts hiking the greater the risk that there won't be time for caution, if inflation expectations are threatening to become entrenched too high. But there's a lot of water to flow under the bridge before that scenario becomes a threat.

# Where we might end up

## Summary

A year on from the Great Lockdown, virus risks are abating and data volatility is beginning to settle. That means we can start putting a little more weight on our central forecasts for activity. But there're a whole bunch of important inputs such as the output gap, inflation dynamics (including expectations), and the level of full employment that are difficult enough to gauge in real time, let alone forecast. Clarity on these things will be extremely important for monetary policy settings as we approach the tightening cycle. This chapter presents two scenarios that could either see the RBNZ tighten faster, or not at all, over our forecast horizon.

## Upside and downside

We produce two scenarios that may not involve wildly different activity outcomes in the near term, but require a very different policy response because they include varied supply-side assumptions.

### Scenario 1: OCR low (or lower) for longer

Very strong near-term inflation proves to be less persistent than assumed. Headline inflation materially weakens in late 2022 and inflation expectations start to slip as global manufacturing and shipping capacity rebounds sharply (ie supply-chain bottlenecks are worked though, shipping containers become more abundant, an inventory overhang develops, and labour mobility and productivity recover). Meanwhile, the lockdown-induced pivot towards online shopping globally has also increased competition in retail more than assumed, suppressing prices further.

All this occurs as the global great substitution from holidays to things starts to reverse, alleviating price pressure on goods-producing industries. Commodity prices slip as demand softens, and New Zealand's key export prices are hit with a double whammy after food-importing economies (such as China) sufficiently rebuild inventories and reduce their buying.

Meanwhile, the local housing pulse weakens more than expected. Household and business confidence stagnates at a sub-par level, preventing the tightening in the overall labour market required to achieve sustainable growth in household incomes.

In short, the supply side of the global economy recovers a lot, while demand struggles to hold up as the less-sustainable drivers start to fade.

We've thrown the kitchen sink into this scenario, but even a subset of these outcomes could add up to a need for more stimulus for longer to achieve inflation and employment objectives.

### Scenario 2: OCR up earlier and/or by more

Improvement in the labour market is faster and stronger than we assume. This is a must-have condition in our view to warrant an earlier-than-expected tightening. In this scenario, skills mismatching resolves more quickly, allowing for faster employment growth. This, combined with much stronger wage growth, adds to the domestic demand pulse. Business and consumer optimism is sustained at historically high levels.

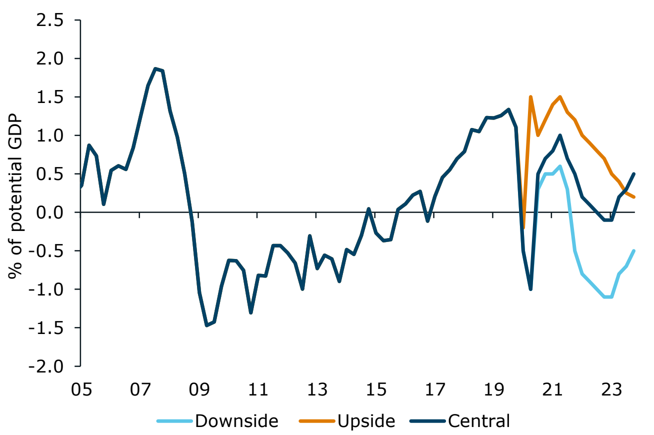
High near-term inflation pushes inflation expectations substantially and sustainably higher, and inflation gets into all of the cracks of the economy (including wages). This helps the NZ economy grow and inflates some of the debt away, meaning interest rates can go higher in the longer run (the neutral OCR lifts to 2.5%, from an assumed 2.0% currently).

In other words, demand is stronger through our entire forecast horizon, and continues to outstrip growth in supply. In this upside scenario the output gap and inflation actually converge to similar levels as in our central scenario by the end of the forecast. This is because the RBNZ can easily raise interest rates to cool an overheated economy. This in itself, reflects the lopsided balance of risks – with monetary policy close to its limits, further softening in the economy would be a much more difficult problem for the RBNZ to manage, which is the justification for its "least regrets" policy of letting things run a bit hot for a while.

## Key unknowns

**The output gap:** The output gap, being unobservable, is notoriously difficult to measure, particularly given disruptions to the supply side of the economy as well as demand.

Figure 1. Output gap



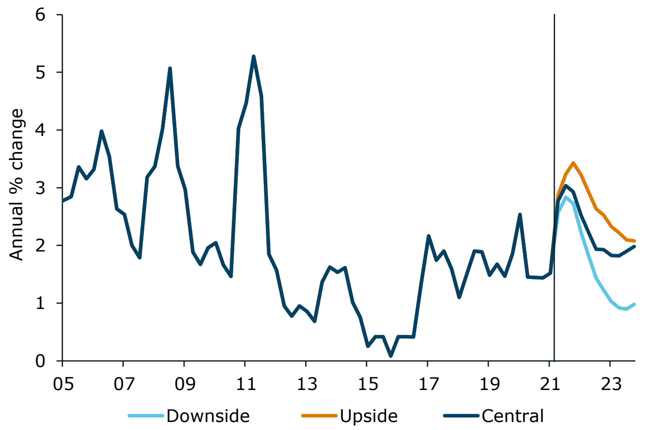

Source: ANZ Research

Statistical filtering and monitoring of various activity and labour market indicators is required to take a stab at whether the economy is running hot or cold relative to its sustainable rate, and estimates of the current starting point can differ widely, let alone forecasts. We currently believe the output gap is positive in aggregate – that the economy is trying to grow faster than it can. The Reserve Bank, in contrast, estimates that the output gap is currently about zero, though certainly with pockets of resource stress, such as the construction sector.

Perhaps the largest challenge for estimating the output gap recently is the underlying GDP data itself. Lockdown led to a significant fall in production as entire parts of the economy were shut down (a significant supply shock). But underlying demand appears to have held up pretty well through that – in part because the wage subsidy essentially put a lot of this lost production on the Government's balance sheet, meaning incomes didn't fall nearly as sharply. Production GDP doesn't capture direct Government transfers to households in the same way income GDP does, but because income GDP is released annually and with a significant lag, we can't use it as a different lens on what actually occurred at this time. We think it's possible that the sharp deterioration of the output gap in mid-2020 wouldn't look nearly as bad based on an income measure of GDP. In fact, our central estimate includes some positive judgement here.

**Inflation and inflation expectations:** Inflation is everywhere at the moment. And there are big questions around how much is transitory vs persistent vs permanent. We think it's probably a mix of all three. But it may take a couple of years before we (and the RBNZ) know what state of the inflation world we are actually in. Central banks certainly have the tools to stamp inflation out, but from this starting point, less of an ability to give it a rev up if required.

Figure 2. CPI inflation




Source: Statistics NZ, ANZ Research

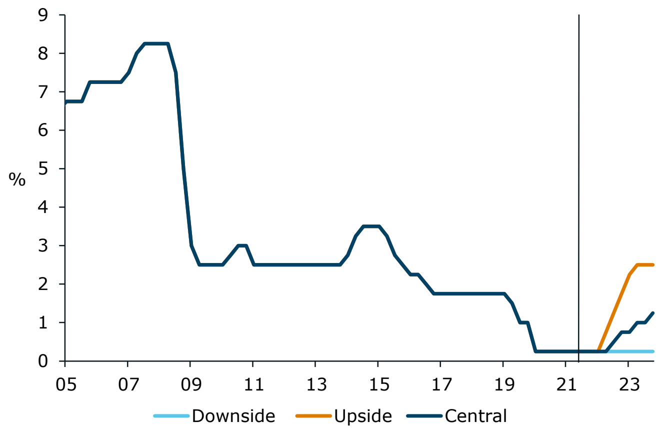
**Labour market:** NZ labour market data can be volatile, but consecutive better-than expected reads suggest we're right to take a positive signal from it. We think labour market statistics (the broad suite of indicators that contribute the RBNZ's judgements around maximum sustainable employment) may end up having the most sway in terms of when the RBNZ decides to tighten policy. Labour market tightness and wage growth will need to be evident, sustained, and widespread before the RBNZ deems the economy able to handle higher interest rates.

Figure 3. Unemployment rate


Source: Statistics NZ, ANZ Research

**Official Cash Rate:** Both cyclical and structural forces will determine the pace and extent of OCR tightening. As mentioned, we think it's likely that the neutral interest rate will continue to drift lower, reducing both the ability and the need for the RBNZ to hike.

Figure 4. Official Cash Rate




Source: RBNZ, ANZ Research

## In sum

The above scenarios capture just a few of the risks that could see things turn out differently. Another virus outbreak remains a significant risk until vaccination rates are much higher, for example. And other key risks haven't gone away just because the economy is going better. For example, all this debt-fuelled global stimulus and moon-bound asset prices suggest elevated financial market risks will be with us for a long, long while yet.

# Are we there yet?

## Summary

Both interest rates and the NZD are at similar levels to those prevailing at the end of February, when our last *Quarterly* was published. However, over the past three months there has been considerable volatility as markets have gone off on meandering journeys, testing their assumptions about the economic outlook and the timing of rate hikes and the like. With OCR cuts looking much less likely, there isn't much scope for short end interest rate volatility. But with the NZ market pricing in hikes while offshore markets price in policy stability by other central banks, there is certainly scope for long-end interest rate and FX volatility.

## Snapshots hide the journey

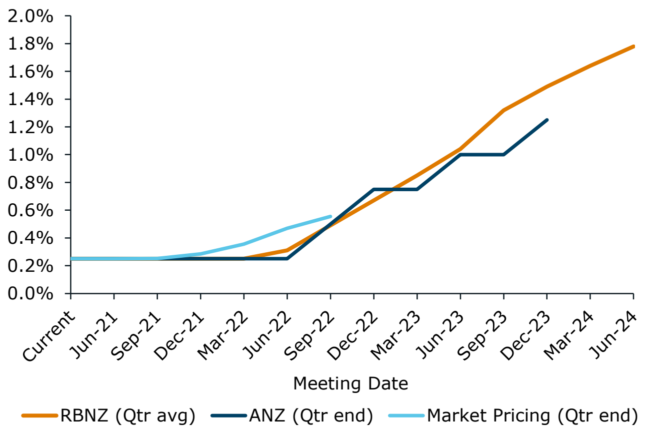
Quickly comparing where 3-4 bellwether markets levels are today compared to where they were on 26 February, one could be forgiven for thinking that not much has changed. Back then, the NZD was around 0.7230; at the moment it's around 0.7270. In the interest rate space, back then markets were pricing in around 23bps of OCR hikes by May 2022 and the 10-year bond was at 1.89%. Today, those two markets are at very similar levels, at 22bps and around 1.80% respectively. But these two snapshots in time mask a period of considerable volatility that has seen the NZD reach a high of 0.7460, then a fall to a low of 0.6950, and a recovery back to current levels. The journey taken by the 10-year bond is similarly wild – its yield hit a high of 2.01% before falling all the way back to 1.51%, and eventually rising again to where it is now.

So, what happened? Broadly speaking, markets have gone on a rollercoaster ride of expectations. Locally, the high point for markets was fuelled by fears that the RBNZ might need to hike much sooner after its remit was amended to take into account of house prices, which were spiralling out of control. The low point was an equally extreme interpretation that the RBNZ and other central banks would remain on hold for a considerable period, looking through inflation that was judged to be purely transitory.

## Navigating the extremes ahead

Looking ahead, we expect markets to remain volatile as consensus opinion lurches from one theme to the next. At the moment, forecasters' views are bounded by two fairly extreme interpretations. At one end of the spectrum there are those who believe that monetary policy easing has fuelled a surge in money supply that has reignited inflation, which will need to be headed off by dramatic policy tightening. That view of the world implies a return to much higher interest rates. At the other end of the spectrum we have those who believe that inflation is nothing but a transitory supply-side shock, and/or that the degree of debt out there is such that many economies simply can't tolerate higher interest rates. That view of the world would be consistent with a much longer period of low interest rates (and potentially growing financial imbalances). Our OCR forecasts assume a scenario between these two extremes, with a track that is reasonably similar to the RBNZ's. However, market expectations are more advanced than both the RBNZ and ourselves (Figure 1).

Figure 1. RBNZ OCR projections, ANZ's OCR forecasts and market expectations for the OCR (as at 31 May)




Source: RBNZ, Bloomberg, ANZ Research

## Offsets to limit short-end volatility

Despite the difference between what's priced in and our forecasts, we don't expect significant short-end interest rate volatility to emerge between now and the first rate hike. This part of the curve is anchored by the OCR, which we expect to remain at 0.25% till next year. There is scope for the market to debate the timing of the first hike, but we find it difficult to envisage a credible scenario (in the absence of another lockdown) where the OCR needs to go lower. That mitigates the risk of significant downside. There are also other checks and balances which will dampen volatility for 2 to 3-year interest rates. These include the tendency for markets to assume that an earlier start to the tightening cycle will reduce the likely number of hikes that are needed.

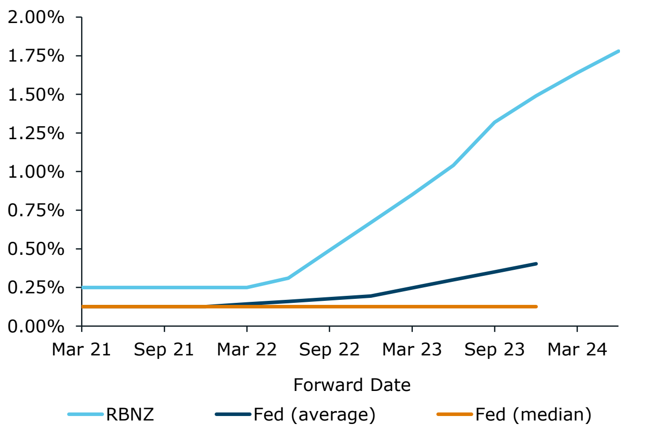
## Long-end interest rates more vulnerable

However, longer-term interest rates tend to be driven by global factors, and will be more vulnerable to shocks. One clear source of tension is the divergence between the RBNZ's OCR projections and the US Federal Reserve's "dot plot" projections (figure 2).

## Are we there yet?

Our forecasts assume a gradual rise in US 10-year bond yields that will in turn put upward pressure on local long-end interest rates. However, this is sensitive to how Fed policy evolves. At the moment, markets have taken a relaxed view of how policy will evolve. The Fed has said that it will allow inflation to run above target for a considerable period of time before it tightens policy – consistent with its average inflation targeting approach. While that's a soothing near-term message (it's a commitment to keep the Fed Funds rate lower for longer), it's less bond-friendly long term. That's because it speaks to greater determination by the Fed to achieve its employment and inflation goals, which in turn speaks to a stronger (nominal) economy, and logically, bond yields above the Fed's 2% inflation target.

Figure 2. RBNZ OCR Projections vs. US Federal Reserve Dot Plot Projections




Source: RBNZ, Bloomberg, ANZ Research

We expect this tension between easy policy in the short term versus more sustainability in the long term to drive significant US interest rate volatility. This volatility, in turn, has scope to drive volatility in longer-term interest rates and the currency here.

Differences in policy expectations and progress toward policy normalisation (eg while the Fed has not yet started tapering its asset purchases, the RBNZ has) do point to some global volatility being absorbed via spread compression (which also speaks to FX convergence). However, if we do see markets move to price in earlier Fed tapering and hikes, the immediate implication will be higher long-term interest rates here.

It is worth noting too that New Zealand long-end rates and NZD/USD are both higher than before the COVID crisis hit. Something about that doesn't sit naturally with us – it doesn't make sense that the crisis has made it possible for the economy to sustain tighter long-term financial conditions. It's also a warning not to extrapolate trends too far.

### Convergence the main risk for the NZD

Returning to FX markets, while our forecasts call for a gradual appreciation in the NZD, the risks are skewed toward a more muted NZD lift if other central banks follow the RBNZ's lead, and markets move toward expecting policy rate convergence. At the moment, the RBNZ's 1.78% projection (while highly conditional) for the OCR by mid-2024 is a long way from the Fed's late 2023 "dot-plot" projection of 0.125% (figure 2). We don't see a lot of scope for this spread to widen (it's difficult to envisage the RBNZ going it alone) but we do see scope for it to narrow, and if it does, that could take some shine off the NZD.

Table 1: Forecasts (end of quarter)

| FX Rates | Jun-21 | Sep-21 | Dec-21 | Mar-22 | Jun-22 | Sep-22 | Dec-22 |
|---|---|---|---|---|---|---|---|
| NZD/USD | 0.75 | 0.76 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 |
| NZD/AUD | 0.95 | 0.95 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| NZD/EUR | 0.61 | 0.61 | 0.61 | 0.61 | 0.60 | 0.60 | 0.60 |
| NZD/JPY | 82.5 | 84.4 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 |
| NZD/GBP | 0.53 | 0.53 | 0.53 | 0.52 | 0.51 | 0.51 | 0.51 |
| NZD/CNY | 4.82 | 4.83 | 4.85 | 4.81 | 4.77 | 4.76 | 4.74 |
| NZ$ TWI | 77.7 | 78.1 | 78.3 | 78.0 | 77.6 | 77.5 | 77.3 |
| **Interest Rates** | **Jun-21** | **Sep-21** | **Dec-21** | **Mar-22** | **Jun-22** | **Sep-22** | **Dec-22** |
| NZ OCR | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.50 | 0.75 |
| NZ 90 day bill | 0.37 | 0.40 | 0.40 | 0.40 | 0.57 | 0.82 | 0.90 |
| NZ 2-yr swap | 0.56 | 0.61 | 0.66 | 0.68 | 0.86 | 1.08 | 1.15 |
| NZ 10-yr bond | 2.05 | 2.15 | 2.40 | 2.50 | 2.75 | 2.85 | 2.85 |

Source: Bloomberg, ANZ Research

# Key economic forecasts

| Calendar Years | 2017 | 2018 | 2019 | 2020 | 2021(f) | 2022(f) | 2023(f) |
|---|---|---|---|---|---|---|---|
| NZ Economy (annual average % change) | | | | | | | |
| Real GDP (production) | 3.5 | 3.4 | 2.4 | -3.0 | 3.8 | 3.5 | 3.1 |
| Private Consumption | 5.6 | 4.4 | 3.6 | -1.8 | 5.8 | 2.3 | 3.1 |
| Public Consumption | 3.4 | 3.4 | 5.4 | 5.8 | 1.9 | -0.2 | 2.3 |
| Residential investment | -1.5 | 1.2 | 5.0 | -4.4 | 14.3 | 3.4 | 4.0 |
| Other investment | 7.3 | 9.7 | 2.6 | -8.5 | 1.7 | 4.2 | 7.3 |
| Stockbuilding[1] | 0.2 | 0.4 | -0.7 | -0.7 | 0.8 | 0.0 | 0.0 |
| Gross National Expenditure | 5.3 | 5.3 | 2.9 | -2.5 | 6.0 | 2.5 | 3.8 |
| Total Exports | 2.5 | 2.8 | 2.3 | -12.1 | 2.7 | 11.9 | 5.6 |
| Total Imports | 7.3 | 6.5 | 2.2 | -16.3 | 15.4 | 12.3 | 6.9 |
| Employment (annual %) | 3.7 | 2.2 | 1.2 | 0.8 | 1.3 | 2.6 | 1.8 |
| Unemployment Rate (sa; Dec qtr) | 4.5 | 4.3 | 4.1 | 4.9 | 4.7 | 4.0 | 3.9 |
| Labour Cost Index (annual %) | 1.9 | 2.0 | 2.4 | 1.5 | 2.2 | 2.0 | 2.0 |
| Terms of trade (OTI basis; annual %) | 7.9 | -4.8 | 7.1 | -1.7 | 1.4 | 1.9 | 1.9 |
| Prices (annual % change) | | | | | | | |
| CPI Inflation | 1.6 | 1.9 | 1.9 | 1.4 | 2.9 | 1.9 | 2.0 |
| Non-tradable Inflation | 2.5 | 2.7 | 3.1 | 2.8 | 3.2 | 3.1 | 3.2 |
| Tradable Inflation | 0.5 | 0.9 | 0.1 | -0.3 | 2.4 | 0.2 | 0.4 |
| REINZ House Price Index | 3.5 | 3.2 | 5.3 | 15.7 | 16.2 | 1.5 | 2.3 |
| NZ Financial Markets (end of December quarter) | | | | | | | |
| NZD/USD | 0.71 | 0.67 | 0.67 | 0.72 | 0.77 | 0.77 | -- |
| NZD/AUD | 0.91 | 0.95 | 0.96 | 0.94 | 0.94 | 0.94 | -- |
| NZD/EUR | 0.59 | 0.59 | 0.60 | 0.59 | 0.61 | 0.60 | -- |
| NZD/JPY | 79.9 | 73.8 | 73.1 | 74.6 | 86.2 | 86.2 | -- |
| NZD/GBP | 0.53 | 0.53 | 0.51 | 0.53 | 0.53 | 0.51 | -- |
| NZD/CNY | 4.62 | 4.62 | 4.69 | 4.74 | 4.85 | 4.74 | -- |
| NZ$ TWI | 74.4 | 73.4 | 73.7 | 75.2 | 78.3 | 77.3 | -- |
| Official Cash Rate | 1.75 | 1.75 | 1.00 | 0.25 | 0.25 | 0.75 | 1.25 |
| 90-day bank bill rate | 1.88 | 1.97 | 1.29 | 0.27 | 0.40 | 0.90 | 1.40 |
| 2-year swap rate | 2.21 | 1.97 | 1.26 | 0.28 | 0.66 | 1.15 | 1.68 |
| 10-year government bond rate | 2.72 | 2.37 | 1.65 | 0.99 | 2.40 | 2.85 | 3.50 |

[1] Percentage point contribution to growth

Forecasts finalised 1 June 2021

Source: Statistics NZ, REINZ, Bloomberg, Treasury, ANZ Research

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