

# NZ Insight: Endemic COVID-19 and labour supply

17 December 2021



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*With many thanks to  
**Saeyavan Sitsabesan** for his  
work on this topic during his time  
in ANZ Research*

## Endemic COVID-19 and labour supply

### Summary

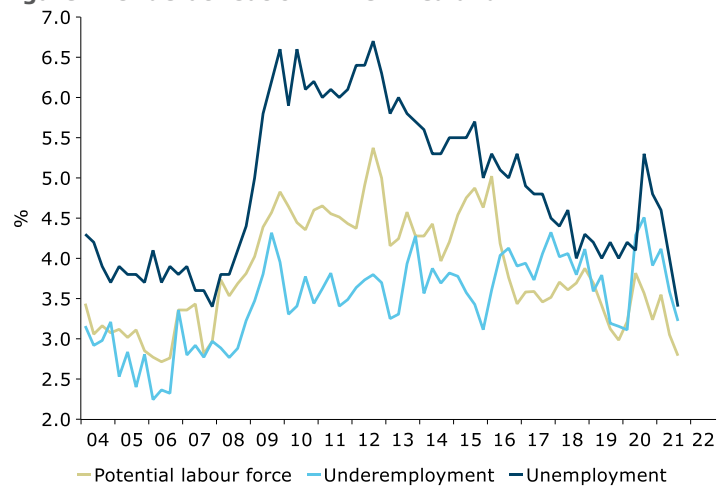
- The New Zealand economy has weathered the COVID-19 shock with aplomb, and the labour market is as tight as it's ever been. But as we move into a world of endemic COVID, the implications for labour supply are important – especially given how older workers have driven rising participation.
- Countries that have experienced ongoing community spread of COVID-19 have seen labour force participation drop, and not recover. For some workers who are older or taking care of vulnerable family members, the virus risks aren't worth it.
- Given the cyclical strength in New Zealand's labour market, and our high vaccination rate, it's not clear what the net effect of endemic COVID will be on labour supply. We explore a few scenarios, and their implications for unemployment. What is clear is that as long as overall demand in the economy holds up, the labour market will remain tight, and COVID will continue to be an inflationary shock – something of which the RBNZ is well aware.
- But the risks are not one-sided, and the possibility of a negative demand shock, spurred by falling consumer and business confidence, a sharp decline in house prices, or global developments, means the RBNZ will have to be on their toes.

### Introduction

There's no question that current labour market conditions are extremely tight. In fact, they're as tight as we've ever seen in the official data, which goes back to 1986. That's clear when we look at the Q3 labour market figures: unemployment hit a joint-record low of 3.4%, well below pretty much every forecaster's expectations. With the economy adding an impressive 54,000 jobs (up 2.0% q/q) and a record-high participation rate, it was a very strong print.

Indicators of labour market tightness are red hot – and many have been setting [back-to-back records](#). Underemployment, which captures part-time workers who would like to work more hours, has dropped back pretty close to pre-pandemic levels – which were already very low compared with the post-GFC experience (figure 1). In short, an unusually high number of people can currently work as much as they want to.

**Figure 1. Underutilisation in New Zealand**



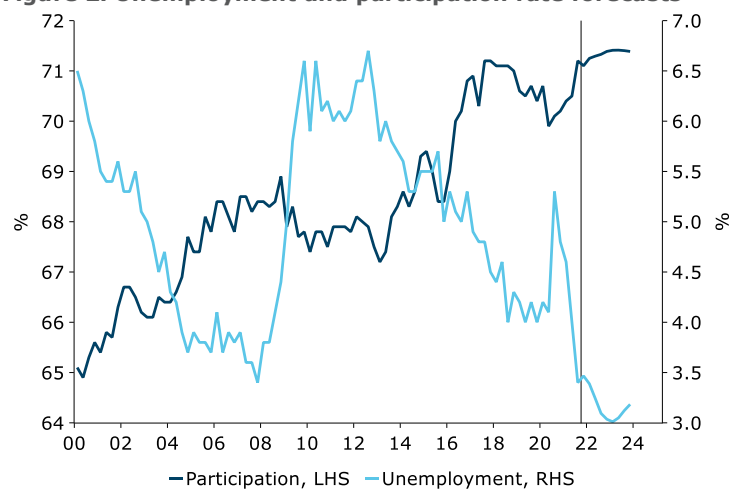
Source: Stats NZ, Macrobond, ANZ Research

It's clear that the balance of power in the labour market has shifted towards workers. Firms are becoming increasingly concerned about a 'great resignation' that could see them lose workers *en masse*, with expectations of worker turnover in the Quarterly Survey of Business Opinion the highest they've been in data stretching back to the 1970s.

With workers in hot demand, and supply still curtailed by the closed border, it's hard to see the labour market not tightening even further heading into 2022. We're currently forecasting that unemployment will fall to 3.0%, and that's assuming that labour force participation holds up around current record levels (figure 2). Should participation drop (eg due to concerns about COVID), then we could see the pool of potential job seekers not just grow insufficiently to keep up with demand, but outright shrink. Such a reduction in labour supply could inject even more capacity pressure into this already highly constrained economy.

The risks aren't one-sided, of course – we've talked a lot about downside risks to demand over the year ahead. But in this paper, we take the demand side of things as given and focus on the supply side of the equation.

**Figure 2. Unemployment and participation rate forecasts**



Source: Stats NZ, Macrobond, ANZ Research

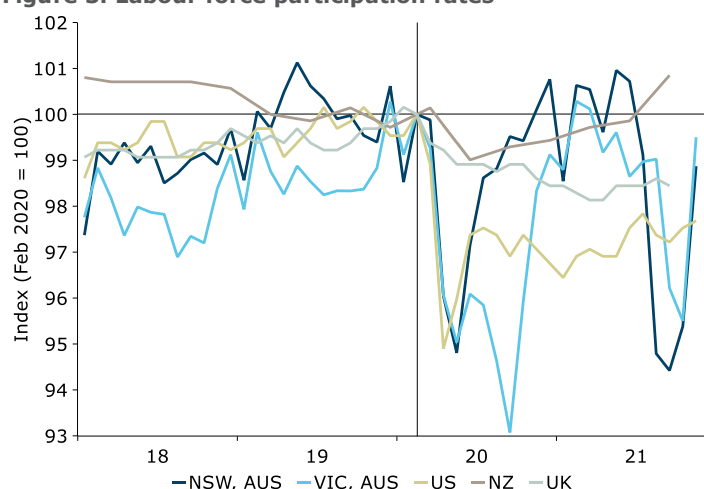
## The overseas experience

With the shift to the Covid Protection Framework (traffic light system), we've moved to a new stage in the pandemic response where we learn to live with endemic COVID. But how will the labour market respond to this? It's hard to know – but looking to the overseas experience offers some potential hints.

The spread of COVID-19 and its variants throughout the world has resulted in lower labour force participation in many countries. Looking at the US and Australia is a good place to start. The US has been one of the countries hardest hit by the pandemic, with total COVID deaths reaching a grim milestone of 800k, and widespread community transmission. By comparison, like New Zealand, the Australian states of Victoria and New South Wales were successful in eliminating the virus from the community in 2020.

The labour force participation rate in both Australian states recovered rapidly to pre-pandemic levels once restrictions eased and people could go about their business without the threat of contracting COVID. In contrast, the US participation rate has remained stubbornly below pre-pandemic levels. New Zealand's labour force participation rate took the smallest hit and is the only one to be currently higher than pre-COVID levels. Not coincidentally, the picture is very similar in terms of employment.

**Figure 3. Labour force participation rates**

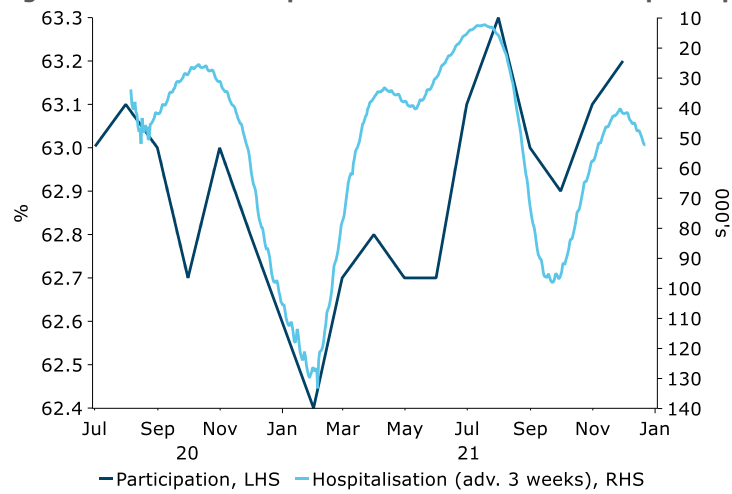


Source: ABS, Stats NZ, BLS, ONS, Macrobond, ANZ Research

So, why haven't labour markets with COVID-19 in the community recovered? A simple but compelling argument is that for many people, the risks associated with the virus make working just not worth it – whether you're an older worker, have young children, or have other health complications that make you more vulnerable to the virus. Older people nearer retirement are also much more likely to be able to get by without the income.

Looking at the participation rate in the US versus hospitalisations, it's clear that a spike in hospitalisations is correlated with a subsequent drop in participation. Not only might COVID act as a deterrent for potential job seekers; it can literally take people out of the labour force through illness and hospitalisation.

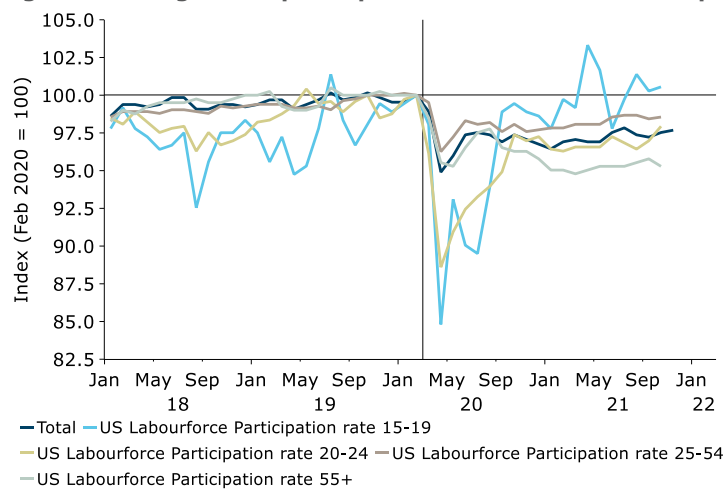
**Figure 4. US COVID-hospitalisations and labour force participation**



Source: BLS, Our World in Data, Macrobond, ANZ Research

In the US, there was initially a big fall in the participation rate of under 25s. That makes sense, since young people tend to work in industries that were most impacted by lockdowns and social distancing requirements (hospitality and retail). But despite participation for under 20s actually now being back to pre-pandemic levels, the overall participation rate is still well below, and that's mainly been driven by older workers, who have left the workforce and just not come back (figure 5).

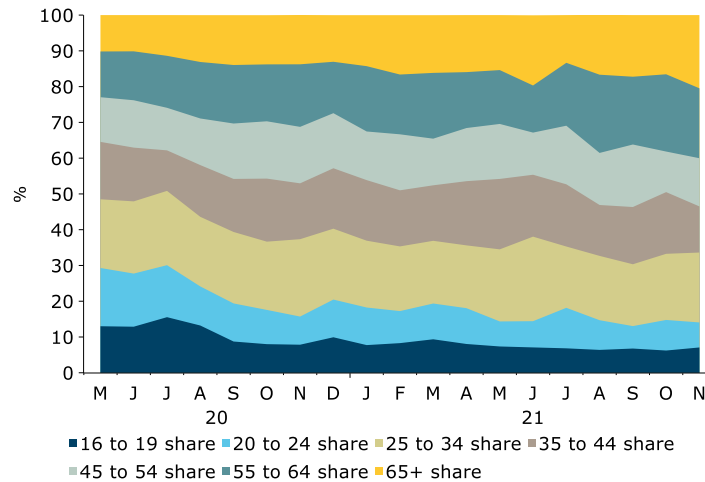
**Figure 5. Change in US participation since the start of the pandemic**



Source: BLS, Macrobond, ANZ Research

Given that older workers are more vulnerable to COVID, and generally more financially secure, that makes sense. Data collected by US Coronavirus Job Retention Scheme highlights that those under 34 initially constituted 48.5% of those driven out of the workforce by the pandemic. This has since declined to 33.2%. 38.2% of these discouraged workers are now aged over 55, up from 22.95% initially (figure 6). Even countries who have seen a full bounce-back in their overall labour force participation rate have tended to see a decline in participation amongst older workers.

**Figure 6. Age distribution of people in the US who didn't look for work due to COVID**



Source: BLS, Macrobond, ANZ Research

Of course it's one thing to prefer not to work if you're scared of catching COVID, but it's quite another to be able to afford that luxury. Policy decisions have a huge impact here. In both the US and Australia, a more generous unemployment benefit was introduced, in anticipation of a persistent big lift in unemployment that fortunately never eventuated. By changing incentives, this could have impacted labour supply.

This scheme is now finished in both countries but the US has found that participation has not bounced back, suggesting the direct COVID effect is the dominant factor. Research conducted by various outfits, including NBER<sup>1</sup> and the Federal Reserve Bank of San Francisco<sup>2</sup>, confirm that the enhanced unemployment benefits were unlikely to have adversely impacted employment.

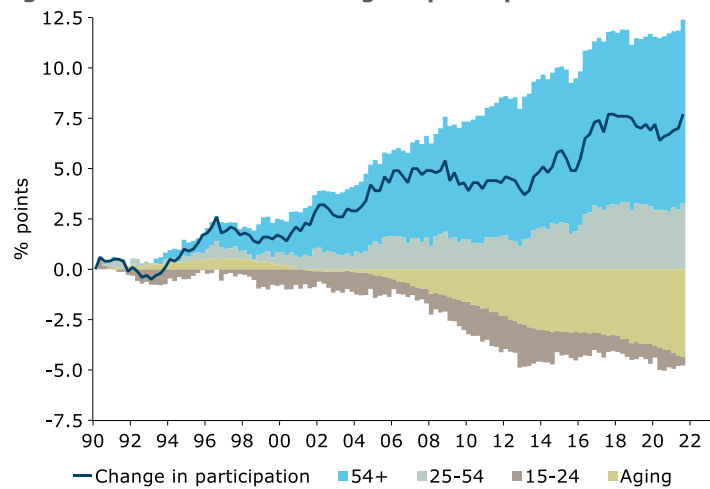
### New Zealand's aging workforce

New Zealand has a very high labour force participation rate compared to other advanced economies, currently sitting at 71.2%, versus 66.1% in Australia and 61.8% in the US, but it was also unusually high pre-COVID as well. This high participation rate has been driven by increased female participation, as well as older workers remaining in the labour force for longer. The latter has more than offset the fact that a larger share of the working-age population is older now, which ordinarily would reduce participation (figure 7). Given the overseas experience with COVID and the participation of older workers, there's clearly a real possibility that we could see a marked drop in the participation of the 55+ age group as COVID becomes endemic in New Zealand. That could see overall participation (and therefore labour supply) deteriorate as the population aging effect starts to dominate.

<sup>1</sup> Iona Marinescu, Daphne Skandalis, and Daniel Zhao, "The impact of federal pandemic unemployment compensation on job search and vacancy creation," National Bureau of Economic Research Working Paper 28567, March 2021

<sup>2</sup> Nicolas Petrosky-Nadeau and Robert G. Valletta, "Did the \$600 unemployment supplement discourage work?" Federal Reserve Bank of San Francisco, September 21, 2020

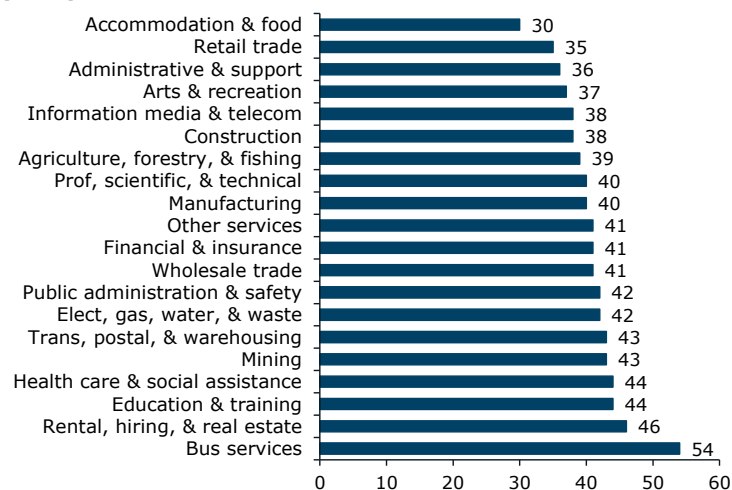
**Figure 7. Contribution to change in participation since 1990<sup>3</sup>**



Source: Stats NZ, Macrobond, ANZ Research

This shock to labour supply won't hit industries evenly. Statistics NZ data from 2018 shows that bus drivers are likely to be one pressure point, along with real estate, education, health care, mining and truck driving. Least affected are likely to be retail trade and hospitality. But offsetting the simple age calculation is the fact that your average truck driver comes into contact with far fewer people in their job than someone in hospitality, so the perceived (and actual) risk is likely to be very different.

**Figure 8. Average age of employees in New Zealand in 2018, by industry (in years)**



Source: Stats NZ, ANZ Research

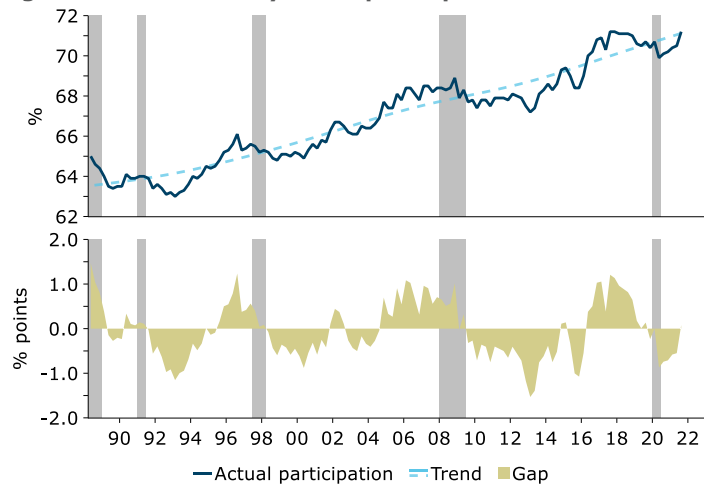
Another factor to consider is the cyclical nature of labour supply. When the economy is running hot, high wages (and possibly rising living costs) encourage people to enter the labour force – and the participation rate runs above trend (figure 9). The opposite is true during economic downturns (eg the GFC).

Underlying our central forecast (back in figure 2) is the assumption that the cyclical strength in participation will outweigh the impacts of population aging and endemic COVID. Firms have been pretty successful at luring inactive people into the labour force in recent quarters. And with high inflation **rapidly eroding real wages**, some people may need to take on part-time jobs just to make ends meet. A decline in participation caused by

<sup>3</sup> This decomposition follows the methodology outlined in this [RBNZ Note](#).

endemic COVID and/or population aging is entirely possible, but we could also see the cyclical strength in the labour market pulling even more workers into the labour force. It's not possible to know for sure which of these forces will end up winning over the next few years, but from a starting point of a record high, the risks have got to be skewed downward.

**Figure 9. Trends and cycles in participation**



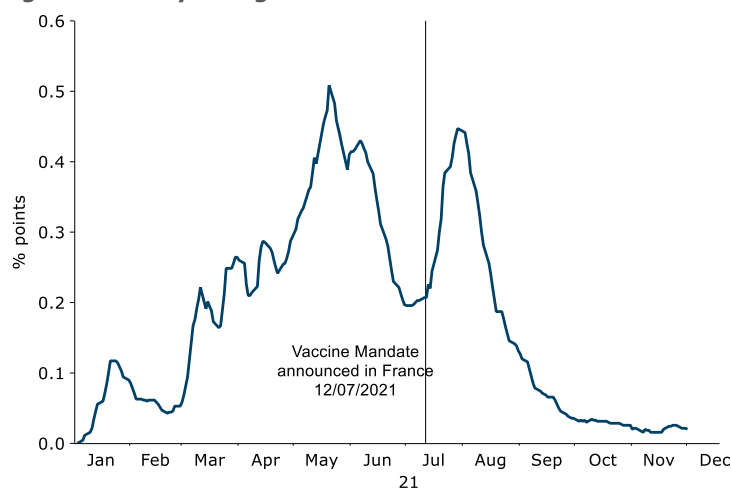
Source: Stats NZ, Macrobond, ANZ Research

## High vaccination rates

Another potential mitigating factor that could reduce the participation effect of COVID is that our vaccination rate is already very high – and the vaccine mandate has the potential to push it further.

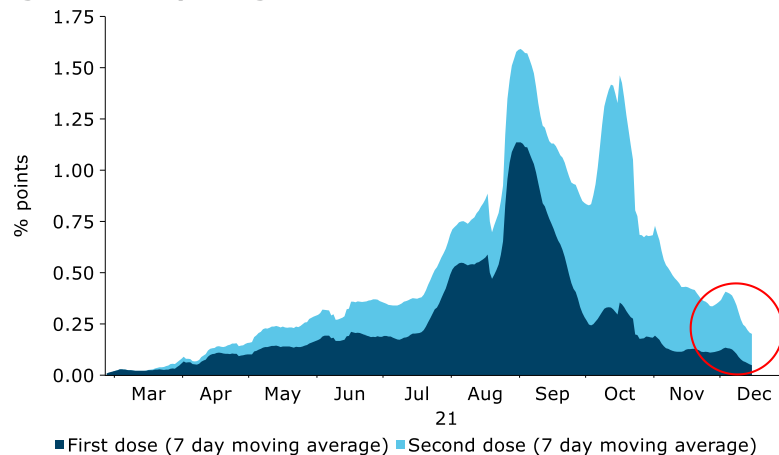
New Zealand's vaccine mandate is consumption-based, with limitations for consumers in higher-risk regions. A similar policy was implemented in France, requiring a vaccine pass to enter places such as restaurants, shopping centres and other places of consumer significance. Following the announcement on 12 July by the French President, vaccinations surged – a marked reversal of previous slowing (figure 10). New Zealand has seen a small uptick in vaccinations in the wake of the vaccine mandate – although given our already-high vaccination rate, one wouldn't expect an impact of similar magnitude to that seen in France.

**Figure 10. Daily change in first dose vaccination rates for France**



Source: Our World in Data, Macrobond, ANZ Research

**Figure 11. Daily change in first dose vaccination rates for New Zealand**



Source: Our World in Data, Macrobond, ANZ Research

Our vaccination rate, possibly boosted a touch by the vaccine mandate, could mean that older people are less likely to leave the labour force, since people are more protected and it's harder for the virus to spread in a highly vaccinated population. That said, the ongoing mutations that we've seen in COVID (with the latest Omicron variant causing both market concern and increasing activity restrictions due to its increased transmissibility and reduced vaccine efficacy) could see some caution from even vaccinated Kiwi workers, especially those with underlying health issues.

### Some possible paths

While there's a lot of uncertainty, we can run some scenarios to outline the potential impact of different participation rate outcomes. To keep things tractable, we consider three scenarios:

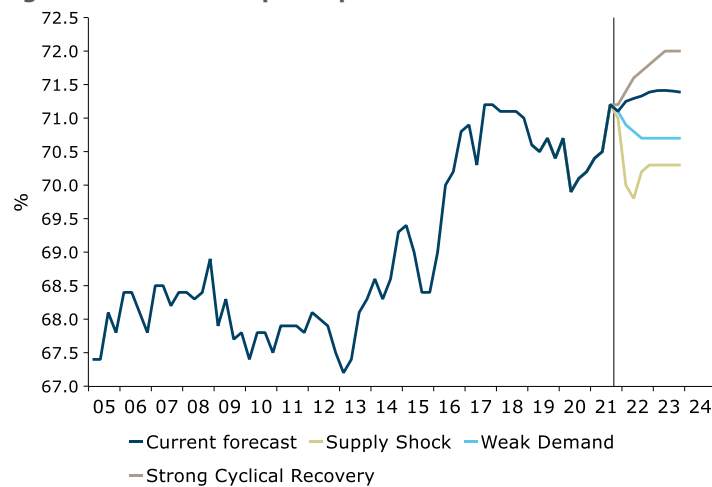
1. a reduction in labour force participation due to COVID;
2. stronger-than-expected cyclical strength in the labour market; and
3. a drop in labour demand due to sagging business and consumer confidence.

Our first scenario (which we'll call a labour supply shock) assumes that widespread transmission of COVID-19 in the community causes a sharp decline in participation heading into winter 2022, with only a subdued and incomplete recovery (figure 12). As a result, participation ends up at 70.3% in 2023 – below pre-pandemic levels. This scenario is closer to what the US has so far experienced.

Given how tight the labour market already is, a fall in participation would likely see an even steeper decline in unemployment than our current bullish forecast. But that's where the good news ends. It would also result in an equally sharp decline in employment growth, as employers will struggle to fill vacancies with an ever-declining pool of jobseekers (after all, this has been an issue even with current record-high levels of participation). Not growth-friendly.



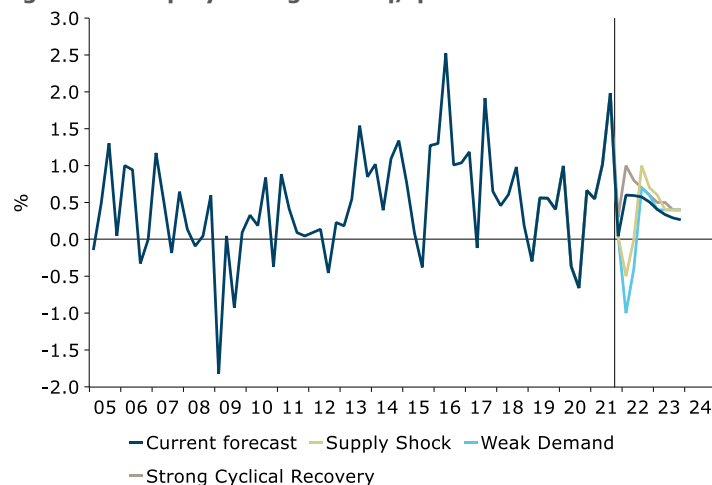
**Figure 12. Workforce participation rate under our scenarios**



Source: Stats NZ, Macrobond, ANZ Research

The second scenario assumes that the cyclical strength of the economy and the labour market is even stronger than anticipated, and this is enough to drive a steady increase in participation to 72% over the medium term as firms continue to entice people into the labour market with better wages and working conditions. Employment growth in this upside scenario is greater than in our central forecast, as employers are able to fill more of their vacancies. A labour-supply response to the immense pressure in the market would help firms who are struggling to meet surging demand with constrained resources. As with the first scenario, this second scenario sees unemployment drop by even more than our central forecast – but this time due to strong hiring and robust participation. That’s much more of a good news story, particularly for workers with great opportunity to upskill, though of course there would be a productivity hit from firms not being able to find the workers with the skills and experience they would prefer off the bat.

**Figure 13. Employment growth q/q under our scenarios**

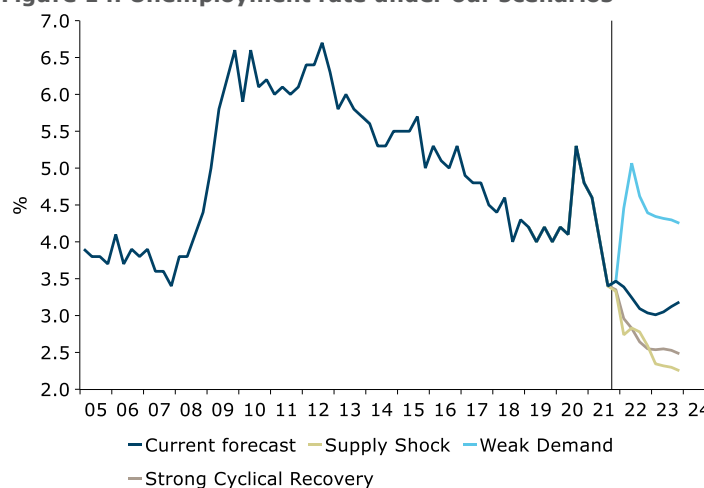


Source: Stats NZ, Macrobond, ANZ Research

These first two scenarios assume that the economy isn’t hit by any significant negative shocks. But such an event is a real possibility – for example if housing has a harder-than-expected landing, or endemic COVID (including any further mutations) causes consumer and business confidence to decline enough to result in significant job losses and reduced economic activity. The third scenario examines this possibility, with reduced demand driving a sharp decline in employment, before a much more subdued

recovery. Participation is assumed to remain below 71% – because the cyclical forces currently pulling people into the labour market would fade. This scenario results in a surge in unemployment, and looser labour market conditions overall. The decline in labour force participation means the unemployment rate doesn't go as high as it would have otherwise, but it's still lost income.

**Figure 14. Unemployment rate under our scenarios**



Source: Stats NZ, Macrobond, ANZ Research

A few results stand out from these scenarios.

Firstly, both the supply shock and cyclical strength scenarios lead to sub-3% unemployment. There is no significant reduction labour market tightness. That matters, given there's already a risk that high inflation and a tight labour market generate a wage-price spiral – something the RBNZ would want to nip in the bud before it snowballs.

But the growth implications of the first two scenarios are very different. In the labour supply shock, employers would find their productive capacity even more constrained by labour shortages, weighing on GDP growth even as inflation pressures would worsen. Under a strong cyclical recovery scenario, we have much more employment growth, implying more economic growth is possible given rising labour resources.

For the RBNZ, the inflation and therefore ultimate policy implications of a negative labour supply shock or a stronger-than-expected cyclical recovery would be in theory pretty similar (ie a faster increase in the OCR and/or a higher terminal rate). But the negative supply shock would be a more unpleasant state of the world for people to be in, since it implies that we'd have to make do with lower growth but equally high interest rates. And in practice, weak growth outcomes would make it harder for the RBNZ to keep on hiking, even if they estimate inflation pressures to be equally problematic.

In contrast to the first two, the weak demand scenario sees unemployment surge to 5.2% in the second quarter of 2022, before slowly recovering (but remaining well above 4%). For the RBNZ, a sharp reduction in demand like in this scenario would necessitate a pause in the hiking cycle – and even potentially a reversal of their recent hikes.

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## What about immigration?

To keep things simple, we haven't tweaked immigration in our scenarios – we just assume that over 2022 immigration [starts to pick up again](#), but doesn't reach the same highs that we saw over the 2010s. Obviously the different scenarios could impact immigration via job opportunities available, and immigration itself boosts both demand and supply in the [economy](#). But Omicron has thrown the whole plan to re-open the border up in the air for now in any case, so it's just a matter of wait and see.

## Bringing it all together

Endemic COVID poses significant risks to labour supply in New Zealand. Given the importance of older workers in lifting our participation rate over the past decade, there's a real possibility that endemic COVID leads to a significant drop in participation over the next year or so. That's certainly been the case in some countries. But it's also possible that the cyclical strength in the labour market, and our high vaccination rates, could see participation holding up at current record levels.

It's highly uncertain how things will play out – and our scenario analysis shows there are significantly different unemployment and growth outcomes depending on the state of the world. The most complicated scenario is a (further) negative supply shock. The closed border has already had a large impact on labour availability in New Zealand, and endemic COVID could reduce it further. That's bad for growth, but inflationary, putting the RBNZ potentially in a tricky spot. But of course, the demand side won't stay still either, and could evolve abruptly. With all that going on, it's appropriate for the RBNZ to continue in considered steps, hiking in 25bp increments and constantly monitoring for signs that economic momentum may have turned. Endemic COVID is unknown territory for New Zealand – and treading cautiously is the least-regrets strategy right now.



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Last updated: 15 October 2021

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