ANZ Research

NZ Insight: The road to full employment

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The road to full employment

Summary

Recently markets have fixated on the risk that rising inflationary pressures will prompt central banks, including in New Zealand, to bring forward a tightening in monetary policy. But the RBNZ also has to support maximum sustainable employment, in addition to achieving price stability. So how could the labour market impact monetary policy settings in New Zealand?

- Before considering any withdrawal of monetary stimulus, the RBNZ will be looking for a broad-based improvement in labour market indicators that is consistent with employment at its 'maximum sustainable' level. This is in addition to other criteria outlined in our Insight paper The Path to Normal, including evidence of a sustained rise in inflationary pressure.
- The labour market weathered the COVID storm far better than anyone anticipated. The key question for the RBNZ is whether the labour market has already returned to maximum sustainable employment, or if there is still slack in the market. The challenge in analysing this question is that maximum sustainable employment cannot be measured directly, unlike CPI inflation and it can also move around over time. The unique set of circumstances COVID-19 has brought about is likely to have caused a change in the maximum sustainable employment level.
- The labour market is throwing out mixed signals, with firms struggling to find workers, but job-seekers struggling to find work. The uneven impact of COVID 19 means that there is some dysfunction in the labour market. People in face-to-face services sectors such as tourism have been affected most by job losses, and the available jobs are likely to not be in the right industries or regions. This dysfunction means that the level of employment that the New Zealand economy can currently sustain has probably decreased.
- On balance, we think employment is currently below its maximum sustainable level, even though the labour market has performed much better than expected. Measures of labour market tightness show that there is still a way to go before the RBNZ can declare mission accomplished.
- Once the border opens (we assume in early 2022), it's likely that labour market dysfunction will ease. This will increase both the actual level of employment, and the maximum sustainable level. A lift in maximum employment means that actual employment needs to be higher than otherwise to put upward pressure on wages.
- What matters for the RBNZ is when employment will be able to catch up to maximum sustainable employment. We think that existing levels of fiscal and monetary stimulus, combined with a rise in aggregate demand as the border opens, should be enough to see this happen, though not until we're well-into 2022.
- A tight labour market should add to other underlying inflationary pressures in the economy, providing enough evidence for the RBNZ to start normalising monetary policy settings from mid-2022, first through tapering the LSAP, then with eventual OCR hikes.

- There are risks to this assessment, not least due to the uncertainty in quantifying whether the labour market has reached full employment, as well as to the broader growth and inflation backdrop. We think these risks are broadly balanced.

The following sections can be accessed via clickable links:

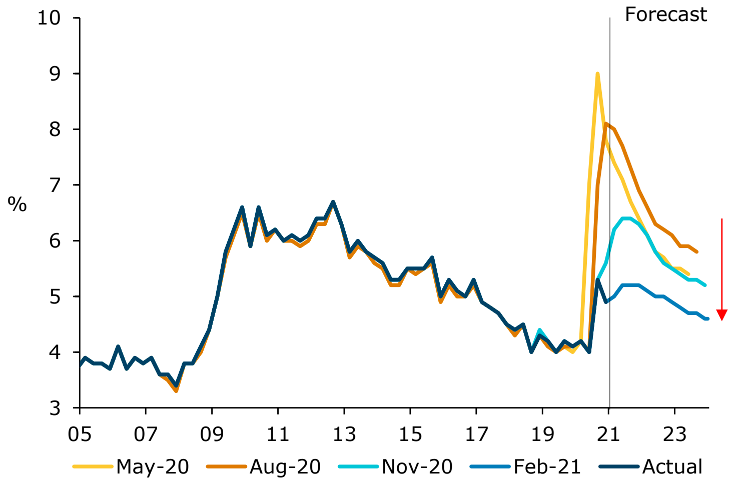
1. Why are we writing about the labour market when inflation is the talk of the town?

Recently, global economic headlines have been focused on concerns about a surge in inflation. A string of better-than-expected economic data and the vaccine rollout have raised the possibility that central banks around the world, including here in New Zealand, will need to start tightening monetary policy sooner than they are saying. But inflation is only part of the story.

The RBNZ has a dual mandate, meaning that in addition to ensuring price stability, the Monetary Policy Committee (MPC) must also support maximum sustainable employment. As we noted in our recent Insight The Path to Normal, there are four broad criteria that the RBNZ will have in their minds before they are ready to normalise policy. One of these is that the labour market will need to be close to or at full employment.

While people are still suffering from the impacts of COVID on the New Zealand economy, it's hard to deny that the labour market has shown remarkable resilience over the past year. Through 2020, the RBNZ was expecting unemployment to rise, and not dip back below 5% over their entire forecast horizon (figure 1). And yet in Q4, unemployment came in at 4.9%. We're not throwing stones – our forecasts were no more accurate and we're equally delighted to have been so wrong. While both we and the RBNZ expect some retracement of these gains as the void left by tourism over the summer causes the economy to wobble, it is clear that the labour market is in much better shape than anyone could have hoped back when COVID struck.

Figure 1: Unemployment versus RBNZ forecasts



Source: Stats NZ, RBNZ, ANZ Research

What's striking is not only the lower unemployment peak, but how quickly the labour market appears to have started bouncing back from the COVID shock. During the GFC, the labour market took nearly two years just to reach a floor. And it was only in Q1 2020 when the RBNZ was able to say there was a chance the labour market was 'slightly above' maximum employment. In contrast, it looks like the labour market has not deteriorated nearly as much as it did during the GFC (despite some early expectations that COVID would take unemployment into double digits).

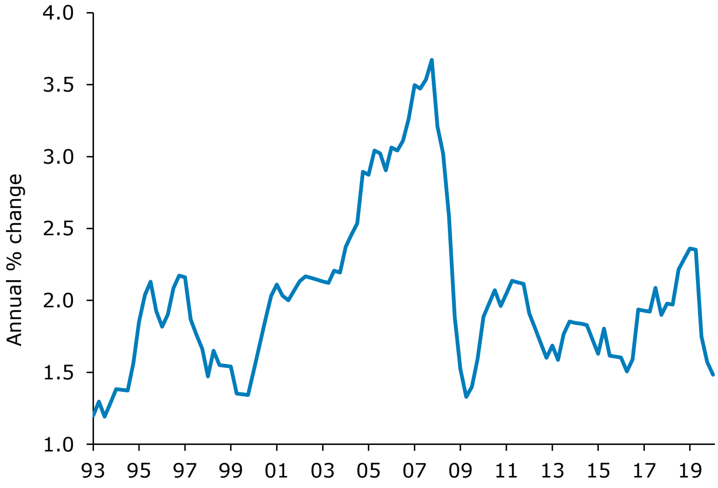
The key question for the RBNZ is whether the surprising performance of the labour market, combined with more-positive outlooks for inflation and GDP, have been enough to tip the balance in favour of an earlier tightening than expected. As with most questions in economics, the answer is: it depends. And partly, it depends on whether employment is near or back to its "maximum sustainable" level.

2. Maximum sustainable employment: a moving and unobservable target

The RBNZ interprets "maximum sustainable employment" to mean 'the highest utilisation of labour resources that can be maintained over time'. The RBNZ has previously defined what is 'sustainable' in terms of the impact on inflation (see the May 2018 MPS where the RBNZ first reported on the dual mandate). Essentially, if the labour market is too tight, we will likely see considerable wage pressures and labour shortages leading to CPI inflation becoming unacceptably high, forcing the RBNZ to tighten monetary policy to tamp things down.

It's important to note that even though the unemployment rate was happily lower than expected in Q4, this is not enough to indicate that the labour market is back at its maximum sustainable level. We'll need to see sustained strength across a range of labour market indicators before we can conclude that – including wage inflation, which has slowed sharply recently (figure 2), though anecdotes suggest wage pressures are rapidly emerging in the construction sector at least.

Figure 2: Private sector wage inflation



Source: Stats NZ, ANZ Research

An added complication with maximum sustainable employment is that the RBNZ can't see their target (unlike inflation, which is directly measured by the Consumer's Price Index). Maximum sustainable employment is a difficult concept to pin down, and cannot be fully captured by simple measures such as the headline unemployment rate.

The unobservable employment goal can also move over time. Factors such as population growth (including migration), and changing trends in labour force participation have seen the level of employment that the economy can sustain trend upwards over the past decade. But again, we can't know for certain how large these increases have been, since we can only make vague assessments of the level of full employment.

3. Are we at maximum sustainable employment yet?

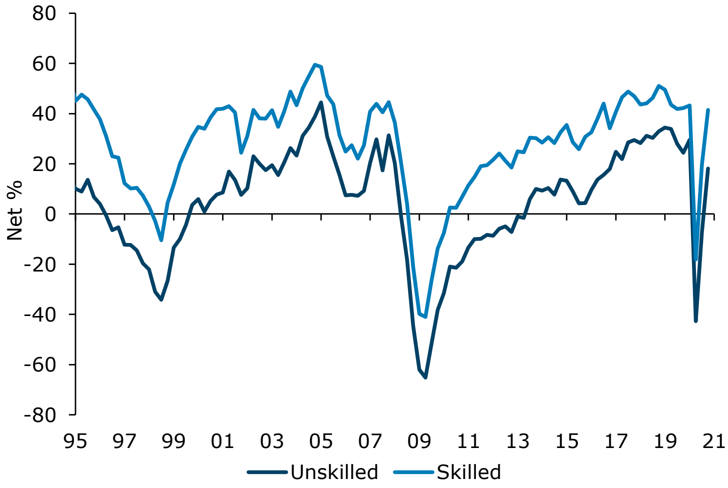
The lockdowns and border closure required to combat the spread of COVID-19 caused employment to drop in 2020, but we also think that the level of employment that the economy can sustain dropped too due to the skills and location mismatches caused by the uneven impacts of COVID-19. So are we at, above, or below maximum sustainable employment?

Despite not being able to observe maximum sustainable employment, we are not quite flying blind, and there are indicators that give us a read on the level of capacity pressure in the labour market. For example, if firms are finding it difficult to find labour, or underemployment is low, these are signs that employment is probably near or above its maximum sustainable level.

Unfortunately, these indicators are throwing out mixed signals right now.

On the one hand, we see reports that firms are struggling to find both skilled and unskilled workers, with these measures rebounding heroically after lockdown (figure 3). Indeed, firms report in our Business Outlook survey that finding skilled labour is their biggest problem. Some industries, particularly primary industries, are really struggling with the closed border. They are unable to bring in seasonal workers from overseas, and have not been able to attract Kiwi workers in enough numbers to fill the gap. This leaves fruit and other produce unpicked, and growers out of pocket.

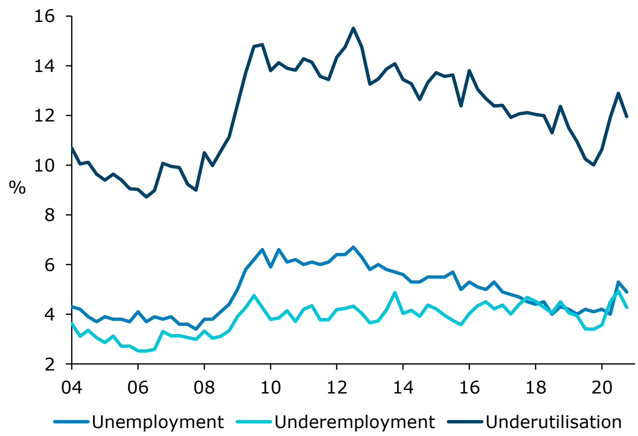
Figure 3: Difficulty finding labour



Source: NZIER, Macrobond, ANZ Research

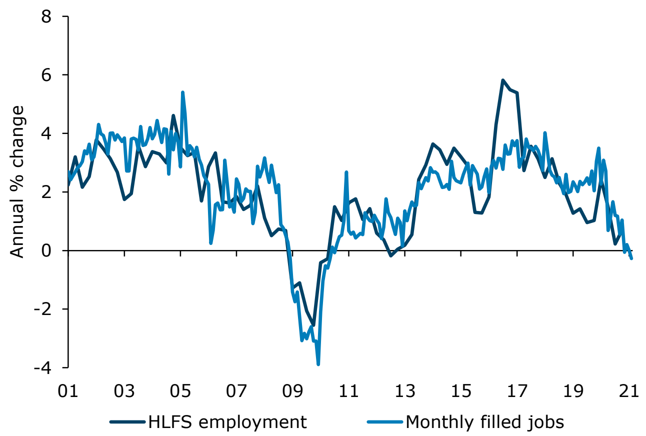
On the other hand, the underutilisation rate remains well-above pre-COVID levels, despite ticking down in 2020 Q4 (figure 4). Underutilisation includes unemployed, underemployed (part timers who want more hours), and other jobseekers not captured by unemployment figures. When we look at monthly filled jobs data from Stats NZ, it shows that the pace of jobs growth has slowed sharply to around zero (year-on-year) in recent months, despite increased demand for *and* supply of labour (figure 5).

Figure 4: Unemployment, underemployment, and underutilisation



Source: Stats NZ, Macrobond, ANZ Research

Figure 5: Jobs growth



Source: Stats NZ, Macrobond, ANZ Research

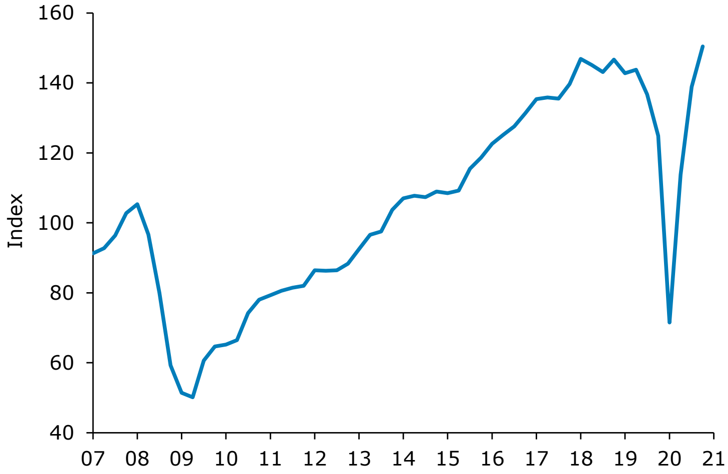
These conflicting signs show that there is probably some dysfunction in the labour market. Jobseekers are having trouble 'matching' with firms who want to take on new staff. This could be due to the uneven nature of the COVID-19 recession, and the subsequent recovery. People in face-to-face services industries such as tourism have been affected most by job losses, and the available jobs may not be in the right industries or regions. People may need to re-skill or relocate before they can take up new jobs (or they might just be waiting for the industry to get up on its feet again), and this process takes time.

The problem facing the RBNZ, and economic forecasters in general, is working out how all these pressures and mismatches in the labour market are likely to net out. That is, has COVID-19 shrunk the capacity of the labour market so much that the current unemployment rate of 4.9% is as good as it gets for now? Or, on balance is there still some slack in the labour market that needs to be absorbed before the RBNZ can claim mission accomplished?

4. Sorting the signal from the noise

A really useful way to analyse what's happening in the labour market is something called the Beveridge curve. While not as fun as a "beverage" curve, the Beveridge curve can tell us what's happening with labour supply, labour demand, and the matching process (and it can give us some sense of how all these factors may net out).

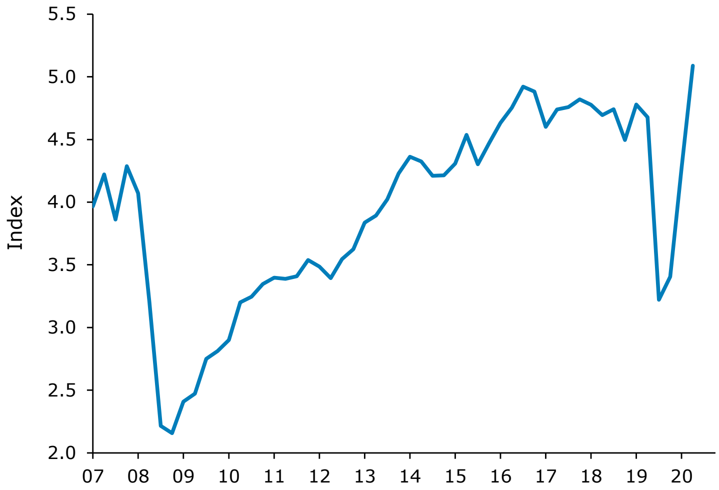
Figure 6: Job advertisements



Source: MBIE, Macrobond, ANZ Research.

The first step to understanding the Beveridge curve is to understand the relationship between job vacancies (a proxy for labour demand – figure 6) and unemployment (a rough indicator for the available supply of labour). Figure 7 shows the ratio of vacancies to unemployment. This measure rises when the labour market is tight, because there are lots of firms posting vacancies, trying to attract relatively few unemployed people. In Q4 2020 this labour market tightness measure bounced-back to an all-time high, indicating considerable pressures in the labour market. So does this mean we're back to, or even above maximum employment? Not quite, as the Beveridge curve will tell us.

Figure 7: Labour market tightness index



Source: Stats NZ, MBIE, Macrobond, ANZ Research

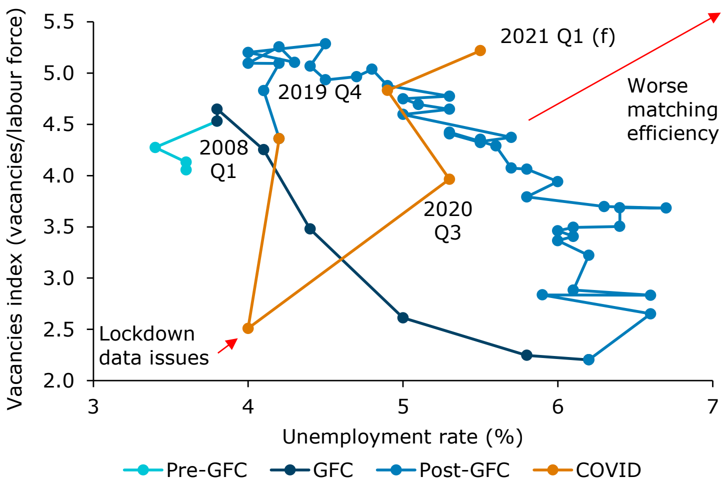
The Beveridge curve is simply another way of viewing the relationship between vacancies and unemployment. Rather than as a time-series, we show this relationship as a scatter plot. The Beveridge curve is shown in figure 8, with the unemployment rate on the horizontal axis, and vacancies on the vertical.

The data on the chart tend to be negatively correlated, since high vacancies are consistent with low unemployment. But the position of the scatter also tells us about the extent of dysfunction in the labour market and can help us to sort out the mixed signals we're receiving from our labour market indicators. When the data are moving away from the origin, it means that matching efficiency in the labour market is getting worse. That is, the same level of job vacancies being posted is associated with a higher level of unemployment, meaning the labour market is struggling to match job-seekers with vacant positions.

The chart shows that in 2019 Q4, when the RBNZ assessed the economy to be 'at or slightly above its maximum sustainable level', the labour market was in the top left section of the chart, with high vacancies and relatively low unemployment. But, once COVID-19 struck, unemployment rose and vacancies dropped. While there were some measurement issues due to lockdown, it's clear from the chart that in 2020 Q3, the labour market was experiencing significant slack.

The chart also shows that, based on our current forecasts, labour market dysfunction has likely increased. When we add our forecast for the unemployment rate in 2021Q1 alongside the vacancies data for Q1, we can see that the Beveridge curve is likely to move outwards, which would be consistent with matching efficiency getting worse. Both labour demand and supply have increased, but because matching efficiency may have declined, we expect that this probably won't result in a significant near-term rise in employment. This is consistent with relatively subdued high frequency employment indicators despite strong labour demand.

Figure 8: The Beveridge curve



Source: Stats NZ, MBIE, Macrobond, ANZ Research

In addition to reducing actual employment growth, the matching problem means that the number of people that can be sustainably employed in the labour market has probably fallen too. Until people reskill or relocate, or borders reopen, there simply may not be enough people with the right mix of skills and availability for firms to be able to fill their vacancies. The vast majority of firms are currently stuck hiring from a domestic pool of labour, and with the quantity of available workers fixed for now, the only way supply and demand can net out is with higher prices (ie a rise in wages), or a switch to more capital-intensive processes.

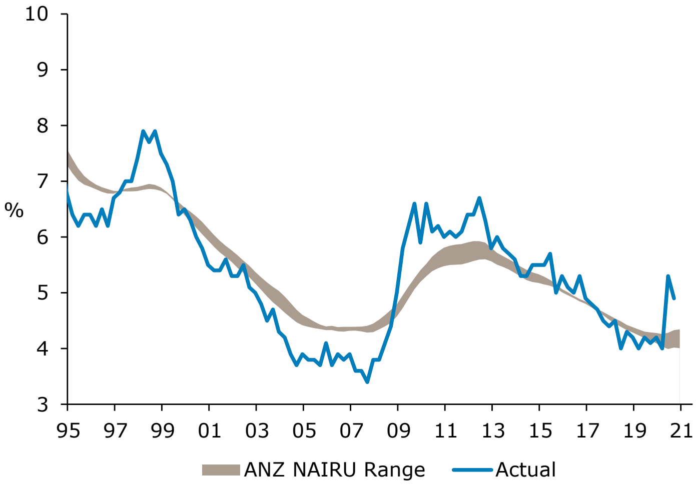
Another way to disentangle the conflicting signals coming from the data is to try to estimate the NAIRU, or Non-Accelerating Inflation Rate of Unemployment. This is the rate of unemployment that is consistent with stable inflation. If the unemployment rate is below the NAIRU, inflation pressures out of the labour market will be increasing. Conversely, if unemployment is above the NAIRU, this will exert downward pressure on inflation. Given that the RBNZ thinks about maximum sustainable employment in terms of impacts on inflation, the NAIRU should be a reasonable proxy for the unemployment rate that might be sustainable, at least in theory.[1]

The NAIRU is unobservable and is estimated using models, based on the relationship between labour market outcomes and inflation. Of course, any estimate from a model during one of the largest economic shocks in decades should be taken with a grain of salt, but in the absence of a clear measure of maximum sustainable employment it's better to look at too many frameworks than too few.

In figure 9 below we show the range of NAIRU estimates from our models, alongside the actual unemployment rate.[2] These models are indicating that the NAIRU is somewhere around 4%. We think that the labour market dysfunction discussed earlier means the actual NAIRU is currently a little below 5%, but this has not yet been reflected in the data, since we do not have labour market data into 2021 and the impacts of changes in the labour market will take time to flow through into inflation, given usual lags. Once matching issues resolve, we should see the NAIRU drop back to around 4%.

Either way, an actual unemployment rate of 4.9% (and our expectation it will lift to 5.5% over 2021), indicates that employment is likely below its maximum sustainable level. Taken together, both the Beveridge curve and NAIRU frameworks suggest that despite the surprising drop in unemployment in Q4 the labour market is still experiencing some slack, and employment probably has a way to go before it can be considered to be at its maximum level.

Figure 9. NAIRU estimates



Source: Stats NZ, ANZ Research

For the RBNZ, the existence of some slack in the labour market has a few key implications. Firstly, it means that all else equal, they need to keep monetary policy settings at current stimulatory levels for some time. Secondly, we are unlikely to see wage pressures being a driving force for inflation in the near future, even though wage inflation is unlikely to decelerate much given matching difficulties, and pockets of wage inflation are likely in the 'hot' parts of the economy, particularly construction. The RBNZ is likely to remain in

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[1] We should take a moment here to note that the RBNZ doesn't "want" a minimum level of unemployment to keep inflation under control. But it would not be a good idea to ask the Reserve Bank to try to drive unemployment to zero. That would result in boom-bust economic dynamics that wouldn't help anybody. Monetary policy can't directly influence the factors that determine how many people are effectively employable at any given point in time. That will reflect education levels, the evolution of the economy, minimum wage settings, immigration… all kinds of things.

[2] The NAIRU is inferred using state-space techniques, similar to those used to track rockets in space. NAIRU estimates are notorious for being subject to considerable uncertainty, and can be revised heavily, so caution is warranted when interpreting these results.

‘watch, worry and wait’ mode until they see some sign that employment is nearing its maximum sustainable level, and actual inflation is returning sustainably to 2%.

5. Chasing the moving target: How do we get to maximum sustainable employment?

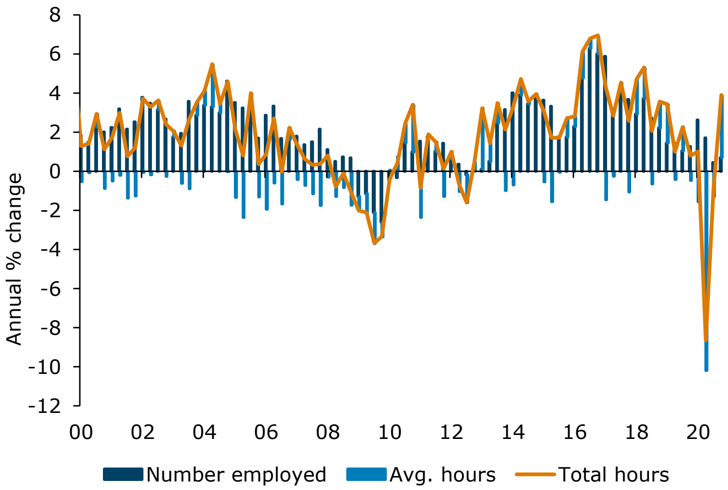
To understand whether the RBNZ will consider the labour market to be back at full employment over the next few years, we need to track where actual and maximum sustainable employment will be heading. It’s like landing a rocket on the moon, with the twist being that you can’t see the moon. (On the plus side, no one will ever be sure whether you actually landed or just faked the photos.)

Let’s start with the rocket. In our case this is the actual state of the labour market, which we can ‘see’ with some accuracy in actual data published by Stats NZ. We’re anticipating some continued softness in the labour market over 2021, as the economy moves broadly sideways. This reflects that economic momentum struggled a bit in Q4 (and likely into Q1) as some industries retraced some of the huge gains made in Q3 2020, and other industries continued to feel the absence of international visitors, especially over the 2020/21 summer.

We expect that the labour market is going to rebound strongly in the next few years. A big driver of this recovery will be the ‘return to normal’ starting in 2022. We are anticipating that the border can gradually reopen from early 2022, as Kiwis get inoculated against COVID-19 over 2021. While there will be significant residual effects from COVID still working their way through the economy, we expect that demand will surge, and economic activity will start to rise significantly above pre-COVID levels.

The labour market is well positioned to respond to rising demand in the economy. Looking at figure 10 below, we can see that total hours worked in New Zealand have surged recently, after dropping sharply over 2020.The vast majority of this earlier fall in hours came through a drop in average hours worked by New Zealanders, and less so from people losing their jobs. This is very important, as it’s much easier to put part time workers back up to full hours than it is to have to advertise for, hire, and on-board new staff. That so many people kept their jobs over 2020, despite the huge drop in output, is a testament to the success of the country’s COVID response and the rapid rollout of the wage subsidy.

Figure 10. Contribution of employment and average hours worked to total hours



Source: Stats NZ, Macrobond, ANZ Research

Rising demand and the relatively solid starting point of the labour market (even if we are below full employment) mean that we are expecting pretty solid employment growth over 2022 and 2023, and we're forecasting that the unemployment rate will drop to 4% by the end of 2023.

Of course, strong employment growth is only one side of the equation. To understand the implications for monetary policy, we need to think about what will happen to the level of maximum sustainable employment too. We think that the level of full employment dropped in 2020, with labour market dysfunction seeing firms struggle to hire workers, despite having an additional 25,000 job seekers to hire from compared with 2019 Q4.

But looking ahead, it's pretty clear that the level of maximum sustainable employment is probably going to rise. If the border does open in early 2022 (our current assumption), then the economy will receive a big boost with the revival of the tourism industry. Many jobs lost during 2020 were in tourism and hospitality, so the restoration of international tourism should see a large bump in the number of workers able to be employed in New Zealand – though there is considerable uncertainty about what the new normal for global tourism looks like.

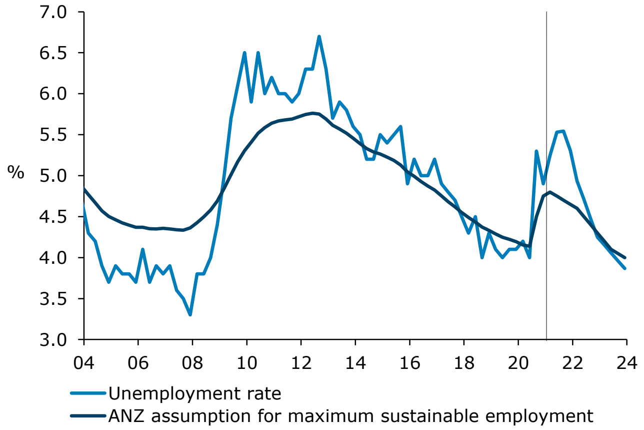
By restoring our access to global labour markets, an open border should also help ease congestion in the local labour market. This will be a boon for both workers and firms in New Zealand. Workers will be able to search across a much wider field of jobs for opportunities that may be harder to find in New Zealand. And, firms will be able to tap a vastly larger global pool of potential labour to fill current shortages.

Taken together, these factors should seriously increase the 'liquidity' in the labour market. This should improve the matching process and allow the economy to absorb more workers in positions that are a much better fit for their respective skills and experience. Returning to the Beveridge curve framework for a moment, we would expect to see movements towards the top left of the curve (high vacancies, low unemployment), accompanied by an inwards shift of the curve, as the labour market gets better at matching labour supply and demand together.

Overall it looks like the labour market will gradually return to full employment over the next few years. With the level of sustainable employment expected to lift, the labour market will have to work pretty hard to get actual employment to this new higher target. How does this look in our forecast? We think that the unemployment rate will drop from a peak of 5.5% in mid-2021 to around 4% in 2023. Given that we expect the NAIRU will return gradually to 4% once labour market dysfunction eases, we could see employment returning to its maximum sustainable level from late-2022 onwards (figure 11).

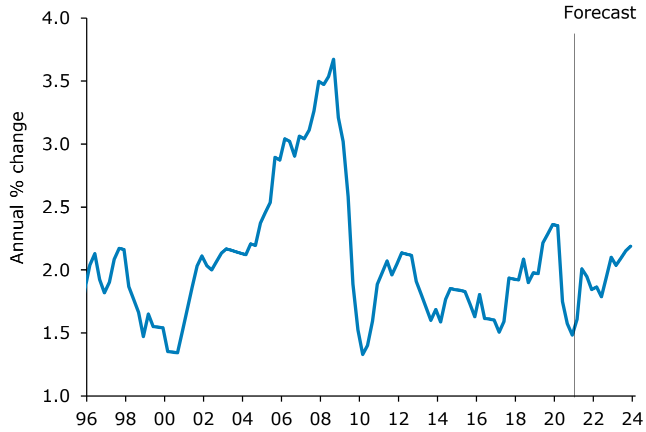
How does all this feed into wages? Well the outlook is actually pretty rosy for an economy recovering from recession. Right now, the matching problems in the labour market are likely providing a floor for wage inflation, since it's so hard for firms to hire staff. We could even see an acceleration in wages for certain sectors like construction that are facing robust demand. Once the economy begins to normalise, and demand increases, then we should see labour market tightness building and a subsequent rise in wage inflation (figure 12).

Figure 11: Unemployment and NAIRU assumption



Source: Stats NZ, ANZ Research

Figure 12: Private sector wage inflation forecast



Source: Stats NZ, ANZ Research

6. So when can we check the labour market box?

The bottom line is: don't expect the RBNZ to change their stimulatory monetary policy stance until they're seeing concrete evidence that the labour market is on track to return to maximum sustainable employment.

The RBNZ looks at a wide range of measures to assess whether the labour market is at maximum sustainable employment, in addition to those covered here. So the RBNZ will want to see broad-based improvements across a wide range of labour market outcomes, and rising wage pressures, before they can knock full employment off their checklist for monetary tightening. We don't think this evidence will be in place until 2022.

Overall, our view on the outlook for the labour market is consistent with our thinking that the RBNZ might be ready to lift the OCR in mid-2023. This policy outlook is in-line with the RBNZ's monetary policy strategy of 'least regrets'. Essentially, they would rather do too much now than risk having to ease policy further in the future. They will be cognisant that with interest rates already near-zero and the LSAP programme pushing its limits, they have limited ammunition should the labour market need a boost later on. So by keeping policy stimulatory now, they lessen the probability of further monetary easing in the future.

Something to keep in mind is that the current recovery in the labour market that we have pencilled in takes into account that monetary policy settings remain stimulatory into 2022. Even if labour market outcomes do start improving in line with our projections, this should not necessarily be taken as a sign that monetary policy will tighten early, lest they undermine that improvement. The RBNZ is looking for strong employment and inflation outturns as their baseline scenario, so it would take some pretty strong data for them to bring forward policy tightening. Of course, if we get persistently higher inflation despite mediocre growth and ongoing slack in the labour market, the RBNZ faces a conundrum. It's possible, depending on what happens to New Zealand's terms of trade, among other things, but it's not our forecast.

7. What are the risks to maximum sustainable employment?

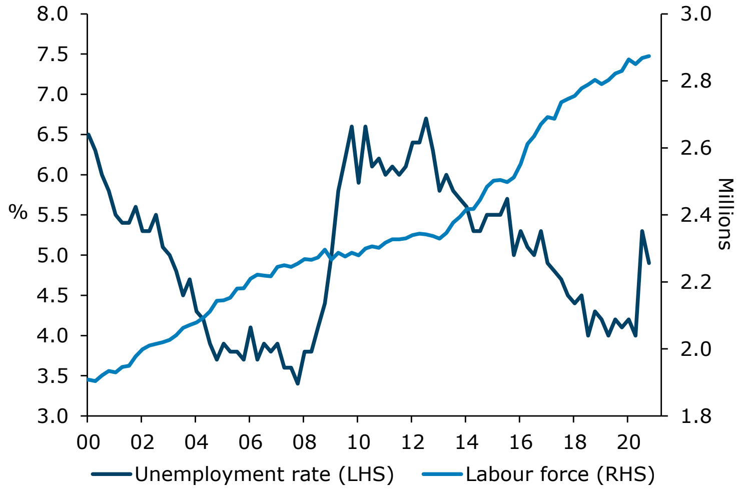
It's very possible we could be off-base with our assessment of how the labour market will evolve, especially given how uncertain maximum sustainable employment is. 2020 has taught us that predicting actual employment outcomes can be very difficult, let alone unobservable concepts like full employment.

This difficulty is unlikely to ease. For example, when the border opens, we could see people enter the labour market on the hope that labour demand will rebound. But, it could take a while for jobs to open up and for people to go through the hiring process, so paradoxically there could be a temporary spike in unemployment. This would give a false signal simply due to the timing of different events in the labour market. Whatever happens, we can rely on volatility being a feature of the data until COVID is well and truly in the rear-view mirror.

Over the 2010s the labour market showed a remarkable ability to absorb tens of thousands of permanent migrants every year, with unemployment steadily declining even as the labour force expanded rapidly (figure 13). It's possible once the borders open that the labour market shows this kind of agility over 2022/23, which could see the level of sustainable employment rising quickly. This would mean that a given level of employment would be less inflationary than before, putting downwards pressure on overall inflation pressures in the economy.

Immigration settings after the border closure ends will be important for understanding labour supply going forward. Over the 2010s, more open immigration settings saw tens of thousands of people a year moving to New Zealand, which likely increased the maximum level of sustainable employment. If previous immigration policy remains in place, this trend could return from 2022 onwards. However, given the heat in the housing market, the Government may be under pressure to tighten immigration policy for fear of increased population growth generating further surges in house price inflation.

Figure 13: Labour force and unemployment



Source: Stats NZ, ANZ Research

It could also be the case that the labour market takes longer to recover fully from the COVID-19 crisis than we anticipate. After the GFC for example, the unemployment rate didn't start trending down until several years after the recession technically ended, and there is evidence that there was a decline in the matching ability of the labour market. If the labour market shows evidence of similar damage after COVID, this could indicate that the level of full employment has deteriorated, and may take longer to recover than our central case. This would be very hard to diagnose in real time, again because we cannot observe maximum sustainable employment. But a failure of the Beveridge curve to shift back inwards could indicate that matching efficiency has not recovered, implying a lower level of maximum employment.

Somewhat perversely, such a decline in the level of maximum sustainable employment would be inflationary, as firms would find it harder to employ workers, putting upwards pressure on wages. This would therefore be an upside risk to our assessment that monetary policy will not start to normalise until 2022.

Overall, we think that the labour market has weathered the COVID storm fairly well, and this means that when the borders open, employment should close the gap with maximum sustainable employment in around 2022. Combined with rising inflation (and inflation expectations) and a more balanced economic outlook, this will provide enough evidence for the RBNZ to start normalising policy in time.

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