

ECONOMIC OVERVIEW

The bill comes due.

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New Zealand economy	01
Special topic: Housing supply in the wake of Covid-19	04
Global economy	05
Agricultural outlook	06
Inflation and the RBNZ	08
Exchange rates	10
Economic and financial forecasts	11
The economy in six charts	12



Note from Michael

As we enter the third year of the pandemic, the price of New Zealand's largely successful approach to Covid is now revealing itself. A strong economic recovery, aided by fiscal and monetary stimulus, is running up against constrained capacity. As a result, inflation pressures are building up in a way we haven't seen for many years.

This is not to put the blame on policymakers. Their aim was to err on the side of doing too much rather than too little, and they deserve credit for achieving that – stubborn inflation is a better problem to have than stubborn unemployment. But there was never going to be a cost-free solution to a shock of this nature, and the bill is now coming due.

In this respect, New Zealand differs from the rest of the world only by a matter of degree. Other countries are now waking up to the fact that they also have an inflation problem, and we expect to see several other central banks join the RBNZ in raising interest rates this year.

New Zealand's elimination strategy was key to the strength of both our economic and health outcomes. But as we transition to living with Covid, it seems that policy is struggling to move away from the 'elimination' mindset. One of the biggest changes to our forecasts this time is that we no longer expect a pickup in tourism this year – self-isolation requirements will be too prohibitive for all but a handful of visitors.

The issue is not the impact on the tourism sector per se. Rather, the total extent of demand pressures are shaping up to be less than we expected this year. Combine that with signs that higher interest rates are getting some traction on the housing market, and the risks around our forecast of a 3% peak in the OCR are starting to look more two-sided.

Michael Gordon
Acting Chief Economist

NEW ZEALAND ECONOMY

Learning to live with it.

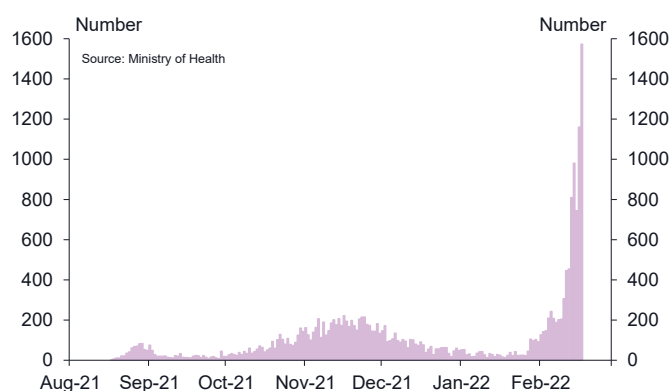
2022 is shaping up to be another challenging year. Covid is now in our communities and our approach to managing its spread has changed. At the same time, supply disruptions and shortages of labour are widespread, and interest rates are pushing higher in response to surging inflation. Against this backdrop, we expect a return to firm levels of economic activity over the coming year, but with significant differences across sectors and regions.

New Zealand has now moved into a new phase of the pandemic. With the vast majority of the eligible population now vaccinated and the emergence of more contagious variants, we are no longer pursuing an elimination strategy. Instead, we are learning to live with the virus in our communities. This means regional lockdowns are now less likely. Instead, health and activity restrictions (like mask requirements and social distancing) will be dialled up and down as needed to manage outbreaks in the community.

This change in approach means that the economic impacts of the current Omicron outbreak are likely to be very different from previous outbreaks. Notably, it is unlikely that we will see the sharp quarter to quarter swings in economic activity that we did when lockdowns were imposed in 2020 and 2021. Nevertheless, we still expect some significant economic disruptions.

The key uncertainty is how the labour market will be affected. Countries where the Omicron wave began earlier, such as Australia, give us a good idea of what to expect from here. Case numbers will continue to go near-vertical, reaching a peak 3-5 weeks after the outbreak began, and infections will far exceed the peaks seen in earlier waves. However for individuals the risk of severe illness is much lower than for previous variants, though the sheer number of cases means that hospitals could still be overwhelmed.

Figure 1: Daily Covid infections



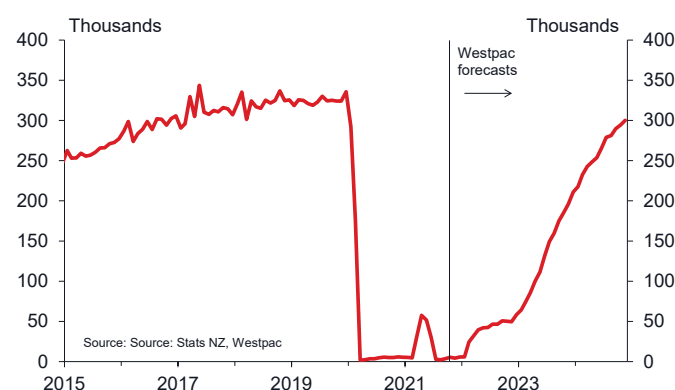
With a sharp lift in infections expected over the coming months, a significant portion of the labour force could be

required to self-isolate, including both cases and close contacts. That raises the risk of high levels of absenteeism and related disruptions to operating conditions across the economy. There is particular concern about how this may affect the already stretched health care sector, as well as supply chains for food and other essential items.

Rising case numbers and ongoing social distancing requirements also signal continued weakness in customer facing industries like hospitality and tourism. Since the shift to the 'red traffic light' setting, many hospitality businesses have reported subdued levels of spending, and fears about Omicron will no doubt have been a driver of that reduced activity. This has resulted in particularly tough trading conditions in tourist hotspots like Queenstown. However, we're also seeing subdued demand in other areas with large service and hospitality sectors, with city centres emptying out in regions like Auckland and Wellington.

Adding to the challenges for the tourism and hospitality sectors, international visitor numbers are set to remain very low through 2022. While the borders will gradually reopen over the coming year, the continuing requirement to self-isolate on arrival will deter the vast majority of tourists from coming to New Zealand, especially as other countries are opening up again. We don't expect a material rise in international visitor numbers until next year, by which point isolation requirements are likely to have been relaxed.

Figure 2: Monthly international visitor arrivals, s.a.



Shaken, not stirred.

Despite ongoing Covid-related headwinds, overall conditions in the New Zealand economy have actually remained resilient in recent months. That's been reflected most clearly in the labour market, with the unemployment rate falling to just 3.2% at the end of 2021, and job advertisements remaining elevated as we've moved into the new year.

However, the economy is still grappling with a number of serious challenges which are likely to act as a handbrake on activity through the year. Notably, the flipside of low unemployment is that businesses across the nation are reporting significant difficulties sourcing staff. That's resulted in growing upwards pressure on wages with the labour cost index rising 2.6% in the year to December. At this stage, wage pressures have been concentrated among specialised roles, where workers have more power to name their price in a tight market. However, we expect wage increases will become increasingly widespread over the coming year as the tight jobs market allows workers to press the case for cost-of-living adjustments (or more).

In addition to the tightness in the labour market, there have also been ongoing disruptions to global supply chains and distribution networks. Here in New Zealand, that's resulted in shortages of both materials and finished goods, as well as delays in business activity. We also seen large increases in operating costs in some sectors. Those disruptions are expected to persist through 2022.

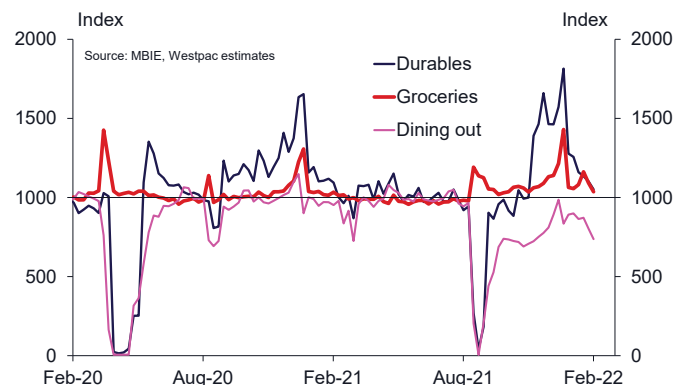
While the Omicron outbreak will dampen growth in the early part of the year, overall economic conditions are set to remain resilient.

We expect that overall economic activity will remain firm over the coming year, but that conditions will be mixed across the economy.

The Omicron outbreak and related public health measures will dampen economic growth in the early part of 2022. That's mainly due to softness in the tourism and hospitality sectors, though nervousness is also likely to weigh on both household demand and business spending more generally. However, while it's been a torrid start to the year, those Omicron related disruptions are actually expected to be relatively brief. We expect demand to recover quickly as the peak in case numbers passes. That's been the experience in other economies like Australia, where spending levels have picked up rapidly as case numbers have dropped back.

Balanced against the weakness in sectors like hospitality are stronger conditions in a number of other key parts of the economy. Notably, as discussed in our *Special topic* this quarter, residential construction activity is continuing to boom, with a record 48,500 new dwellings consented over 2021 and a large pipeline of work planned over the coming years. We've also seen resilience in household spending appetites with sales of durable items like furnishings remaining firm in recent months.

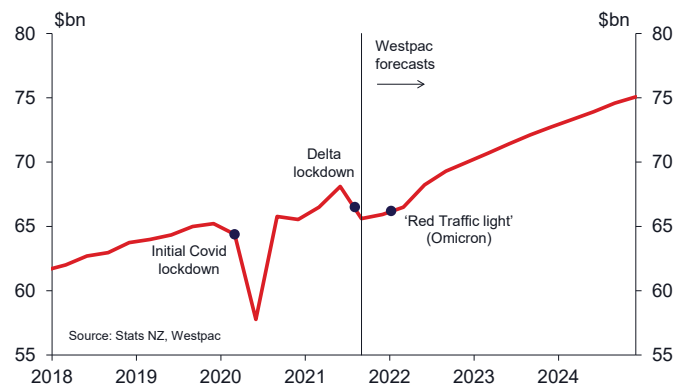
Figure 3: NZ weekly retail spending



Also helping to support economic conditions, prices for our commodity exports have hit record highs, jumping by 24% over the past year. As discussed in the *Agricultural outlook* section, we expect further strength over the first half of 2022, with strong global dairy prices leading the way. That signals a large boost to farm incomes. And while some of this is being used for debt repayment, the resulting lift in earnings is also boosting spending appetites in rural communities.

Putting this altogether, we expect that economic growth will remain sluggish through the early part of 2022, but that conditions will firm through the latter half of the year as the Omicron related disruptions fade. Against this backdrop, the labour market is expected to remain very tight, with unemployment on track to fall to just 3% over the coming months.

Figure 4: Quarterly GDP forecasts



The bill is coming due.

In addition to our earlier success in containing Covid, the resilience of the economy in recent years owes much to the extraordinary amount of monetary and fiscal stimulus that was rolled out. But while those measures played a vital role in bracing the economy, this unprecedented degree of stimulus has come at a cost. As discussed in the *Inflation and the RBNZ* chapter, low interest rates and strong domestic demand have contributed to the surge in inflation pressures which is now squeezing households' spending power. There have also been rapid increases in house prices, along with related concerns about both financial stability and social stresses (like increasingly stretched housing affordability). On top of those developments, government debt has leapt higher and is set to peak at around 43% of GDP in 2024.

With the economy now on a firmer footing and showing signs of overheating, policy stimulus is set to be dialled back over the coming years. And just as the introduction of this stimulus boosted demand, its withdrawal will be a drag on growth.

The extraordinary amount of policy stimulus that was rolled out in recent years is now being wound back, and that will be a drag on growth over the coming years.

In the case of monetary policy, the Reserve Bank has already begun to lift the Official Cash Rate, and we expect a series of further cash rate hikes over the coming years. That will take the OCR above the levels we saw prior to the pandemic and into 'tight' territory by the end of this year.

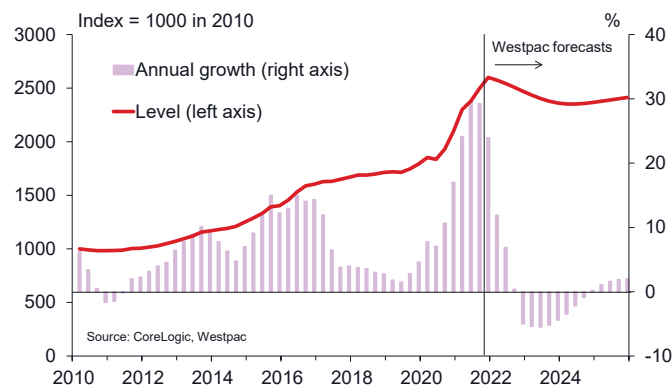
Mortgage rates have already been pushing higher in anticipation of OCR hikes, and the resulting rise in debt servicing costs will be a drain on many households' wallets.

The dampening impact of higher borrowing costs will also be felt acutely through the housing market and related hit to households' balance sheets. The housing market has already turned down sharply in recent months, with sale prices dropping 2.6% since November and sales numbers now running at below pre-pandemic levels.

This downturn in the housing market has been compounded by a tightening in loan-to-value limits since November, and changes to the CCCFA (or more accurately the Responsible Lending Code) which came into effect from December. Following that tightening in lending conditions, new mortgage lending has fallen sharply, dropping by an estimated 9% in December (after adjusting for normal seasonal variations).

With mortgage rates set to continue rising over the coming year, we expect a further cooling in the housing market over 2022, with prices expected to drop by 5% over the course of this year. But while that is a stark turnaround, the expected price declines would only reverse a small portion of the gains seen in recent years, meaning that housing affordability is set to remain stretched relative to incomes.

Figure 5: House price forecasts



We've long forecast a cooling in the housing market in response to higher interest rates. However, the pullback that we've seen in recent months has been faster than even we expected. That's important as the housing market is a key influence on households' wealth and their willingness to spend, and ultimately the extent of demand-side inflation pressures. That in turn could affect the extent of OCR hikes that will be needed to keep inflation in check.

The fiscal accounts have come through the pandemic in better-than-expected shape. That's given the Government scope to continue spending in areas like health and education to support its longer-term goals of enhancing social and economic wellbeing, as well as meeting its climate change targets. Even so, a period of fiscal restraint will be needed if the Government is to rebalance its books post-Covid. As a result, increases in government spending are likely to be more modest over the coming years, with spending on public services growing at a slower pace than other parts of the economy. That means after providing a powerful boost to demand in recent years, fiscal spending will also become a drag on growth over time.

Figure 6: Government consumption share of GDP



Wage increases will become increasingly widespread over the coming year as the tight jobs market allows workers to press the case for cost-of-living adjustments (or more).

SPECIAL TOPIC

Housing supply in the wake of Covid-19.

The closure of our borders has seen population growth plummet at the same time as home building is hitting record levels. As a result, the shortages that built up in recent years are now being rapidly eroded. But even with a strong outlook for home building, this doesn't signal that a period of 'oversupply' is on the cards.

Between 2015 and 2020 New Zealand's population grew by around 11%. Over that same period our housing stock only increased by 7%. That left us with around 59,000 too few homes. Shortages of housing have been most pronounced in Auckland. However, they have become increasingly widespread across the country.

The huge imbalance between population pressures and housing supply that developed over the past decade is now undergoing a rapid transformation in the wake of Covid-19. In fact, over the past year alone, the shortfall of housing has fallen by around 29,000 homes. And looking to the next few years, further big changes in both housing demand and supply are on the cards.

Home building activity is booming. Over the past year, a record 48,500 new dwellings were consented. That's more than twice the pace needed to keep up with population growth and address the existing shortages.

At the same time, population growth has plummeted. In the year to September 2021, New Zealand's population grew by just 0.5% - well down on the rates of around 2% that we saw in the years leading up to the Covid outbreak. This downturn in population growth is primarily due to the closure of our borders and the resulting fall in net migration. Between 2015 and 2020 net migration averaged around 60,000 people per annum. But since the outbreak of Covid-19, that situation went into reverse with the country recording a net outflow of 4,000 people. And while net migration will (eventually) pick up again when the borders reopen, we don't expect a return to the sorts of levels that we saw over the past decade with the Government having previously signalled its intention to tighten entry requirements.

The closure of the borders has had a particularly stark impact on Auckland, with the region's population actually falling slightly over the past year. Auckland has been grappling with a growing shortage of housing for the better part of a decade. But with building activity in our largest city now charging ahead, that shortage of homes is on track to be eliminated by the end of next year.

In other parts of the country, population growth has not fallen to the same extent. As a result, housing shortages in areas outside of Auckland are being eroded more gradually. Even so,

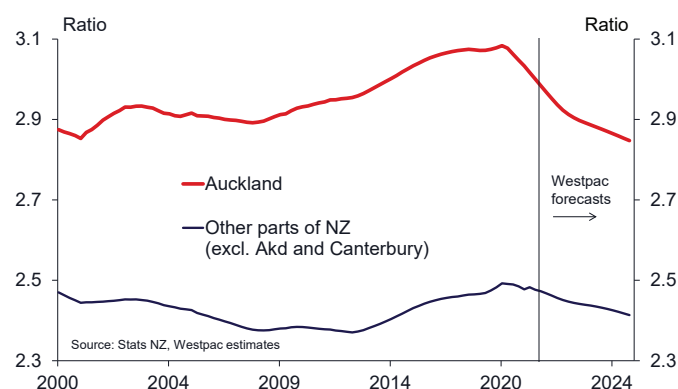
elevated levels of home building mean housing shortages are on track to be largely eliminated by the middle part of this decade.

We expect home building activity will remain elevated for some time. That's because of the strong financial incentives for developers to bring new projects to market: while residential building costs have increased by around 50% since 2015, average house prices have more than doubled over the same period.

Even so, we don't expect an oversupply situation will emerge, even with the slowdown in population growth. In most parts of the country, the current high levels of home building are what is needed to take the number of homes per head of population back to the sorts of levels we saw in the middle of last decade (just before the start of the recent period of very strong net migration).

It's a more nuanced picture in Auckland. Housing pressures in the city mean that we typically see an outflow of its residents to other parts of the country - something that's been exposed recently as the tap of incoming migrants has been turned off. With the number of completed homes set to rise sharply, that raises the risk that the city could tip into oversupply within the next few years. However, we don't think that would be the case for long: an abundant supply of housing would help to stem the exodus of its residents, bringing demand and supply back towards balance. Ultimately, the risk of oversupply is more relevant at the national level, rather than regional.

Figure 7: Average number of people per dwelling



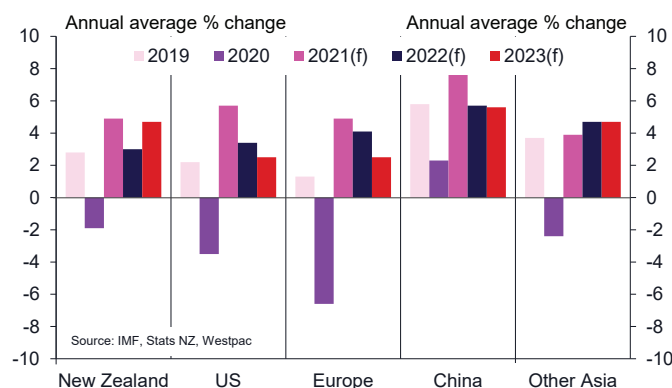
GLOBAL ECONOMY

Growing pains.

The world economy will continue to grow at a solid pace in 2022, setting aside some Omicron disruptions in the near term. But with inflation pressures building, central banks will increasingly be acting to rein in demand this year. We expect both Australia and the US to increase their policy rates several times by the end of the year. In contrast, China is easing policy to ensure that investment can firmly take the baton as the major driver of growth.

The global economy is starting 2022 on a firm footing. While we have revised down our growth forecasts since the November *Economic Overview*, that largely reflects some softness early on as the Omicron wave passes through. High vaccination rates in the developed world, and the lower severity of this variant, mean that governments have relied less on strict control measures, and the economic impact is likely to be relatively small.

Figure 8: Global GDP growth



The bigger headwinds to growth this year will come from a source that we haven't seen for a while: rising interest rates. Central banks are increasingly coming to the realisation that inflation is more than just a passing phase, and that the monetary stimulus that has been in place for the last two years will need to be dialled back. The common theme across the major economies has been a strong recovery in demand running up against capacity constraints, with the differences being only in a matter of degree.

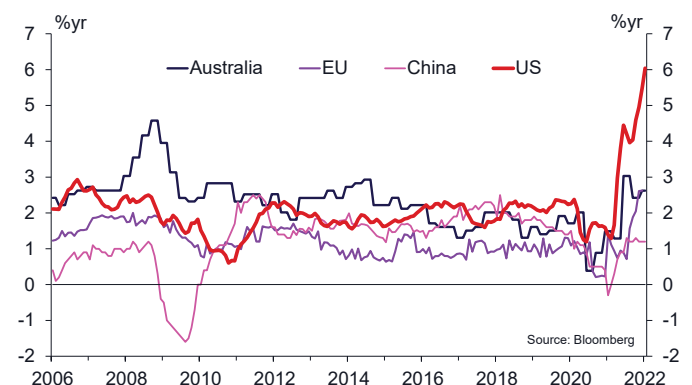
Disruptions to global supply chains in the wake of Covid have continued to drag on for longer than hoped, resulting in shortages in both materials and finished goods, and further contributing to inflation. Transport remains a major bottleneck – not only do shipping rates remain high, but the cost is increasingly being borne in terms of delay times. Energy prices have risen substantially, and we're not seeing the supply response that we might have expected in the past.

We expect the US Federal Reserve to begin raising interest rates in March, with a further three hikes this year. That's actually less aggressive than financial markets are already pricing in for this year. The key difference is that we think the US has substantial room to bring people back into the workforce as Covid concerns fade – its participation rate is still well below pre-Covid levels – which will ease the pressure for higher wage increases.

Australia's position is more akin to New Zealand's, with activity picking up and unemployment falling sharply. Its rate of inflation had been relatively subdued – in part due to temporary subsidies that were brought in during the Covid shock – but is now moving above the central bank's target range. We expect interest rate hikes to begin from August this year, eventually reaching a peak of 1.75% in 2024.

In contrast, Chinese authorities have actually added more stimulus in recent months. In part that's due to the need to support domestic activity while they continue to pursue a zero-Covid strategy. But moreover, with the excesses in residential construction and infrastructure now being reined in, China recognises the need to support investment as a driver of growth. These growth-friendly policies will help to underpin demand for many of New Zealand's agricultural exports (wood being a clear exception).

Figure 9: Core inflation rates



AGRICULTURAL OUTLOOK

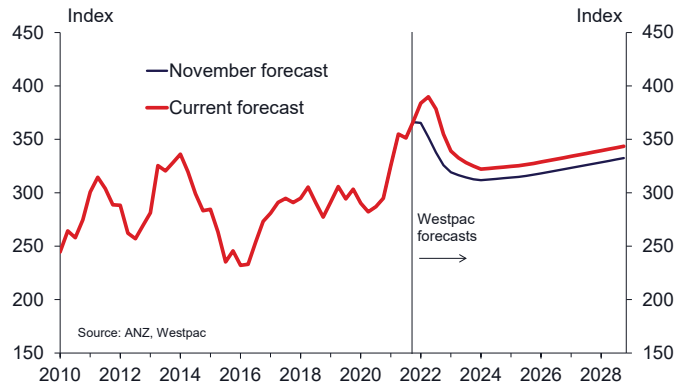
Perfect storm.

New Zealand commodity prices are in the midst of a perfect storm. At the heart of the storm is Covid and its variants pushing supply chains to breaking point. Indeed, record high commodity prices are going hand in hand with record high input prices. Normally, we'd expect such increases to prove short-lived. However, there is a structural element in play, meaning some commodity prices are set to remain high for longer.

New Zealand commodity prices are on a tear. Prices in world terms set six record highs over 2021. And 2022 has started in a similar vein. Indeed, January saw another fresh record high.

We expect there's more to come. Global dairy prices have already surged by nearly 14% so far this year, with more than half of that increase coming in February. Given dairy's large export weighting, we expect a second successive record high come the February commodity price reading. In fact, the momentum behind commodity prices is huge. As such, we expect the readings over the June quarter to be even higher.

Figure 10: New Zealand commodity prices – world terms



Global meat prices are also setting a record-breaking pace. US beef bull prices have set another record high in the first two weeks of February. And it's a similar story in global lamb markets, with European lamb leg prices also knocking off fresh record highs.

All things considered, fruit prices are holding their own. Gold kiwifruit prices have dipped below the bumper 2020 crop price. However, at Zespri's latest forecast of \$11.05 per tray, the returns to growers remain healthy particularly as the 2021 crop volumes have jumped up from 2020. At the same time, apple prices have remained healthy and are only marginally back year on year.

Digging into the drivers of the surge in meat and dairy prices, a perfect storm of supply and demand factors have hit commodity markets. On the supply side, Covid and its

variants continue to disrupt supply chains. These disruptions have pushed up the prices of key agricultural inputs like feed grains, fuel and labour; and, in turn, crimped production in our key competitors. On the demand side, the Chinese economic recovery has underpinned demand, while demand has also picked up in other key markets as Covid restrictions have eased and as those economies have improved.

Locally, the weather has been a key driver of higher dairy prices. Early in the dairy season, the weather was wet and cold, and on top of that the 2022 summer has now been dry in some key parts of the country. On this basis, we expect this season's production to fall 3% compared to the 2020/21 season.

The cumulative pressure on the milk price has been spectacular. That's prompted us to make several revisions to our forecasts as global dairy prices have surged. For this Overview, we have lifted our forecasts to \$9.50/kg and \$8.50/kg for the 2021/22 and 2022/23 seasons, respectively. The current season forecast, if achieved, will represent a record high milk price in both actual and inflation-adjusted terms.

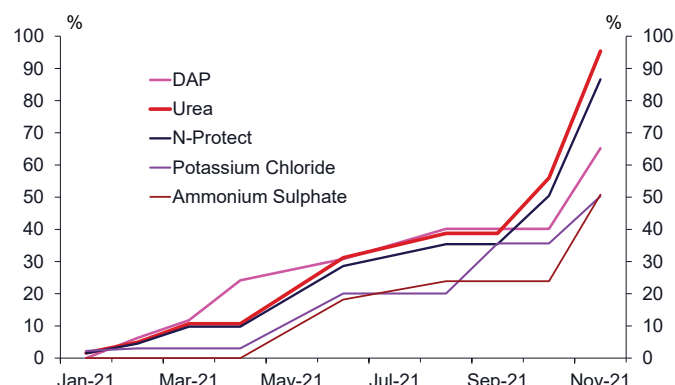
Figure 11: Farmgate milk prices



However, it's not all one-way traffic. Farm and orchard input prices have also surged across the board. In many cases, the prices have outpaced general inflation. For example, fertiliser prices have spiked by between 50% and 100% over the past 12 months, while consumer inflation has jumped a relatively modest (but still historically large) 5.9%. Anecdotally, dairy farms in the Waikato, Canterbury and Southland are reporting

overall cost of production increases (excluding interest costs) of between \$0.30/kg and \$0.60/kg this season. Using a rough \$4.60/kg as a cost base, the increases represent percentage rise of between 7% and 13%.

Figure 12: Fertiliser price inflation – Percentage increase from November 2020



Nonetheless, farm and orchard profitability has surged and remained strong, respectively, over the past season. Mainly that's due to very high farmer and grower margins even with the cost increases discussed above. For meat and dairy producers, New Zealand's pasture-based production system has also partly sheltered farmers from surging feed grain prices that have hit our competitors offshore.

Another factor helping agricultural returns has been a weaker New Zealand dollar. Indeed, the weaker currency has lifted all commodity boats. The NZD/USD is currently trading at around US\$0.66 from over US\$0.70 in late 2021. In the short term, we expect this weakness to continue. Over the March and June quarters, we expect the NZD/USD to trade at around US\$0.65, before the New Zealand dollar strengthens towards the end of the year.

All up, with high returns, cash is rolling into the sector. However, it's being used differently compared to previous commodity price booms. Many farmers and growers have chosen to repay debt instead of re-investing the cash back into their businesses. Indeed, agriculture debt has fallen from its

peak in July 2019 by over \$2bn and now stands at \$61.8 billion. We expect this trend to continue over 2022.

In contrast to previous commodity price booms, many farmers and growers are choosing to repay debt instead of reinvesting profits back into their businesses.

Meanwhile, the rural land market is finally heating up. However, it's not to the degree we might have previously expected based on current record returns. In the current market, there are other factors in play alongside high returns. Chiefly, environmental regulations, including fertiliser restrictions, are driving investment decisions. In some cases, this has seen farmers convert out of dairy farming for example or look to purchase an additional land block in order to become self-sufficient.

There is also a new kid on the block: carbon prices have also surged to record highs, more than doubling to around \$85/unit over the past year. The massive shift in carbon prices is driving investment into forest plantings, particularly in steeper New Zealand hill country. In other words, many sheep and beef farms are being converted to carbon farms. Moreover, this expansion is occurring at a time when log prices are at a low, with little short-term prospect of improvement.

Looking beyond 2022, we expect commodity prices to eventually moderate. Indeed, the perfect storm pushing prices to record highs cannot continue indefinitely. Specifically, we expect feed and other supply input prices to moderate and for supply to eventually begin to increase as a result.

However, we anticipate that some of the increase in commodity prices is structural. In particular, any cost increases associated with environmental regulations are likely to prove permanent. With that in mind, our long-term view of the milk price for example is now between \$7.50/kg and \$8.00/kg. In that sense, what goes up doesn't necessarily come all the way back down.

Commodity price monitor

Sector	Trend	Current level ¹	Next 6 months
Dairy	Dairy prices have surged over 2022 so far on dry New Zealand weather. We've lifted our forecasts to \$9.50/kg and \$8.50/kg for 2021/22 and 2022/23, respectively.	High	→
Beef	Farmgate beef prices are at very healthy levels. Prices are set to remain very strong, however Omicron outbreaks could lead to processing issues.	Above average	→
Lamb/Mutton	Farmgate lamb prices are at seasonal record highs. Prices are set to remain at or near highs, however Omicron outbreaks could lead to processing issues.	High	→
Forestry	The reset in the Chinese housing and construction market has dragged log prices lower. With no change likely on this front in the short term, prices are set to remain weak.	Low	↘
Horticulture	Kiwifruit prices have eased a touch on extra supply, while apple prices have remained at very healthy levels. From here, large 2022 crops may see prices ease.	Above average	↘
Wool	Fine wool prices remain firm as global apparel demand recovers. Whereas, rising Australian wool production is keeping a lid on other wool prices.	Low	→

¹ NZ dollar prices adjusted for inflation, deviation from 10 year average.

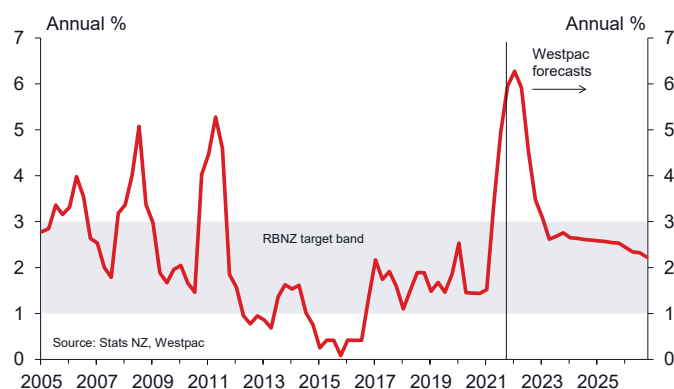
INFLATION AND THE RBNZ

Bringing it all back home.

Inflation has risen to a multi-decade high, driven by a cocktail of global cost pressures, supply constraints and strong demand. As the year progresses, it is domestic factors that will largely account for where the inflation rate settles, and therefore how strong a monetary policy response will be required. Our view remains that the OCR will reach a cyclical peak of 3% next year.

Inflation has well and truly made a comeback, with consumer prices rising by 5.9% over 2021. That was the highest rate we've seen since 1990, which itself was temporarily boosted by an increase in the GST rate. While the result was only slightly higher than expected on the day, it far exceeds what anyone imagined we might reach at the start of that year.

Figure 13: Inflation forecasts



This spike in the inflation rate is the product of several factors coming together at once. Much of it to date has been due to international forces. Disruptions to global manufacturing chains in the wake of Covid have resulted in shortages of many consumer goods and production inputs. The resulting upward pressure on prices has been compounded by increases in international transport costs, with both shipping rates and oil prices rising rapidly over the past year.

But home-grown price pressures are also on the rise. With demand running hot and unemployment falling to new lows, many New Zealand businesses are struggling to source workers, and wage costs have been pushing higher as businesses compete to attract staff. The strength in consumer demand has meant that businesses have had greater scope to pass on cost increases into final prices. Homebuilding has probably been the most extreme manifestation of these pressures, with prices for new builds up almost 16% over the last year. But we're seeing the same story repeated to varying degrees in a number of sectors.

The surge in inflation underscores one of the biggest lessons of the last year: the Covid shock was not like a 'normal' recession, where the economy suffers a shortfall in demand. Policymakers certainly responded under the assumption that they would need to revive demand, and that support was particularly valuable during the periods of lockdown. But for the most part the pandemic has been a productivity shock, which has weighed on the economy's operating capacity. Demand stimulus, plus capacity constraints, have meant a double whammy for inflation.

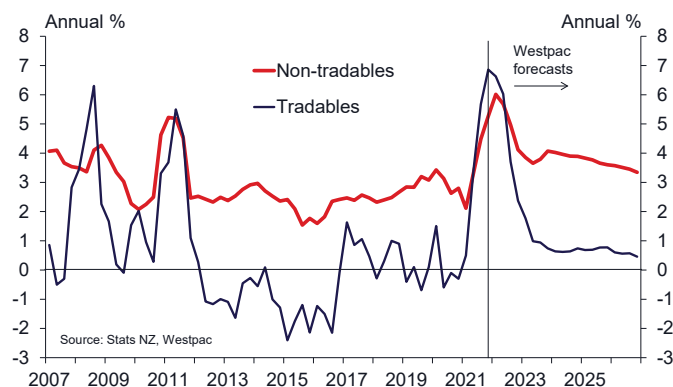
We expect headline inflation to rise further in the near term, reaching a peak of 6.3% in the March quarter this year. Beyond that, the annual rate is expected to ease back as the impulse from global cost pressures fades – things like oil prices and shipping costs may or may not recede over the year ahead, but it's unlikely that they will double or triple again in the way that they did over the last year or so.

However, what's more important is not the peak in inflation, but its persistence. Our forecasts see inflation remaining above 3% through to the end of this year, then dropping below that mark from 2023 onward – but remaining in the upper half of the Reserve Bank's 1-3% target range over the medium term. That would be a distinct change from the decade prior to Covid, when inflation was stubbornly in, or below, the lower half of the target range.

Even as headline inflation recedes from its highs, domestic inflation pressures are set to remain strong.

Even as the overall inflation rate recedes, we expect a growing contribution from non-tradables inflation – items whose prices are largely determined by local conditions. This is where the risk of persistent inflation lies: in a tight labour market, higher prices can spur demands for higher wages, which are passed on as higher prices, and so on. Once this happens, the cycle of higher prices will continue until monetary policy steps in as a circuit-breaker.

Figure 14: Tradables and non-tradables inflation



The Reserve Bank's own survey shows that businesses and forecasters are becoming more concerned that inflation will be persistent. Expectations for inflation a year from now jumped to 4.4%, while expectations for two years ahead rose to 3.3% – both of which are above the top of the RBNZ's target range. Admittedly, for a forward-looking measure, the average response tends to follow the last inflation print more than it should (our forecast for inflation two years from now is 'only' 2.8%). But expectations over the 5-year and 10-year horizons – which are less a forecast and more a poll on the credibility of the inflation target – are also starting to drift above the 2% midpoint.

All of this leads to the conclusion that tighter monetary policy is required. The direction is not in question – the RBNZ has already started this process, with two hikes in the OCR late last year and projections of many more to come. Instead, the crucial issue now is the extent of policy tightening that will be needed to rein in inflation pressures.

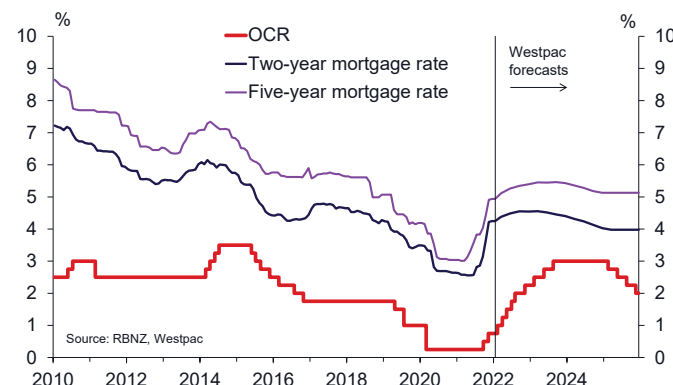
In our November *Economic Overview*, we forecast the OCR to rise to a peak of 3% by the second half of 2023. This represented a move beyond 'neutral' interest rate settings and into 'tight' territory, at least for a short while, to cool down demand and bring inflation pressures into check. At the time that was at the high end of the range of market forecasts, with most envisioning a gradual glide path up to 'neutral'. However, financial markets saw more of a need for action, with longer-term interest rates factoring in a peak OCR somewhere in the high 2's.

We have retained our forecast of a 3% peak in the OCR, with near-term inflation pressures worsening but the medium-term outlook less certain.

In the following three months, growing concerns about inflation have prompted other forecasters to move towards our view, while the RBNZ itself projected a peak OCR of around 2.6% in its November *Monetary Policy Statement*. In contrast, we've retained our OCR forecast in this latest *Overview*. Near-term inflation pressures are clearly even more concerning than they were three months ago, but there have been other developments that weigh against the longer-term inflation picture.

The first is the housing market. We've long been forecasting a shift from rapid house price gains to moderate price declines, once we saw a meaningful rise in interest rates. That has certainly happened: fixed-term mortgage rates have risen sharply from their lows since last September, as markets have anticipated a series of OCR hikes over the next few years. Indeed, we'd argue that term mortgage rates (particularly for two years and beyond) are already nearing their highs for this cycle. That in turn is having the intended effect on the housing market: prices have slowed and even started to turn lower in December and January. Falling house values will dampen households' willingness to spend over the next couple of years.

Figure 15: OCR and indicative mortgage rates



The second, related development is around tourism. Previously, we expected that as household spending stepped down as a driver of growth, international tourism would step up. That now looks unlikely this year: self-isolation requirements will be too prohibitive for all but a handful of visitors.

The concern is not for the impact on the tourism sector per se. Rather, the sum of demand pressures in the local economy is shaping up to be less than we thought for this year. And that has a direct bearing on how much monetary tightening will be needed. With this in mind, we continue to expect that a peak of 3% will prove sufficient for the RBNZ to rein in inflation back to its target range.

Financial market forecasts (end of quarter)

	CPI inflation	OCR	90-day bill	2 year swap	5 year swap
Mar-22	6.3	1.00	1.40	2.55	2.80
Jun-22	5.9	1.50	1.90	2.75	2.95
Sep-22	4.5	2.00	2.20	2.90	3.05
Dec-22	3.5	2.25	2.45	2.95	3.10
Mar-23	3.1	2.50	2.70	3.00	3.15
Jun-23	2.6	2.75	2.95	3.00	3.15
Sep-23	2.7	3.00	3.10	2.95	3.15
Dec-23	2.8	3.00	3.10	2.90	3.10
Mar-24	2.6	3.00	3.10	2.80	3.00
Jun-24	2.6	3.00	3.10	2.70	2.90

EXCHANGE RATES

Kiwi stumbling out of the block.

The New Zealand dollar has fallen by 5% since November, despite domestic data remaining strong. On a fundamental basis, it continues to be undervalued despite commodity prices continuing to make new highs. Our forecasts for the NZD against the US and Australian dollar have been revised lower, as their respective central banks prepare to hike interest rates this year to combat inflation.

The New Zealand dollar has fallen by about 5% since the November *Economic Overview*. Multiple headwinds for the currency have made it difficult for it to gain ground. External events include the arrival of Omicron, and rising interest rates overseas as central banks have started to tighten their monetary policy settings.

Despite domestic data showing strength, this hasn't helped the NZD find support. Part of this is that much of the good news on the economy had already been priced into the yield curve and currency. Even with domestic interest rates rising, the differentials with overseas interest rates have narrowed.

Even allowing for this, the recent lack of support for the NZD has been surprising. We constructed a model of 'fair value' for the NZD based on economic fundamentals and found three factors to be significant. The first is export commodity prices, which reflects New Zealand's earning power in the international market. The second is relative interest rates, using two-year swap rates which capture the expected path of monetary policy. Finally, we use New Zealand's net international investment position as a proxy for country risk.

The model shows the NZD is below the range of 'fair value', even as economic conditions would point to a move higher. Export commodity prices have surged, and the narrowing in the interest rate gap hasn't been large enough to counteract this.

The 'fair value' estimate is not intended to be a forecast; there are many reasons why the currency can depart from fair value for a long periods. History shows that the NZD usually struggles when global risk aversion reigns, such as the Global Financial Crisis. This isn't the case today: the NZD suffered in the early stages of the pandemic, but it has rebounded since then.

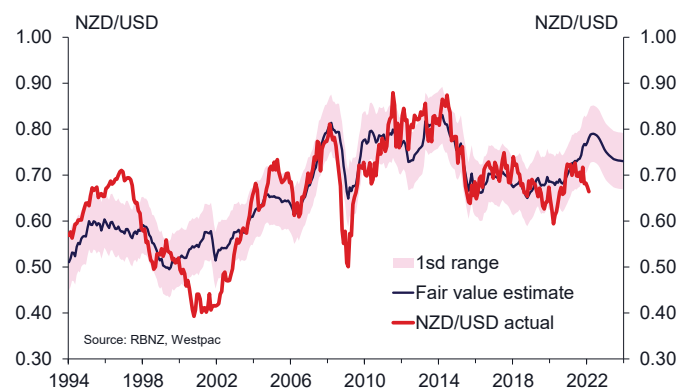
The NZD is not alone as our comparable model for the Australian dollar shows that it has been below 'fair value' for even longer. While both currencies remain under pressure against the US dollar in the near term, we don't see this as the start of a sustained downturn. The positives for both currencies will eventually reassert themselves.

We expect NZD/USD to finish the year at 68c, rising to 71c by the end of 2023. We've reduced it by about 2 cents compared

to our November *Economic Overview*. The primary driver has been a stronger outlook for the US dollar in the near term. As detailed in the *Global economy* section, we expect the US Federal Reserve to raise interest rates starting from March, as inflation becomes more persistent.

We've also marked down our forecast against the Australian dollar, for similar reasons. As in New Zealand, the Reserve Bank of Australia will need to raise the cash rate to above 'neutral' and into 'tight' territory to contain inflation. We've brought forward the expected timing of the first move to August 2022.

Figure 16: NZ dollar 'fair value' estimates



Exchange rate forecasts (end of quarter)

	NZD/ USD	NZD/ AUD	NZD/ EUR	NZD/ GBP	NZD/ JPY	TWI
Mar-22	0.65	0.93	0.59	0.48	75.4	70.1
Jun-22	0.65	0.93	0.60	0.47	75.4	70.1
Sep-22	0.66	0.93	0.61	0.48	77.2	70.7
Dec-22	0.68	0.93	0.62	0.49	79.3	71.9
Mar-23	0.69	0.92	0.62	0.50	81.4	72.5
Jun-23	0.70	0.92	0.63	0.51	82.6	73.1
Sep-23	0.71	0.92	0.62	0.52	83.9	73.4
Dec-23	0.71	0.91	0.62	0.53	84.5	73.6
Mar-24	0.71	0.91	0.62	0.52	83.5	73.0
Jun-24	0.70	0.91	0.61	0.52	82.6	72.5

ECONOMIC AND FINANCIAL FORECASTS

New Zealand forecasts

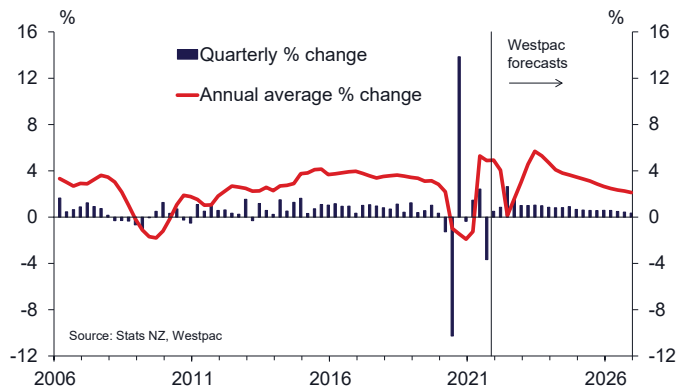
GDP components	Quarterly % change				Annual average % change			
	Dec-21	Mar-22	Jun-22	Sep-22	2020	2021	2022	2023
GDP (production)	0.5	0.9	2.6	1.5	-1.9	4.9	3.0	4.7
Private consumption	4.7	2.4	1.8	0.3	-1.1	5.9	3.4	1.8
Government consumption	0.8	0.7	0.6	0.3	6.9	9.0	3.4	1.1
Residential investment	4.4	3.5	2.9	2.3	-3.2	10.8	7.7	5.8
Business Investment	4.1	0.6	3.9	3.0	-8.8	6.5	5.6	6.8
Exports	-4.2	-2.1	1.9	2.8	-12.7	-3.6	-0.6	9.6
Imports	1.0	0.6	1.4	0.4	-16.1	15.0	5.3	2.6
Economic indicators	Quarterly % change				Annual % change			
	Dec-21	Mar-22	Jun-22	Sep-22	2020	2021	2022	2023
Consumer price index	1.4	1.2	1.0	0.9	1.4	5.9	3.5	2.8
Employment change	0.1	0.5	0.1	0.0	0.6	3.7	0.9	1.0
Unemployment rate	3.2	3.1	3.0	3.0	4.9	3.2	3.0	3.3
Labour cost index (all sectors)	0.6	0.7	1.1	0.9	1.6	2.6	3.6	3.5
Current account balance (% of GDP)	-5.5	-5.8	-6.6	-6.9	-0.8	-5.5	-6.8	-6.3
Terms of trade	-2.9	3.8	1.1	-1.1	-1.6	1.1	1.0	-1.0
House price index	4.1	-1.0	-1.2	-1.4	17.0	24.0	-5.0	-4.4
Financial forecasts	End of quarter				End of year			
	Dec-21	Mar-22	Jun-22	Sep-22	2020	2021	2022	2023
90 day bank bill	0.69	1.40	1.90	2.20	0.27	0.69	2.45	3.10
5 year swap	2.46	2.80	2.95	3.05	0.31	2.46	3.10	3.10
TWI	74.3	70.1	70.1	70.7	72.9	74.3	71.9	73.6
NZD/USD	0.70	0.65	0.65	0.66	0.69	0.70	0.68	0.71
NZD/AUD	0.95	0.93	0.93	0.93	0.94	0.95	0.93	0.91
NZD/EUR	0.61	0.59	0.60	0.61	0.58	0.61	0.62	0.62
NZD/GBP	0.52	0.48	0.47	0.48	0.52	0.52	0.49	0.53
Net core Crown debt (% of GDP)	33.1	37.6	41.0	44.7	32.4	37.6	45.7	46.4

International economic forecasts

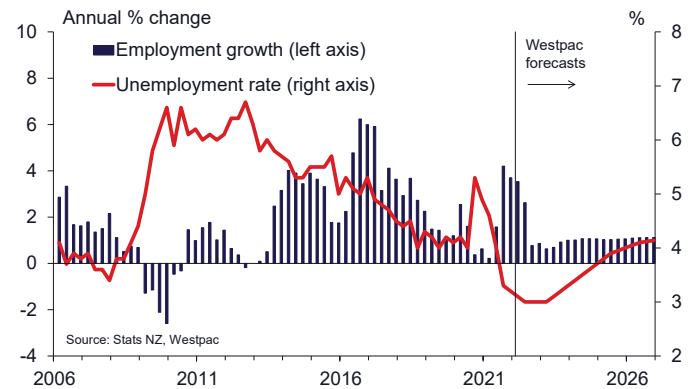
Real GDP (calendar years)	Annual average % change					
	2018	2019	2020	2021f	2022f	2023f
Australia	2.8	2.0	-2.2	4.4	4.4	4.0
China	6.7	5.8	2.3	8.1	5.7	5.6
United States	3.0	2.2	-3.5	5.7	3.4	2.5
Japan	0.6	0.3	-4.8	2.3	2.7	1.5
East Asia ex China	4.4	3.7	-2.4	3.9	4.7	4.7
India	6.5	4.0	-8.0	9.0	8.5	7.0
Euro Zone	1.9	1.3	-6.6	4.9	4.1	2.5
United Kingdom	1.3	1.4	-9.9	7.0	4.5	2.0
NZ trading partners	4.1	3.4	-1.8	5.7	4.7	4.2
World	3.6	2.8	-3.3	5.4	4.4	3.6

THE ECONOMY IN SIX CHARTS

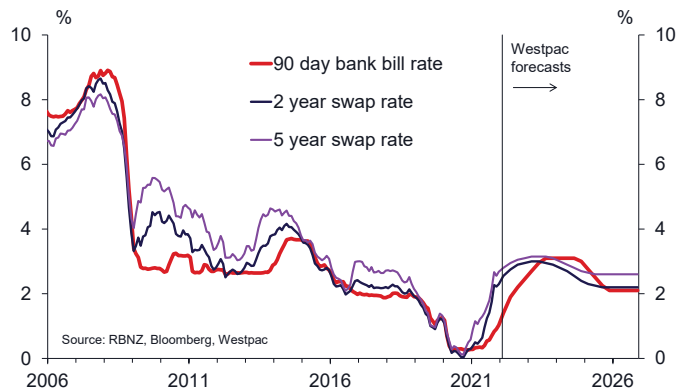
New Zealand GDP growth



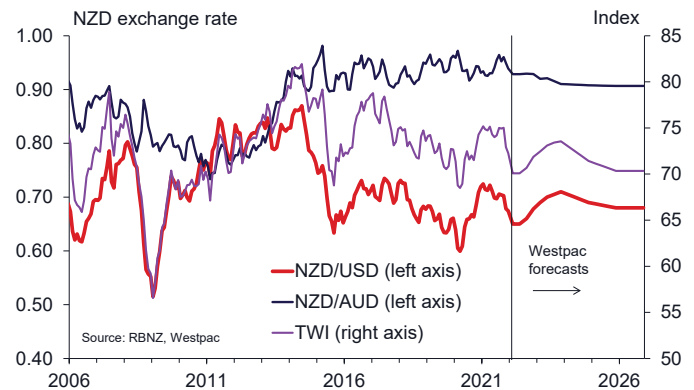
New Zealand employment and unemployment



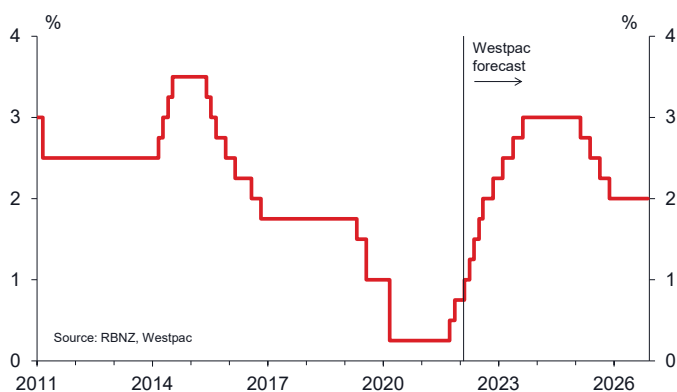
90 day bank bills, 2 year swap and 5 year swap rates



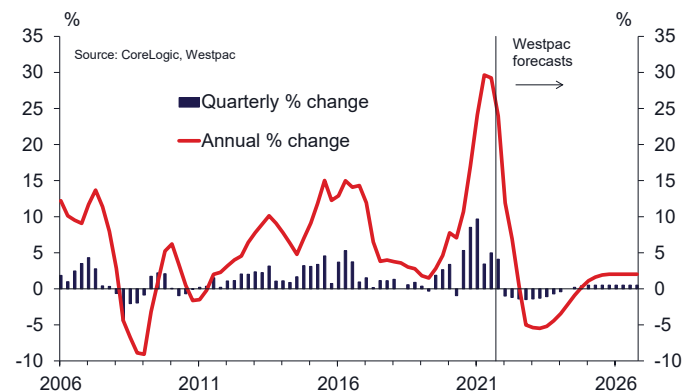
Exchange rates



Official Cash Rate



New Zealand house prices



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