

Economic Overview.

Unintended consequences.

November 2020



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Contributing authors

Dominick Stephens
Chief Economist
☎ +64 9 336 5671

Michael Gordon
Senior Economist
☎ +64 9 336 5670

Satish Ranchhod
Senior Economist
☎ +64 9 336 5668

Nathan Penny
Senior Agri Economist
☎ +64 9 348 9114

Paul Clark
Industry Economist
☎ +64 9 336 5656



Note from Dominick.

Covid-19 has wreaked havoc for the travel and tourism sector, but the remainder of New Zealand's economy has shown its resilience in fine style. It's now clear that the economy will be damaged, but not as severely as originally feared. We predict a peak unemployment rate of 6.2%, which is about the same as the 2009 recession.

House prices are skyrocketing, and we think this is just the beginning. By mid-2021 we expect house price inflation will be 15%, roughly the same as 2016. The political and social fallout will be just as intense as it was back then.

Rising house prices are an unintended consequence of the Reserve Bank's interest rate cuts. But that doesn't mean the RBNZ is going to reverse course – if it did, deflation and high unemployment would beckon. We still expect that the RBNZ will cut the OCR below zero next year, while simultaneously slowing the quantitative easing programme which will run low on fuel.

Government deficits are mounting, but the tax take is going to outstrip Treasury's pessimistic forecasts. Windfall revenue will be allocated on a "two for debt, one for social spending" basis, allowing positive fiscal surprises *and* more spending. This fiscal trajectory is unsustainable, so future governments will have to tax more and/or spend less. My pick is that some form of tax on wealth, land or capital gains will get over the line in the mid-2020s, when societal dissatisfaction with rising wealth inequality reaches boiling point.

Globally, the economic gap between countries that have controlled the virus and countries that have not is as wide as ever. New Zealand is lucky to find itself in a relatively Covid-free part of the world. Long may that last, because Asia's resilient economies have backstopped our agricultural exporters in an otherwise difficult situation.

Dominick Stephens - Chief Economist

New Zealand economy.

Sugar rush.

The lack of international tourists has left a big hole in the economy. However, monetary and fiscal stimulus have underpinned a strong recovery in domestic demand, with signs of solid momentum as we head into the new year. Longer-term, the country will face some tough decisions, as the current 'sugar rush' from super-stimulatory policy will eventually have to be repaid.

As 2020 draws to a close, economic activity remains below the levels that prevailed prior to the outbreak of Covid-19. That's mainly due to the continued closure of our borders and the related loss of international tourist spending. Tourism exports normally account for around 5% of GDP, and the halt on tourist inflows since March has been a significant drag on earnings and employment in sectors like accommodation and hospitality.

In contrast, outside of the travel and tourism sectors, much of the ground lost earlier in the year has already been recovered, with many parts of the domestic economy rebounding faster than expected after the lockdown. At the head of the pack, businesses linked to the building industry are reporting strong demand. We've also seen lifts in manufacturing activity (including exports) and gains in the retail sector. Against this backdrop, we're now seeing a rise in the number of businesses who are planning to take on new staff.

Underpinning this resilience in domestic activity has been New Zealand's success in curbing the spread of Covid-19. That's meant most restrictions on activity have been lifted sooner than anticipated and has left New Zealand sitting in a much better position than many other countries. On top of that, a massive amount of monetary and fiscal stimulus has been rolled out since the start of the year. That's given demand in some key parts of the economy (including the housing market) a powerful shot in the arm.

Looking ahead, the strength of economic conditions will remain closely tied to the spread of the virus. Recent positive news about the vaccine development is welcome, but we don't expect a widespread rollout to begin until mid-2021. While this will start to bring down the risk of the virus to more tolerable levels, reaching effective immunity for the global population could still be several years away.

Consequently, restrictions on international travel will remain a sizeable drag on economic activity for some time yet, and we've pushed out our assumptions regarding the closure of New Zealand's borders. We are now assuming that visitors from Australia will only be allowed entry into the country from mid-2021 onwards. Even then, the numbers arriving are likely to start off small, building gradually as restrictions are lifted on a state-by-state basis. For other countries, we now assume that New Zealand will gradually loosen border restrictions from September 2021, starting with countries that are relatively free of Covid-19. We expect that visitor arrival numbers will start off small, gradually lifting as a vaccine becomes more widely available and confidence begins to return.

Domestically, flare ups in infections and episodes of higher alert levels like the one we experienced in August remain highly likely. Our forecasts allow for similar disruptions from time to time over the coming year. However, the August event proved to have a small economic impact, and we assume future events would be similar in that regard.

Figure 1: Quarterly GDP forecasts

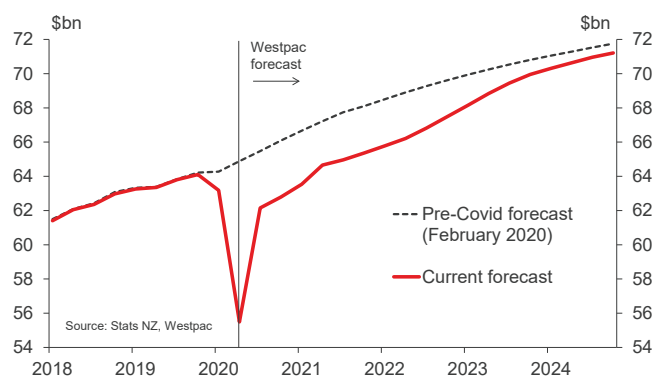
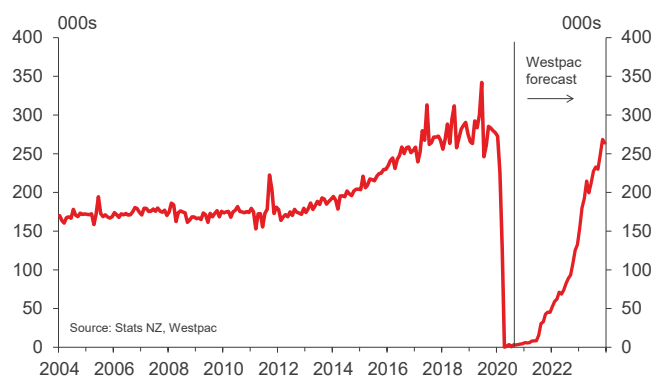


Figure 2: Monthly international visitor arrivals, s.a.



Balancing the ongoing Covid headwinds with the obvious resilience of the domestic economy, we have again revised up our forecasts for GDP with the release of this *Economic Overview*. We've also revised our forecast for the unemployment rate, which we now expect to peak at 6.2% early next year. That would be similar to the peak seen during the financial crisis and much lower than we initially feared when Covid-19 first arrived on our shores.

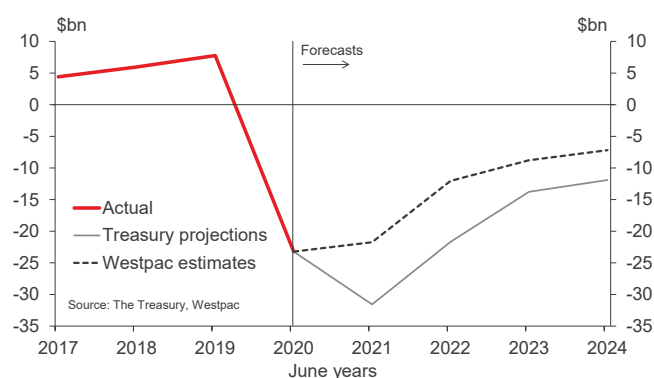
Emptying the fiscal piggy bank.

Helping to underpin the resilience of the domestic economy has been a huge amount of fiscal stimulus. The centrepiece was the wage subsidy scheme, which helped to keep many workers in employment despite the downturn in activity.

Covid-related support spending is now winding down, but there will be ongoing increases in general Government spending and huge infrastructure investment over the coming years. There is public appetite for fiscal spending to tackle a wide range of social concerns, including child poverty, access to housing, and the provision of both health and education services. And the Labour Party's resounding victory at this year's election gave the Government a stronger mandate to pursue these causes.

Normally, New Zealand voters favour small fiscal surpluses. But the Covid crisis has let the fiscal genie out of the bottle, creating democratic consent to run deficits. If anything, the Government will be able to outperform the public's expectations for prudent fiscal management while also increasing social spending. That is because the economy is likely to vastly outperform the Treasury's pessimistic forecasts, meaning the tax take will be stronger than the Treasury anticipates. The Government will receive positive revenue surprises which can be distributed on a "two for debt, one for social spending" basis.

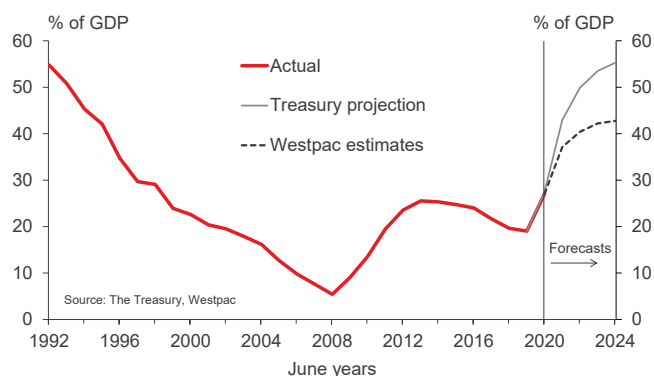
Figure 3: Government operating balance (OBEGAL)



We expect that the combined fiscal deficits over the coming five years will be roughly \$30bn less than assumed in the Treasury's September fiscal update. We also expect that the planned ramp up in infrastructure spending will proceed more gradually than the \$42bn over four years that the Government hopes to build. That all points to a more modest build up in government debt than the Treasury predicts – we

estimate that the debt-to-GDP ratio will be 43% in 2024. One consequence for markets is that the Debt Management Office will reduce its plans for debt issuance to \$45bn this fiscal year and \$30bn next (previously \$50bn and \$35bn).

Figure 4: Net core Crown debt as a % of GDP



As a nation, we'll be facing some tough choices about fiscal policy over the coming years. The Government will still be running large deficits mid-decade. Beyond that the ageing population will increase the cost of New Zealand Superannuation and health care, rendering the current fiscal trajectory unsustainable.

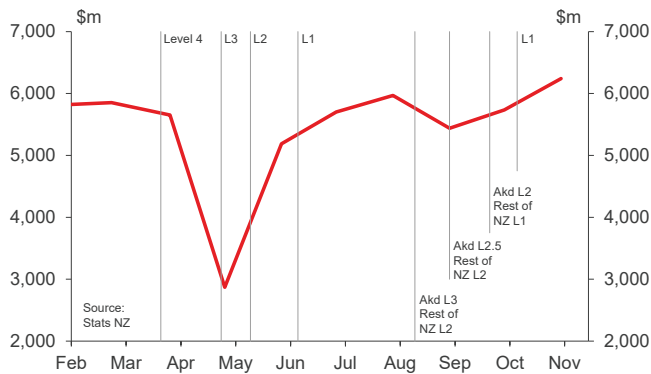
Future governments will therefore be forced to either reduce spending or increase taxes, or both. However, given the lingering challenges stemming from the Covid outbreak and the current Government's spending priorities, we doubt that there will be significant moves on either of those fronts during the current parliamentary term. Indeed, although the Government has announced plans to lift the top income tax rate, the resulting increases in tax revenue will actually be very small.

The required adjustments to our fiscal position can't be delayed forever. Sooner or later, some form of consolidation will be necessary, though the precise form this takes will depend on which party is leading the government at the time. Our pick is that a future government will introduce some form of tax on assets, such as a land tax, capital gains tax or a wealth tax. Societal concern about increasing wealth inequality is only going to intensify, eventually creating a large constituency for such a tax. And tax experts agree that broadening the tax base would enhance economic efficiency.

Put it on the house.

The significant increases in monetary and fiscal stimulus since the start of the year have given the domestic economy a powerful shot in the arm. That's been particularly evident in the household sector, with retail spending now back above the levels that prevailed prior to Covid-19. But while overall spending is holding up, what we're buying has changed. With overseas holidays off the menu and many families spending more time around the house, New Zealanders have been spending up on appliances, recreational items and household renovations. That's offset reduced spending on entertainment activities and travel.

Figure 5: Monthly retail spending



Helping to boost households' spending appetites has been the roaring strength of the housing market, which has defied expectations for a significant downturn in the wake of the Covid outbreak. When the economy first went into lockdown we forecast that prices would initially fall by 7%, and would later shoot higher in response to low interest rates. However, what we actually got was a decline of only 2% followed by an earlier and bigger boom, with prices now up a whopping 14% over the past year.

House prices are responding squarely to the reduction in mortgage rates. Indeed, this year has clearly proven a point that we have been making for years – interest rates matter more for the housing market than physical factors like population growth or housing supply. In recent months net migration has effectively fallen to zero and booming construction activity is adding to supply, yet house prices have continued to charge higher.

With the domestic economy continuing to firm and interest rates set to remain low for some time yet, we've again revised up our forecast for house prices. We now expect that annual house price growth will peak at 15% in mid-2021. And with strength in the housing market typically associated with firmness in households' spending, that also points to firmness in demand as we head into the new year.

Rapidly rising house prices will become a political and social flashpoint over the coming year.

Rapid increases in house prices in recent months have rekindled concerns about affordability for first home buyers and longer-term concerns about financial stability. Consequently, the RBNZ has signalled that restrictions on high loan to value lending (LVRs) are likely to be re-introduced from 1 March 2021, and we expect that they will be squarely targeted at property investors. Based on the experience with LVRs since 2013, we expect that the reintroduction of lending restrictions will take a little of the steam out of the property market, but this won't be a game changer.

Realistically, we don't expect a material downturn in the housing market until mortgage rates push higher. But as discussed in the *Inflation and RBNZ* section, such increases in mortgage rates are still a way off, due to low consumer price inflation.

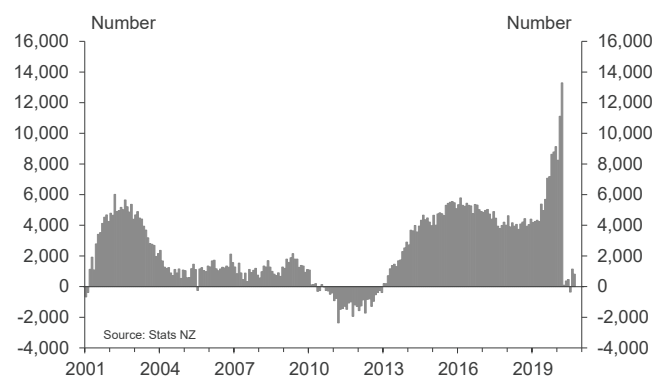
But when inflation does eventually pick up, mortgage rates will also rise. That will see the forces that have driven New Zealand house prices higher over the past decade going into reverse. We're pencilling in a period of declining house prices from 2024, but such long-range forecasts are subject to extreme uncertainty, so the timing is perhaps less important than the principle – when interest rates rise, house prices will fall.

One of the major changes caused by the Covid-19 outbreak has been a dramatic slowdown in population growth. Although the start of 2020 did see large numbers of New Zealanders returning home as Covid spread around the globe, that story is now a thing of the past. In fact, the number of New Zealand citizens and residents returning home each month has fallen to around half of normal levels. At the same time, the closure of our borders has meant that the flow of new foreign citizens arriving in the country has also dried up.

These developments mean that population growth is set to slow from rates of around 2% in recent years to just 0.5% over 2021. Lower population growth will mean slower growth in the demand base for industries like retail and hospitality. The lack of migration in or out of New Zealand could leave the country with the wrong mix of skills, which will be detrimental to productivity.

Slower population growth also means that we'll need to build fewer houses over the coming years than would have otherwise been the case. Combined with earlier disruptions associated with Covid-19, we expect that residential construction will fall to around 6% below pre-Covid levels over the coming year. However, that's actually a much more moderate decline than we initially expected when Covid-19 first arrived on our shores. The resilience in the domestic economy and strength in the housing market are providing a floor under building activity. Consistent with that, we've seen consent issuance hold at strong levels in recent months.

Figure 6: Monthly net migration



Global economy.

Infinity war or endgame?

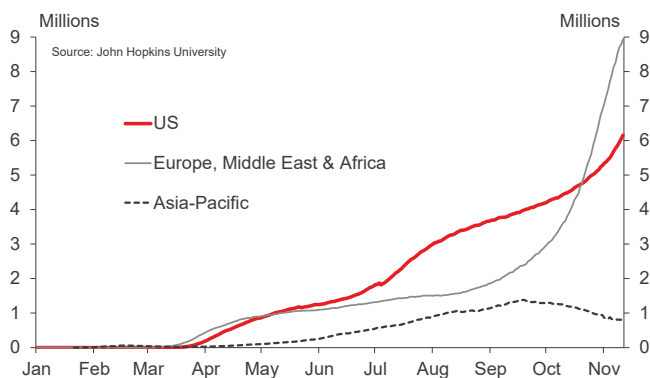
The world economy has rebounded from the initial wave of Covid-19 lockdowns, but a resurgence in infections threatens to derail that momentum in the US and Europe. In contrast, those regions that have successfully controlled the spread of the virus are in a much stronger economic position. An end to the pandemic is now in sight, but vaccines and other treatments will take time to roll out and more policy support will be needed in the meantime.

The global economy has endured a severe slump this year, although slightly less bad than we forecast in our August *Economic Overview*. We now expect global GDP to shrink by 3.8% this year, followed by a 5.3% increase next year.

As the first wave of Covid-19 lockdowns was lifted, economic activity recovered most but not all of its initial decline. The spread of the recovery has been distinctly uneven, not only across countries but across industries. Consumer spending has tended to move away from services, particularly travel and hospitality, partly due to ongoing restrictions. But the prospect of spending more time working from home (or in lockdown) has seen a surge in the likes of household goods and home renovations. Meanwhile, global manufacturing output has been boosted by restocking.

Unfortunately, this momentum is now threatened by a renewed surge in Covid-19. The number of confirmed cases has far exceeded the first wave in many countries; hospitalisation and death rates have not reached the same levels, but are now rising rapidly as well. And with the northern hemisphere winter approaching, the worst may be yet to come.

Figure 7: Covid-19 active cases



This resurgence will further widen the differences in economic performance between those countries that have contained

the spread of the virus and those that haven't. Our GDP forecasts imply that many Western economies won't get back to pre-Covid levels until well into 2022, if not later. In contrast, many Asian economies are already rebounding strongly and are set for further gains in the coming years.

The resurgence of Covid-19 will further widen the differences in economic performance between those countries that have contained the virus and those that haven't.

The most significant economic impact will be in Europe, where a premature scaling-back of restrictions and lack of a co-ordinated containment policy left it vulnerable to a resurgence. Hospitalisation projections are now surpassing previous worst-case scenarios. Some countries such as France and the UK have reverted to strict lockdowns, which will see their economies contract again in the latter part of this year.

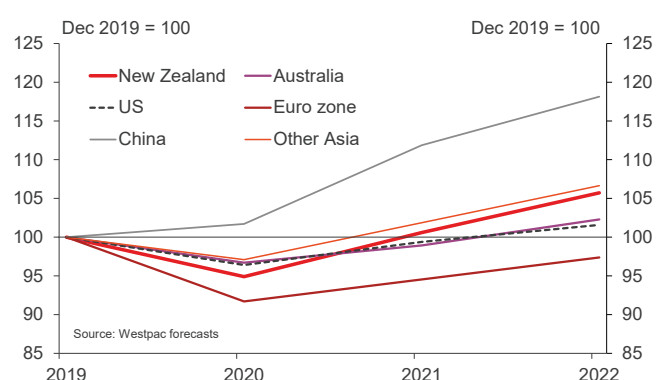
A lack of political appetite means that a return to lockdowns is far less likely in the US. Nevertheless, localised restrictions on some activities such as dining out, and people taking their own precautions, are likely to slow the pace of the recovery. The election of President Joe Biden means that next year the US is likely to take a firmer grip on bringing the spread of Covid under control – although coming from such a poor starting point that it will take quite some time to produce results.

The need for further policy stimulus in the US is evident, as the increased benefits and jobkeeper support programmes that helped to support consumer spending start to run out. Negotiations about a fiscal stimulus package stalled ahead of the election, and with the Republicans expected to retain control of the Senate, it's unlikely that they will be willing to do a Democrat president any favours.

In contrast, China's successful control of the virus has given its economy a significant boost – activity is already up nearly 5% on a year earlier. This success has also meant that policymakers have been able to move away from response and recovery and towards measures that will boost long-term growth. East Asia has also largely been successful in containing outbreaks.

The outlook for the Australian economy has improved as its second wave of infections has been brought under control, and the restrictions in the state of Victoria are starting to be lifted. We have also upgraded our growth forecasts for next year after the long-delayed Federal Budget, which provided a substantial fiscal stimulus package in the form of tax refunds and incentives to invest.

Figure 8: Global GDP forecasts



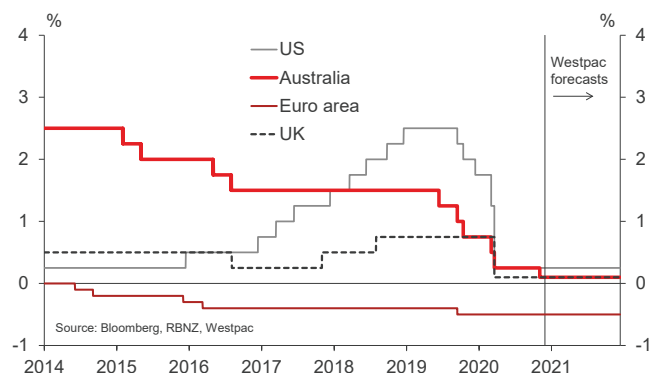
With many economies facing headwinds to recovery, or even going backwards again, it's clear that ongoing fiscal and monetary support is needed. And it's the latter that appears more willing and able to respond, ensuring that global interest rates will remain low for a long time.

Ongoing monetary support will be needed, ensuring that global interest rates remain low for a long time.

The US Federal Reserve has recently tweaked its inflation targeting framework, with its focus now on average inflation over the medium term – that is, an undershoot of the inflation target should be balanced out by a temporary overshoot. Since its existing forecasts already pointed to an inflation undershoot, and with risks skewed to the downside, the case is mounting for the Fed to expand its balance sheet further through asset purchases.

Renewed lockdowns in Europe have so far prompted further asset purchases by the Bank of England. The European Central Bank is also expected to provide more stimulus in December, possibly in the form of asset purchases or an expansion of its term funding facility for banks. The ECB's policy interest rates, already below zero, could go even lower as well.

Figure 9: Central bank policy rates



In some parts of the world, the rolling waves of Covid-19 infections, followed by strict measures to contain the spread, may be starting to feel like an endless loop. However, there is an end in sight to the pandemic. The staggering amount of effort going into vaccine development is starting to bear fruit, and large-scale vaccination programmes are expected to begin from next year.

A vaccine itself is by no means a silver bullet. No vaccine will be completely effective in preventing the spread of Covid, although recent results have been promising. The rate of effectiveness will then determine what share of the population would need to be vaccinated in order to reach effective immunity. That in turn raises concerns about the likely rate of uptake among the public.

Production and distribution of vaccines will also present some significant challenges. Even if multiple vaccines go into production by next year, estimates suggest that it would take several years to produce enough doses to cover the majority of the world population. Vaccines require cold storage and have a short shelf life, which makes them difficult to distribute to more far-flung areas.

Consequently, outright elimination of the virus is unlikely in the foreseeable future – especially in the developing world. More likely, a combination of vaccines, therapeutics and ongoing control measures will bring the risks from Covid-19 down to more acceptable levels, allowing for a phased lifting of border controls and other restrictions on activity. Our forecasts assume that the world will be reaching that point by the end of 2021, although vaccination programmes will need to continue for years afterward.

A combination of vaccines, therapeutics and ongoing control measures will be needed to bring the risks from Covid-19 down to more acceptable levels.

Inflation and the RBNZ.

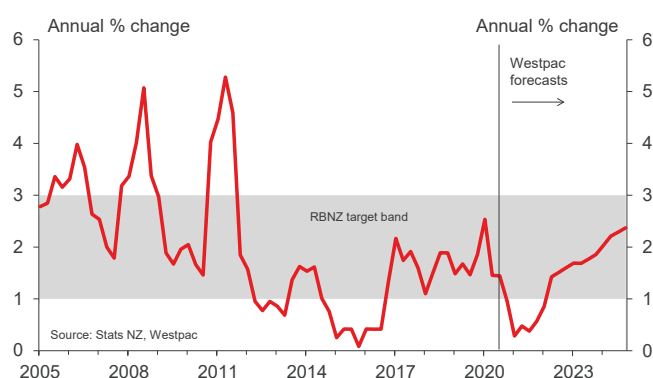
Tools that last.

The economy has fared better than expected but inflation pressures remain weak, so the Reserve Bank will need to keep providing stimulus for a long time. However, its current bond-buying programme is likely to run out of headroom. We expect a switch in the mix of monetary policy tools in order to provide more enduring stimulus. A negative OCR will be part of that mix.

The New Zealand economy's faster than expected rebound from the Covid-19 lockdown has been welcome. But that doesn't translate into upside risks for the inflation outlook. The economy is still running well below its full potential, and that's coming from a starting point where inflation was already persistently on the lower side of the Reserve Bank's target range.

We expect annual inflation to drop below 1% over 2021, even with the substantial monetary stimulus that the RBNZ has delivered to date. Domestic price pressures are likely to ease while spare capacity remains in the local economy. Meanwhile, the weak global economy and a stronger New Zealand dollar point to ongoing softness in import prices. There is evidence of price increases for some items due to supply disruptions, but this doesn't appear to be a widespread issue and will probably prove temporary.

Figure 10: Consumer price inflation



Sub-par inflation and employment mean that the RBNZ will require monetary stimulus for a long time. Its models suggest that it needs to deliver the equivalent of a negative OCR for the next several years. While that projection has been revised up as the economy has fared better than expected, it still points to more stimulus than can be achieved through conventional means.

Fortunately, the RBNZ does have a suite of 'unconventional' policy tools available. Our research suggests that these tools

can successfully stabilise inflation if used with sufficient vigour. However, it's likely that the RBNZ will need to draw on more than one of these tools in order to keep providing stimulus for as long as is needed.

The RBNZ's first step has been a Large-Scale Asset Purchase (LSAP) programme. This essentially involves 'printing' new money by crediting it to banks' settlement accounts, and buying government bonds from them in exchange. The effect of this is to reduce long-term interest rates. Reducing the supply of government bonds available in the market tends to push the interest rate on those bonds down. And since other long-term interest rates are benchmarked against government bond rates, all long-term rates tend to fall. In contrast, short-term interest rates are more anchored to the OCR and are less affected.

The RBNZ's bond buying programme will run out of headroom as Government bond issuance is likely to be much lower than forecast.

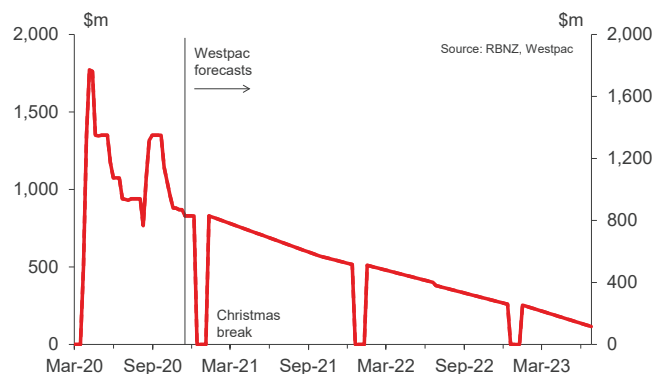
The LSAP currently provides for \$100bn of bond purchases over two years (expanded from \$30bn over one year initially). This is the current limit of the programme. If the RBNZ takes too many bonds out of the market it could become dysfunctional, and any further purchases could end up pushing interest rates higher, not lower.

What's more, the current LSAP limit is calibrated to the Treasury's estimates of how much debt it will need to issue over the coming years. With the economy rebounding much more rapidly than the Treasury expected, it's likely that required bond issuance over the next few years will be lower than previously thought. This means that the LSAP will run out of headroom earlier than previously thought.

For this reason, we expect the RBNZ to engineer a switch in the mix of monetary policy tools, introducing a bank funding

facility by the end of this year and cutting the OCR below zero next year. Together, this would give the RBNZ room to stretch out the \$100bn bond-buying programme over a three-year period, with a correspondingly slower rate of weekly purchases.

Figure 11: Forecast of weekly LSAP bond purchases



The RBNZ has confirmed that it will introduce a Funding for Lending Programme (FLP) for banks in December this year. A FLP means that the RBNZ will make cheap loans directly to banks, at a floating interest rate equal to the OCR (currently 0.25%). Banks will be able to access up to 4% of their total lending with effectively no strings attached, and a further 2% of their lending on the condition that they expand their loan book.

If banks can bring in money more cheaply, they can subsequently lend it out more cheaply while maintaining the same interest margin. So by providing these cheap loans to banks, the RBNZ will engineer a decrease in mortgage rates and business lending rates. There will also be an indirect effect – banks won't need to compete as vigorously for term deposits and wholesale funds, so their interest rates will also fall, further reducing banks' overall funding costs. We estimate that the FLP could reduce mortgage rates by 20 to 25 basis points.

Importantly, the RBNZ has not placed any restrictions on which loans this cheap funding can be used for. This will improve the rate of uptake, but it also ensures that much of the impact will accrue to housing lending. Businesses' appetite to borrow is low at the moment and tends not to be very sensitive to interest rate changes, whereas the housing market is very responsive to interest rates.

The final unconventional measure, which we have been predicting for some time, will be to take the OCR below zero. A negative OCR means that the RBNZ would charge banks interest on their settlement account balances, instead of paying them interest. This would have two effects. First, banks would have an incentive to lend money out rather than getting caught holding costly settlement cash at the end of each day. Second, banks would be less willing to attract deposits, since that would increase their settlement account balances. In order to increase their lending and decrease deposits, banks would have to reduce interest rates.

Since retail lending and deposit rates typically sit at a margin above the OCR, a modestly negative OCR (as we expect) would not result in negative interest rates for bank customers. Indeed, there is a practical constraint to retail deposit rates ever going negative, and that is that people can hoard cash instead of accepting a loss on their bank deposits. Lending rates are generally higher than deposit rates, so if retail deposit rates can't go negative, neither can retail lending rates. However, wholesale interest rates can go negative, because the size and speed of wholesale transactions makes them impossible to conduct with physical cash. Therefore it is possible for bank bill rates, swap rates and government bond rates to drop below zero.

Negative interest rates have been used in several countries, particularly in Europe. The evidence from there suggests that negative rates have a beneficial impact, though they are far from a silver bullet. Banks have not had difficulty in funding themselves when the cash rate is negative – in part because economic weakness meant that there was already an excess of savings over loan demand. Bank profitability has not been impacted, and lending growth has increased modestly. Finally, OCR cuts continue to have a dampening effect on the exchange rate even when they are negative.

A negative OCR would also complement the Funding for Lending Programme. The FLP would provide a source of funding that isn't constrained at the zero lower bound, as term deposits are. Hence, the FLP would bolster the rate of passthrough from an OCR cut to retail lending rates.

We expect the OCR to be reduced in three 25 basis point steps in April, May and August next year, to a low of -0.50%. Once that level is reached, we expect it to remain there until early 2023. Inflation pressures here and worldwide are likely to be muted for some time, and even if they prove stronger than expected, the RBNZ has said that an overshoot of its inflation target is preferable to an undershoot.

Financial market forecasts (end of quarter)

	CPI inflation	OCR	90-day bill	2 year swap	5 year swap
Dec-20	1.0	0.25	0.25	0.00	0.10
Mar-21	0.3	0.25	0.05	-0.10	0.05
Jun-21	0.5	-0.25	-0.30	-0.20	0.00
Sep-21	0.4	-0.50	-0.40	-0.20	0.00
Dec-21	0.6	-0.50	-0.40	-0.20	0.00
Mar-22	0.9	-0.50	-0.40	-0.20	0.05
Jun-22	1.4	-0.50	-0.40	-0.15	0.15
Sep-22	1.5	-0.50	-0.40	-0.10	0.25
Dec-22	1.6	-0.50	-0.30	0.00	0.35
Mar-23	1.7	-0.25	-0.10	0.10	0.45

Agricultural outlook.

Go less West.

East Asia has weathered the Covid storm relatively well and Eastern economies are now rebounding strongly. With the lion's share of our food exports heading to this region, the rebound has helped our agricultural exports to generally perform well this year. And in some cases, like kiwifruit, very well. With demand for our exports robust, Covid challenges are more local, and notably labour shortages are increasingly biting.

China and the rest of East Asia have taken relatively smaller economic hits from Covid. In fact, we expect that the Chinese economy will continue to grow over 2020, unlike most of the rest of the world. This returning strength in the Chinese economy is now flowing through to demand for New Zealand agricultural exports. Note around 60% of New Zealand's food exports head to Asia. For something like mutton, the news is even better, as China accounts for around three quarters of our exports.

This Eastern boost has been noticeable across the majority of export sectors. Horticultural exports remain very strong, with kiwifruit export prices at or near last year's record highs. Global dairy prices have also rebounded from their earlier Covid falls, prompting us to revise our 2020/21 milk price up to \$7.00/kg back in October. Similarly, meat and forestry prices have recovered some lost ground to sit at or around long-run average levels.

However, those sectors heavily exposed to the US or Europe have struggled. Venison is a case in point. The majority of venison exports are destined for Europe (Germany) and as a result farmgate prices remain down by over a quarter from their pre-Covid levels. Similarly, wool export prices are very weak. While most wool is exported to China, this wool is often

then used to manufacture apparel and then re-exported to Western markets in the US and Europe. Wool substitutes have also benefitted from low oil prices, putting further pressure on global wool prices.

Looking to 2021, we anticipate that the strength of Asian economies will continue to underpin the performance of most of our agricultural exports. Indeed, in a Covid disrupted world, New Zealand's heavy exposure to Asia, including China, has provided a safe haven of sorts from the otherwise heavily impacted global economy. That does beg the question: how exposed are New Zealand's exports to China? We delve into that question in our *Special Topic*.

There is a more local Covid spanner in the works for agriculture. Labour shortages are increasingly biting. Some foreign workers have been stuck overseas, and while that has been largely manageable through the winter, the shortage is becoming more acute as we move closer to summer. Already, some pipfruit growers, for example, are planning around which varieties not to thin and/or harvest in the event that the necessary workers don't become available. In turn, these shortages are putting the focus squarely on government policy and crucially the timeliness of the Government's interventions.

Commodity price monitor

Sector	Trend	Current level ¹	Next 6 months
Dairy	We upgraded our 2020/21 milk price forecast to \$7.00/kg in October on the back of strong Chinese demand.	Average	→
Beef	Prices are under some pressure as global beef supply lifts and as the Chinese pig herd rebuild gains momentum. We expect prices to continue to drift lower as these trends play out.	Average	↘
Lamb/Mutton	Lamb and mutton prices have continued to be relatively resilient without nearing the heights of 2019. From here, we expect a relatively moderate seasonal fall in prices this summer/autumn.	Average	↘
Forestry	Prices have rebounded modestly as economic activity in China rebounds. We expect further modest gains.	Average	↗
Horticulture	The stellar kiwifruit season has continued. Apple prices are also firm, albeit down slightly on 2019.	High	→
Wool	Recent prices are hinting at a lift. However, we anticipate this may prove a false (Covid) dawn.	Low	→

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

Exchange rates.

NZ dollar's Covid slide in the rear-view mirror.

The New Zealand dollar, like the New Zealand economy, has proved relatively resilient this year. After an early Covid-related slide, the New Zealand dollar has recovered most, if not all, of its lost ground. Looking ahead, we largely expect this resilience to continue. If anything, the New Zealand dollar may drift a little higher against the key US dollar, but could fall against the Australian dollar.

Since our last quarterly update, the New Zealand dollar has solidified and built further on its mid-year rebound. Against the US dollar, the New Zealand dollar now stands higher than at the start of the year, meaning the currency's slide during the early stages of the Covid outbreak and lockdown is well and truly in the rear-view mirror.

One catalyst for the New Zealand dollar's resilience is the stronger than expected rebound in the New Zealand economy post-Covid. There has been a string of upside economic data surprises over recent months. And as we have discussed in the *New Zealand economy* and *Global economy* sections, New Zealand's economy and Covid case numbers have fared far better than those in the US and Europe.

Global Covid developments have also supported the New Zealand dollar. On this front, positive Covid vaccine developments have boosted financial market sentiment. A positive market tone normally boosts the New Zealand dollar, and this has been the case recently. In addition, as financial markets have pared back expectations for OCR cuts, long-term interest rates have risen, translating into a higher New Zealand dollar.

Meanwhile, Joe Biden's relatively 'clean' presidential election win has taken some of the risk out of US politics. Financial markets have reacted positively to this result and the US dollar has weakened accordingly as global investors have shifted out of currency safe havens like the US dollar and into riskier currencies, including the New Zealand dollar. However, the still split US Congress makes a large fiscal stimulus package less likely, implying some ongoing risk for the global economy, and limited downside for the US dollar.

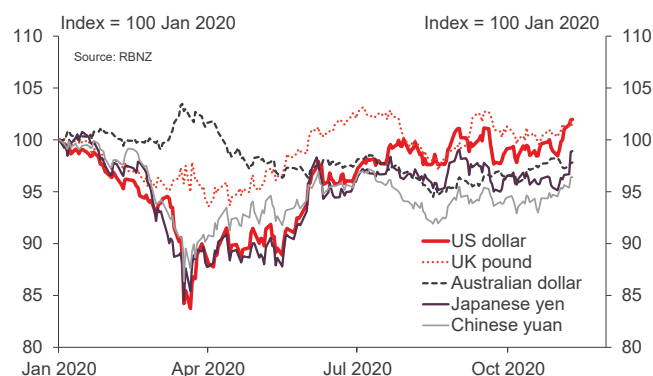
All up, we expect the New Zealand dollar to maintain its strength against the US dollar, ending 2020 at around 69 cents. If anything, we expect the US dollar weakness to persist and as such we have pencilled in for the New Zealand dollar to lift to 70 cents by the end of 2021.

Meanwhile, we expect the New Zealand dollar to fall against the Australian dollar. This forecast is based on our expectation that the Reserve Bank of New Zealand will run a looser monetary policy over the year ahead than its

counterpart across the Tasman. On this basis, we expect the New Zealand dollar to dip below 90 Australian cents by the second half of 2021.

Against the euro and the pound, similar factors are in play. We expect the New Zealand dollar to weaken against both currencies over 2021 as both the European Central Bank and the Bank of England are likely to run tighter monetary policy than our Reserve Bank. A likely final Brexit agreement should boost the pound and see the New Zealand dollar fall back to 50 pence by the start of 2022.

Figure 12: NZ dollar exchange rate vs major countries



Exchange rate forecasts (end of quarter)

	NZD/ USD	NZD/ AUD	NZD/ EUR	NZD/ GBP	NZD/ JPY	TWI
Dec-20	0.69	0.92	0.58	0.53	72.5	73.4
Mar-21	0.69	0.91	0.58	0.52	72.5	72.9
Jun-21	0.69	0.91	0.57	0.51	73.1	72.5
Sep-21	0.69	0.88	0.57	0.51	73.1	71.8
Dec-21	0.70	0.88	0.57	0.51	74.2	72.2
Mar-22	0.70	0.88	0.56	0.50	74.2	71.9
Jun-22	0.70	0.88	0.56	0.50	74.9	71.7
Sep-22	0.70	0.89	0.56	0.50	74.9	71.7
Dec-22	0.70	0.89	0.56	0.50	74.9	71.6
Mar-23	0.70	0.90	0.56	0.50	74.8	71.4

Special topic.

Which New Zealand exports are most exposed to China?

China is big and its market is highly profitable. But as our exports to China rise, the risk of over-reliance also increases. With this in mind, we judge that the tourism, seafood and education sectors plus gold kiwifruit exports have the highest exposure risk to China. On the flipside, we judge that the wine and dairy sectors have the lowest risk exposure, while the meat, wood and overall fruit sectors lie somewhere in between.

In 2017, China surpassed Australia and became our largest export market. But as exporters' focus has switched to China, New Zealand's exports have become less diversified, exposing exporters to concentration risk.

China has at times selectively restricted access to its lucrative market to advance its wider strategic interests. China has used a variety of methods to impact trade flows. Also, the trade rules that apply in other markets are not necessarily enforceable in China, and breaches of intellectual property rights, for example, have occurred.

While the New Zealand-China trade relationship is strong, China could in the future choose to disrupt New Zealand exports. Australia's recent trade tensions with China over coal, barley and beef amongst other exports are a case in point.

At a high level, NZ-China trade flows reflect each economy's relative strengths. By and large, the complementary nature of our trade relationship means New Zealand's risk exposure is less than the outright level of exports would suggest.

That said, in a recent article we took a look at which sectors within New Zealand are most vulnerable should these disruptions occur.¹ This risk is not simply a question of how much a sector exports to China. We believe the more relevant questions are how strategically important is New Zealand's export supply to China and/or how readily China can source supply either from other countries or domestically. Indeed, China has options. Where it has options, New Zealand export sectors face greater exposure risk.

With the above in mind, our view is that tourism, seafood, and gold kiwifruit have the highest exposure. For these exports, essentially China has options (including domestically) for alternate supply. Education (universities and English language schools) also faces similarly high risk.

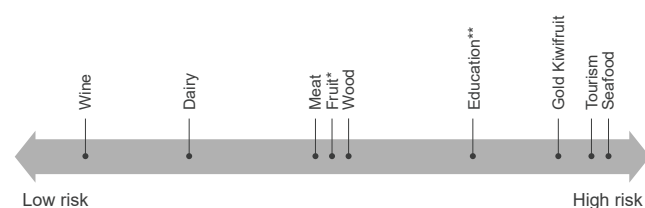
The kiwifruit sector illustrates the risks well. New Zealand is a small fruit supplier, accounting for only 4.5% of China's total

fruit imports. In addition, China has a competitive domestic horticulture industry, which notably has begun to grow Zespri's Sungold kiwifruit variety. And to date, Zespri has had limited success enforcing its intellectual property rights in the Chinese market.

We judge that the dairy and wine sectors have the lowest risk exposure. For dairy, it is a case of China needing us as much as we need them. New Zealand accounts for around half of China's dairy imports. In the case of wine, China is a small market for New Zealand, so the sector's reliance on China is also small.

Meanwhile, we classify the meat, wood and wider fruit sectors as having medium exposure risk. New Zealand accounts for a relatively significant share of global meat and wood exports, so China is reliant on New Zealand to a degree. In the case of meat specifically, China also recognises New Zealand as a reliable and safe exporter. Looking at the wider fruit sector, exporters remain relatively diversified and thus less reliant on China.

Figure 13: China exposure risk by export sector



* Fruit sector exposure risk excluding gold kiwifruit

** Education sector exposure risk includes universities and English language schools

Source: Westpac

¹ <https://www.westpac.co.nz/assets/Business/Economic-Updates/2020/Bulletins-2020/China-Exposure-Oct-2020-Westpac-NZ.pdf>

Economic and financial forecasts.

New Zealand forecasts

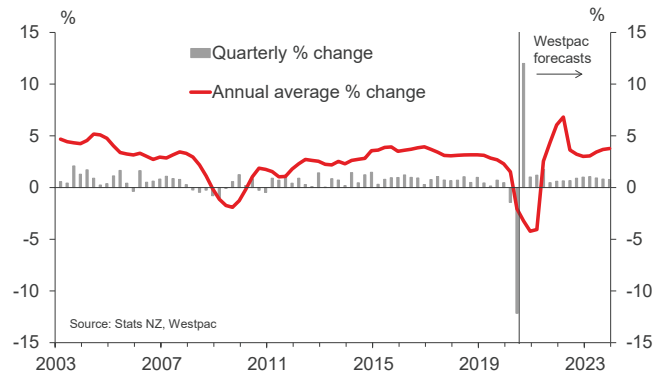
GDP components	Quarterly % change				Annual average % change			
	Jun-20	Sep-20	Dec-20	Mar-21	2019	2020	2021	2022
GDP (production)	-12.2	12.0	1.0	1.3	2.3	-4.2	6.1	3.0
Private consumption	-12.1	9.8	3.1	2.2	2.9	-3.6	8.9	3.3
Government consumption	1.7	1.4	1.2	1.0	4.2	5.4	4.4	3.1
Residential investment	-22.8	31.0	6.0	-2.0	4.3	-9.3	6.1	0.8
Business Investment	-19.6	14.3	3.8	1.8	1.7	-10.4	5.5	3.7
Exports	-15.8	-3.4	-0.4	-0.4	2.4	-14.9	-3.1	11.8
Imports	-24.6	6.9	10.5	1.6	2.2	-17.7	9.2	9.8
Economic indicators	Quarterly % change				Annual % change			
	Jun-20	Sep-20	Dec-20	Mar-21	2019	2020	2021	2022
Consumer price index	-0.5	0.7	0.0	0.1	1.9	1.0	0.6	1.6
Employment change	-0.3	-0.8	-0.6	0.1	1.2	-0.7	1.7	3.4
Unemployment rate	4.0	5.3	6.0	6.2	4.1	6.0	6.0	5.2
Labour cost index (all sectors)	0.2	0.6	0.5	0.2	2.6	1.6	1.5	1.4
Current account balance (% of GDP)	-1.9	-1.4	-1.7	-2.4	-3.4	-1.7	-4.1	-4.0
Terms of trade	2.5	-4.0	2.5	1.0	7.1	0.2	1.4	-0.1
House price index	-1.3	3.7	4.0	3.7	4.6	9.4	13.0	6.5
Financial forecasts	End of quarter				End of year			
	Jun-20	Sep-20	Dec-20	Mar-21	2019	2020	2021	2022
90 day bank bill	0.28	0.27	0.25	0.05	1.17	0.25	-0.40	-0.30
5 year swap	0.40	0.23	0.10	0.05	1.18	0.10	0.00	0.35
TWI	69.7	72.0	73.4	72.9	71.4	73.4	72.2	71.6
NZD/USD	0.62	0.66	0.69	0.69	0.64	0.69	0.70	0.70
NZD/AUD	0.94	0.93	0.92	0.91	0.94	0.92	0.88	0.89
NZD/EUR	0.56	0.57	0.58	0.58	0.58	0.58	0.57	0.56
NZD/GBP	0.50	0.51	0.53	0.52	0.50	0.53	0.51	0.50
RBNZ bond purchases (\$bn)	18.3	33.1	43.5	53.2	-	43.5	76.8	95.6
Net core Crown debt (% of GDP)	27.1	30.6	33.0	35.7	20.7	33.0	39.0	42.2

International economic forecasts

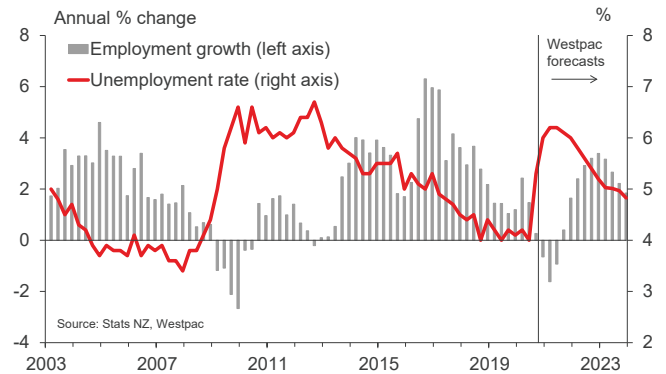
Real GDP (calendar years)	Annual average % change					
	2017	2018	2019	2020f	2021f	2022f
Australia	2.4	2.8	1.8	-3.3	2.3	3.4
China	6.9	6.8	6.1	1.7	10.0	5.6
United States	2.3	3.0	2.2	-3.6	3.1	2.2
Japan	2.2	0.3	0.7	-5.8	2.2	1.7
East Asia ex China	4.7	4.4	3.7	-2.9	4.9	4.7
India	7.0	6.1	4.2	-10.6	9.5	8.0
Euro Zone	2.6	1.8	1.3	-8.3	3.1	3.0
United Kingdom	1.9	1.3	1.5	-11.3	5.7	5.0
NZ trading partners	4.1	4.0	3.5	-2.5	5.7	4.2
World	3.8	3.5	2.8	-3.8	5.3	4.0

The economy in six charts.

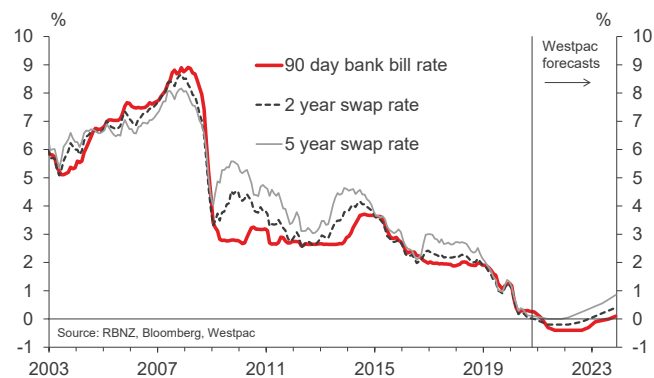
New Zealand GDP growth



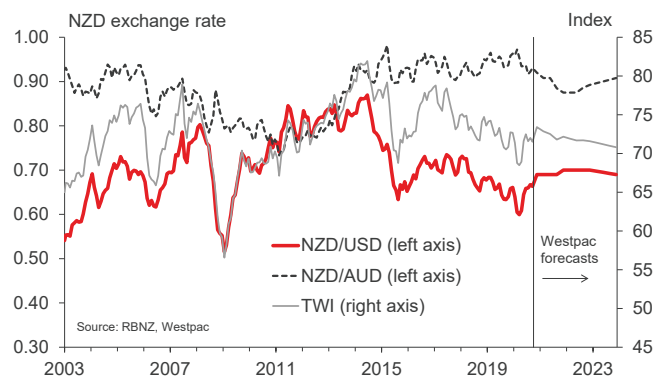
New Zealand employment and unemployment



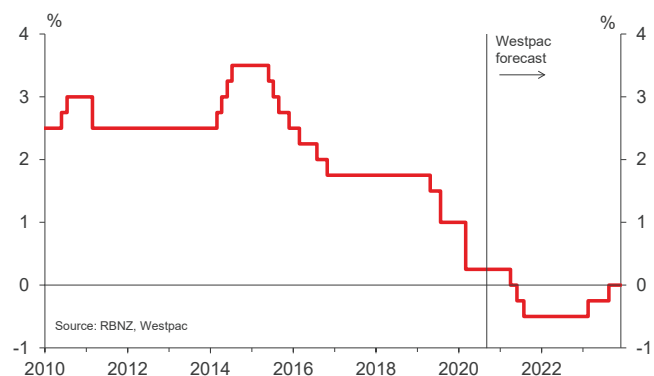
90 day bank bills, 2 year swap and 5 year swap rates



Exchange rates



Official Cash Rate



New Zealand house prices



Contact the Westpac economics team.

Dominick Stephens, Chief Economist

+64 9 336 5671

Michael Gordon, Senior Economist

+64 9 336 5670

Satish Ranchhod, Senior Economist

+64 9 336 5668

Nathan Penny, Senior Agri Economist

+64 9 348 9114

Paul Clark, Industry Economist

+64 9 336 5656

Any questions email:

economics@westpac.co.nz

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