



Economic Overview.

Rolling with the Covid punches.

August 2020



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Note from Dominick.

Welcome to our second *Economic Overview* since the onset of Covid-19 in New Zealand.

Health authorities have learned a lot about Covid-19, such as the value of wearing facemasks. In the same vein, economists have learned two important lessons. First, the economy can bounce back surprisingly readily from a lockdown. Second, countries that have lost control of Covid-19 have much weaker economies than others. I think this makes it clear that when Covid-19 crops up, a short sharp lockdown is the right medicine for both economy and health.

The current resurgence of the virus in Auckland makes the future very uncertain. Our main forecast scenario assumes that the current outbreak is relatively short-lived. In that case our forecasts would be much the same as before – we would still see a protracted economic downturn and unemployment rising to 7%, although the economic fallout would be less severe than we feared when Covid-19 first emerged.

We have also modelled an alternative scenario, in which we ask what would happen if New Zealand went into another strict Level 4 lockdown. Economic activity would be severely constrained during the lockdown, and we would forecast unemployment rising to 8%. But the additional lasting damage would actually only be an increment on top of what has already happened. That's because the majority of the economic cost of Covid has been the lack of international travel, and another lockdown would not do any new damage on that front.

In either scenario, we think the OCR will drop below zero next year. That will probably cause another drop in retail interest rates, but I expect that all interest rates paid and received by ordinary people will remain above zero.

A stylized black ink signature of Dominick Stephens.

Dominick Stephens - Chief Economist

New Zealand economy.

Lessons from lockdown.

As the country faces another round of Covid-19 restrictions, we can draw some important lessons from the first lockdown. The economy appears to have readily bounced back as restrictions were lifted, with the lasting damage largely being connected to the loss of international travel. Rapid elimination of the virus, allowing the domestic economy to operate without restrictions, was a key factor, as was the extensive financial support provided by the government.

A few months ago the outlook for the New Zealand economy was extremely uncertain. The nationwide lockdown announced in late March was unprecedented. So was the scale of the financial support provided by the government. At the time there was a wide range of views about how deep the downturn would be, and how quickly the lights could be turned back on once the lockdown ended.

Today, there is substantial evidence that the economy has fared better than even our forecasts (and we were at the less pessimistic end of the range). Part of that was due to the unexpected but welcome drop down to Alert Level 1 much sooner than expected, and the subsequent 102 days without community spread of Covid-19. But the more crucial factor was that the economy bounced back much more readily than anyone predicted once the alert level was lowered.

The New Zealand economy's rapid rebound from the first lockdown provides some important lessons as the country deals with a fresh outbreak.

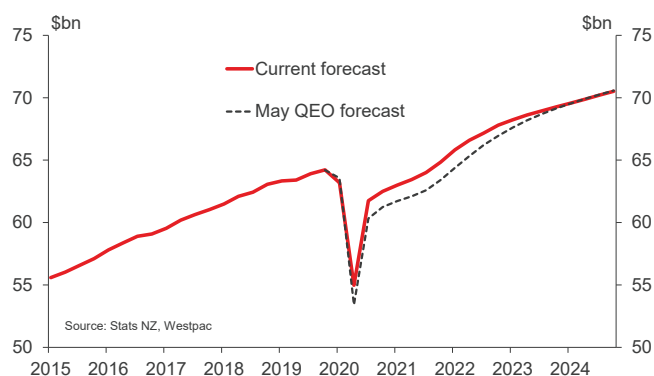
This provides some important lessons as the country faces another temporary round of Covid restrictions. First, it shows that eliminating the virus, allowing the domestic economy to operate without restrictions, is a hugely valuable achievement from an economic perspective as well as the obvious health benefits. Second, it suggests that bouts of tighter restrictions are a feasible response when flare-ups of the virus do occur. With that in mind, we have factored the likelihood of future flare-ups into our central forecast track.

Finally, it demonstrates the value of early, targeted fiscal support. For the most part households and businesses were able to ride through the lockdown without having to make severe cutbacks, which then allowed them to re-accelerate rapidly as the restrictions were lifted. Admittedly this does

push some of the cost of the crisis onto future generations, although a more severe downturn would also have been costly in terms of lost tax revenue.

To be clear, much of the economic pain still lies ahead of us. Those sectors that are connected to international travel and tourism have taken a severe hit, and recent developments in the pandemic suggest that New Zealand's borders will remain closed for even longer than previously thought. We expect that by the end of this year GDP will remain around 3% below its pre-Covid level (or about 5% below trend, considering the growth that would have happened in the absence of the virus). And there will inevitably be some longer-term costs even as life gradually returns closer to normal.

Figure 1: Quarterly GDP forecasts



The recovery is real.

The economy's rebound out of lockdown is apparent across a wide range of indicators. Electricity demand rose swiftly as the restrictions were eased and businesses were able to reopen. By July, the first full month at Alert Level 1, spending on credit and debit cards had risen strongly and was higher than at the same time a year ago. Registrations of both cars and commercial vehicles were almost back to pre-lockdown levels. Consents for new home builds were also close to previous levels. And the PMI surveys for both

the manufacturing and services sectors have risen to levels consistent with strong growth.

Initially, it wasn't clear to what extent the bounce in consumer spending reflected pent-up demand during the lockdown. But the length of time that spending has held up at these levels argues against this. A closer look at the card spending data shows that there was indeed a burst of activity in areas such as homewares and clothing, but even after this surge had run its course, spending in these categories has held up.

Elsewhere, spending has either held steady or is yet to return to its pre-Covid levels. The areas that have seen the weakest recovery in spending are those that are affected by the loss of international tourism, such as transport, accommodation and recreational activities. In contrast, those areas that are largely driven by domestic demand are operating much closer to normal levels.

Figure 2: Electronic card spending by category

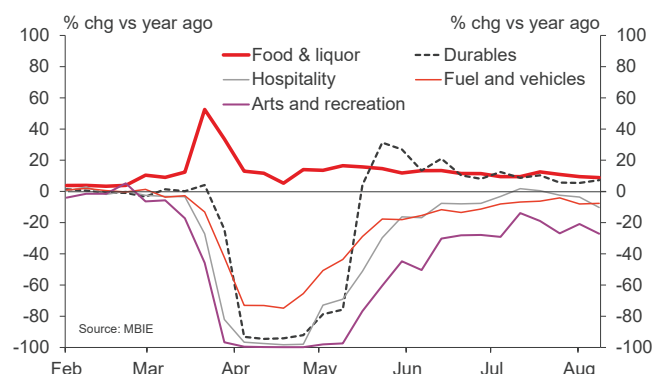
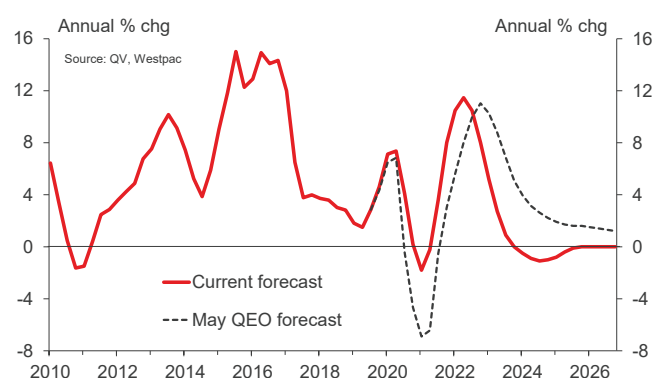


Figure 3: House price forecasts



One area that has clearly seen some pent-up activity is the housing market, with sales rising sharply to a four-year high in July. However, that reflects a rise in interest among both buyers and sellers, as record-low mortgage rates compete with the hit to incomes for homebuyers and tenants. House price growth slowed to zero in the June quarter, and we expect prices to fall 2.5% between now and the end of the year – although that is more moderate than our original forecast of a 7% decline. We also expect a rapid pickup in

house prices next year, as the economy stabilises and the impact of low mortgage rates really comes through.

On the flipside, there are some indicators that show the economy's rebound is less than complete. Traffic volumes are not quite back to previous levels, suggesting some changes in the pattern of people's movements since the lockdown. The monthly employment indicator, based on income tax records, had almost returned to pre-Covid levels by June, but that falls short of the growth in the working-age population over that time. Moreover, job advertisements are still about 20% down on a year ago.

It's also unclear how employment will fare as the time-limited support provided by the Government, such as the wage subsidy scheme, runs out. Prior to the recent extension of the scheme, around 380,000 jobs were still being supported by the subsidy. Many of these jobs will be in areas related to travel and tourism, which means that some fraction of them will likely disappear once the wage subsidy expires.

The official unemployment rate dropped to 4% in the June quarter, but measurement was blurred by the lockdown. Our best guess is that the true rate is currently around 5%. We expect unemployment to peak at 7% by the end of this year as further layoffs are announced. However, that's well shy of the 9.5% peak that we expected back in May.

Figure 4: Unemployment rate forecasts



A brief scare?

With a fresh outbreak of Covid-19 this month, some previous restrictions have been re-imposed, with Auckland expected to be at Alert Level 3 and the rest of the country at Level 2 for two weeks. If that's as far as it goes, we expect the economic impact to be relatively small. Each week around \$300m of economic activity will be foregone, which equates to 0.5% of quarterly GDP. However, for a brief lockdown a higher proportion of that lost activity would be recouped shortly afterwards, so the actual lasting economic damage would be significantly smaller than this \$300m figure.

The cost will be smaller than for the first lockdown because the economy is now taking a hit from an already damaged baseline. For example, the latest lockdown can't reduce international travel and associated services much further,

because spending on these areas is already close to zero. Similarly, some events like sports fixtures were already cancelled before this lockdown, and some New Zealanders were already behaving more cautiously than normal.

However, a more sustained (but successful) lockdown, or an uncontrolled outbreak in New Zealand, would have more severe implications for our forecasts. We consider those scenarios later in this *Economic Overview*.

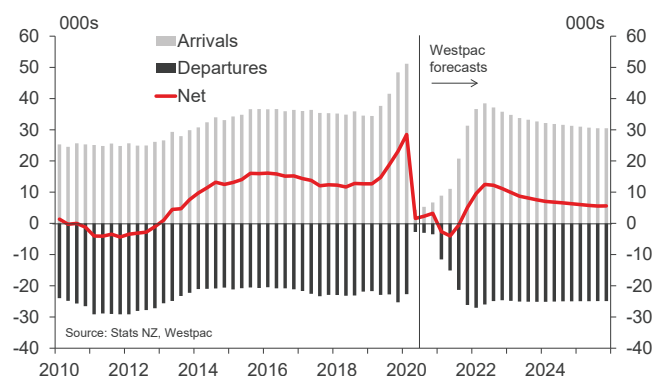
Our forecasts allow for the likelihood of future bouts of community transmission. Another full lockdown would have more severe implications.

Over the horizon.

Beyond the initial rebound out of lockdown conditions, we expect economic growth to return to a more modest pace next year, and GDP to remain below its potential for some time. The ‘hard’ limit on the extent of the rebound is the ongoing closure of the borders. International tourists and students account for about 5% of GDP directly, with further indirect effects on spending and employment. That’s only partly counterbalanced by the fact that New Zealanders’ ability to travel overseas is also limited, which could see some spending redirected towards local holidays or to other big-ticket items.

Our forecasts assume a staggered reopening of the borders, starting with Australia in April and the rest of the world phased in from July onwards. A reluctance to travel means that numbers are unlikely to reach their capacity for some time even as travel restrictions ease. And of course, this timeline is subject to considerable uncertainty, including when widespread vaccination becomes feasible, and whether there are further waves of infections in our major overseas markets.

Figure 5: Quarterly net migration



The border closures will also have an impact on the rate of growth via migration trends. Last year net migration added about 70,000 people to the population, but now the monthly

pace is effectively down to zero. Contrary to reports, the number of returning New Zealanders is actually much lower than it was before Covid-19. At the same time, lower migration will alleviate housing shortages faster than we had previously thought. We expect housing construction to slow again next year, as the existing pipeline of work is completed and developers become reluctant to expand further.

The coming years are also likely to see a downturn in investment spending by businesses, weighed down by lingering uncertainty, weakened business balance sheets and less need to invest in capacity. Commercial construction, especially for hotels and office space, will face reduced demand in the coming years. Increased government spending in areas like infrastructure will provide some offset, but it will still take time for many of these projects to break ground, so construction firms still face a tough time ahead.

Put together, this suggests that consumer spending, along with fiscal stimulus (including transfers to households) will carry the weight of recovery in 2021.

In the following years, a gradual re-opening of the borders will help to bring economic activity closer towards its pre-Covid trends. But even then there is likely to be some degree of economic ‘scarring’ over the long term. The downturn appears to have hastened the demise of heavy manufacturing in New Zealand, with the Tiwai Point aluminium smelter set to close and the fate of others under review. That could mean a wrenching adjustment for the affected regions, though it could also open up new opportunities in the longer term. For example, the closure of Tiwai will free up a supply of cheap electricity while reducing New Zealand’s carbon emissions.

Some of the effects will be more subtle. The hit to migration flows will mean a higher degree of skills mismatch. Employers will find it harder to bring in the right people for the job, and New Zealanders will be more reluctant to move to where they could reach their full potential. Ultimately, this will mean a lower level of productivity than otherwise.

Finally, the scale of the fiscal support package, while appropriate at the time, has put the country further behind in terms of dealing with its long-term fiscal challenges, as we outline in the *Outlook for government debt* section.

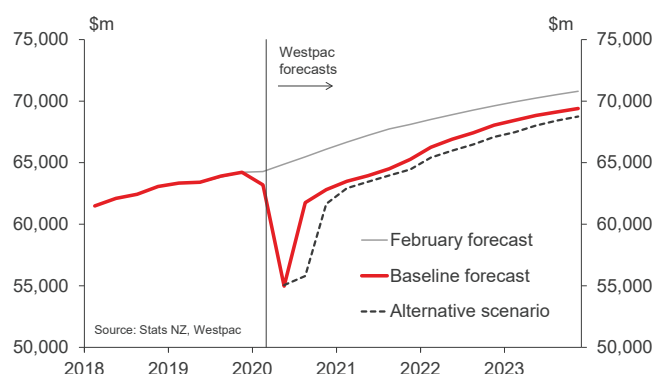
What if we return to Level 4?

An alternative scenario.

Another Covid-19 related lockdown of the economy would push unemployment higher and result in more government debt. However, with the borders already closed, the additional damage to the economy would only be an increment on top of the damage Covid-19 has already wrought. In contrast, if there's an outbreak and the spread of the virus couldn't be controlled, the economic damage would be much more severe.

The charts in this section show how our forecasts would change if the current outbreak of Covid-19 were to result in another strict (but successful) Level 4 lockdown, nationwide, lasting six weeks. This scenario is compared to our base case forecasts, which assume that the current outbreak results in the economy at Alert Levels 2 or 3 for a few weeks.

Figure 6: Level of quarterly GDP



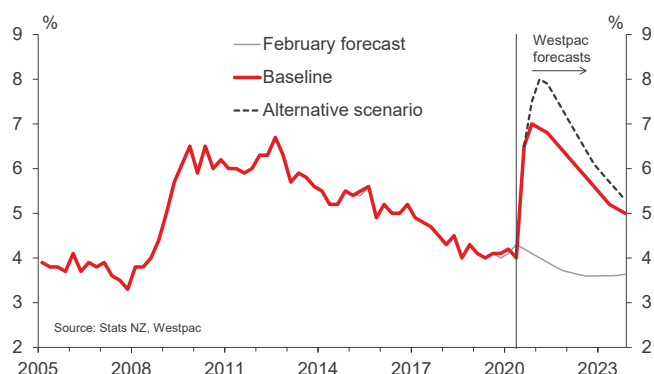
During the April lockdown, economic activity fell sharply. The economy did rebound very quickly, but we estimate that it remains about 5% below our pre-Covid forecast. A major reason for this continued weakness is the closure of our borders and the related loss of international tourism and education. As discussed in the *New Zealand economy* section, conditions in other parts of the domestic economy actually bounced back much more quickly than anticipated, in many cases to pre-Covid levels.

If there was another Level 4 lockdown, we anticipate that economic activity in the September quarter would look similar to June. After that, economic output would rebound quickly to around 5.5% below our pre-Covid forecast. This additional half percentage point of economic damage is due to further business closures and job losses, as well as lower investment activity. While this additional economic damage is serious, it is a relatively small increment compared to the damage wrought by the original outbreak. That's because, with

New Zealand's borders still closed, there wouldn't be further significant damage to the already embattled international tourism or export education sectors.

A key reason for the resilience of the economy after the first lockdown was that the Government rolled out a massive stimulus package, and we assume that they would follow suit if there was another lockdown. That would leave the Government's books in much worse shape, with net debt peaking at around 55% of GDP, compared to 47% in our baseline forecast. Even so, unemployment would likely rise to 8% (compared to a peak of 7% in our baseline forecasts). In addition, another lockdown would leave the economy with deeper scars, such as lingering weakness in investment spending. As a result, the recovery from Covid could be even more gradual, with GDP around 0.5 percentage points lower at the end of 2025 than in our base case.

Figure 7: Unemployment rate



While New Zealand's experience earlier this year has shown that we can bounce back from a successful lockdown, it would be a very different story if there was an outbreak that couldn't be contained. As we're seeing in other economies, in such circumstances activity would take a much larger hit and there would likely be further long-term economic scarring. That highlights that in the long run there isn't really a trade-off between public health and economic activity.

Outlook for government debt.

Less short-term pain, long-term challenges remain.

With the New Zealand economy rebounding from the lockdown better than expected, the Government's books will be in better shape than we feared. Unless there is another strict lockdown, it looks likely that the Government will return to surplus sooner and net debt will peak at a lower level than previously forecast. However, New Zealand's fiscal position has still weakened significantly, bringing long-term fiscal challenges into sharper focus.

Covid-19, the lockdown and the policy response have left a significant hole in the Government's books. We estimate a whopping 2019/20 deficit of \$27bn, reversing the healthy trend of five consecutive surpluses.

However, the economy has fared considerably better than expected back in May. The lockdown was both shorter and more effective than we or the Treasury anticipated. Similarly, the wage subsidy bought firms and workers precious time, leading to fewer business closures and job losses than previously feared. Consequently, tax revenues have been considerably firmer than expected. Expenditure has also been lower than expected, as there was less take-up of some rescue plans than forecast. The Government has held back \$14bn of its \$62bn Covid Recovery Fund.

All up, the fiscal outlook is shaping up better than first feared. We now expect a 2020/2021 deficit some \$10bn or so less than the Treasury forecast at Budget 2020. And over the five-year forecast period, we anticipate total deficits roughly \$30bn less than at the Budget. Accordingly, we expect that the Debt Management Office will reduce its plan for issuing debt, to \$50bn this fiscal year and \$35bn next (previously \$60bn and \$40bn).

As explained in the *What if we return to Level 4?* section, if New Zealand went into another Level 4 lockdown, the Government would have to expand its rescue measures and would suffer a reduction in revenue. But even in that case, we see government debt peaking at a still-manageable 55%, compared to 47% in our central scenario.

The debt the Government has incurred in the course of its economic rescue may be perfectly manageable, but New Zealand will still face the long-term fiscal challenges related to an ageing population, such as the cost of New Zealand Superannuation and the provision of health services. And we note that some of the Covid policy responses such as permanent business tax cuts and benefit payment increases, while providing a short-term economic boost, will exacerbate these long-term fiscal challenges.

With that in mind, future governments are going to have to make tough choices – either spend less or tax more. Which path is taken will depend on which party is leading the Government at the time. If the decision is to tax more, our pick is some form of tax on wealth. Wealth inequality is a burning social and economic issue, and most economists agree that New Zealand taxes wealth too lightly and overtaxes income. In other words, we suggest one fiscal eye on the short-term pain, and the other on the long-term challenges that remain.

Figure 8: Operating balance before gains and losses

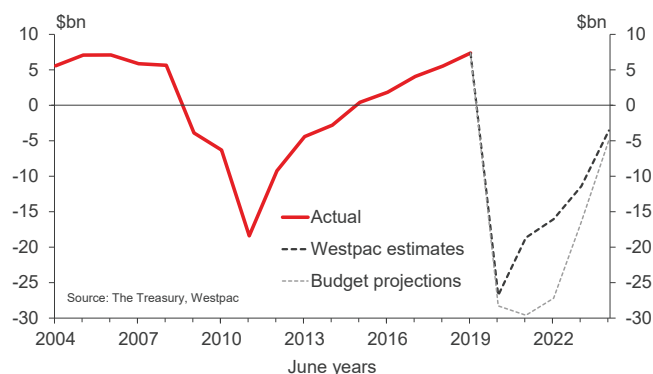
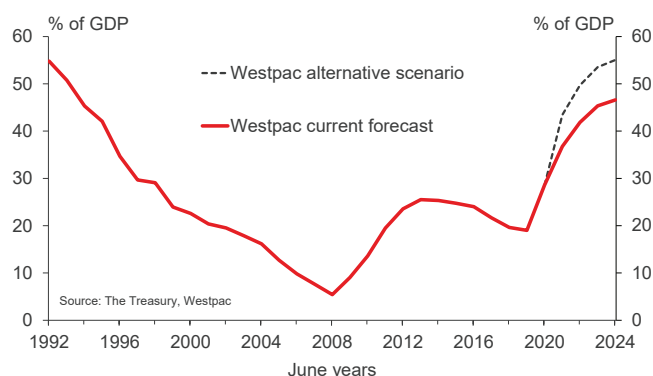


Figure 9: Net core Crown debt as a % of GDP



Global economy.

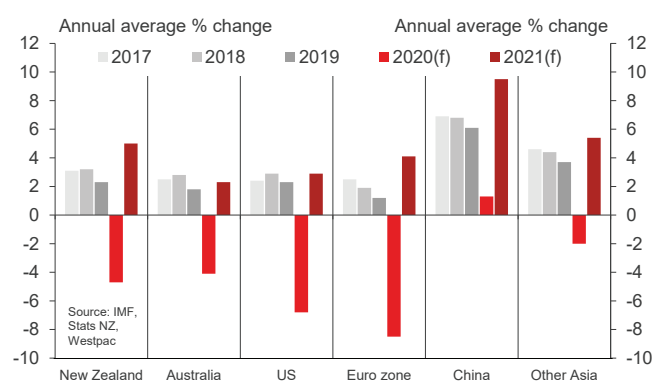
Polar opposites.

A stark divergence has opened up across economies in the wake of Covid-19. Countries like China, which acted early and implemented successful lockdowns now find their economies on firmer footing. In contrast, those countries that had less stringent lockdowns, like the US, are facing continuing outbreaks and lingering weakness in economic conditions.

The outbreak of Covid-19 and the related measures to protect public health have reverberated around the globe, and we are now forecasting that global economic output will contract by 4.3% over 2020.

Economies are starting to reopen again and global GDP growth is set to pick up over the year ahead. However, while all countries have been wrestling with the same shock, their responses to the virus and degree of success in controlling its spread have been very different. That's resulted in stark divergences in economic conditions across our major trading partner economies. Countries that have implemented successful lockdowns are generally doing much better economically than countries that have not – illustrating that the 'choice' between health and economy was always a false dichotomy.

Figure 10: Global GDP growth



At the head of the pack is China. Earlier this year, the imposition of tight restrictions by Chinese authorities suppressed the spread of the virus, but also saw GDP falling by 10% in the March quarter. The benefit of this aggressive action is now evident. GDP rebounded by 11.5% in the June quarter, with a recovery in production levels and the reopening of the services sector.

Looking ahead, we expect a continued acceleration in the Chinese economy. Government support for investment

and infrastructure will help to bolster demand. That will be reinforced by a further rise in household consumption spending on the back of strong growth in hours worked, improved confidence and the availability of credit. On top of those factors, the diversion of household spending away from international travel and education is also likely to support demand in the domestic economy.

At the other end of the spectrum is the United States. After US economic output fell 9.5% in the June quarter, we were beginning to see signs of a nascent recovery, including a firming in the jobs market. However, the US reopened its economy early, allowing a second wave of the virus to take hold. That has stymied the recovery and an extended period of weak growth is a real possibility. The outlook for the US has been further clouded by the protracted political wrangling around the provision of further stimulus, as well as the upcoming presidential election.

The outlook for the Australian economy has also deteriorated. Despite the initial success of Covid-related health restrictions, surging case numbers have pushed Victoria (which accounts for around 23% of the Australian economy) back into lockdown. There are also local outbreaks being reported in other states. Those developments have prompted us to revise our forecast for GDP growth in 2020 down to -4.7%. And although growth is expected to pick up over the year ahead, economic activity at the end of 2021 is still expected to be 1.8% lower than at the end of 2019.

Countries that have implemented successful lockdowns are generally doing much better than countries that have not.

While the downturn in the global economy through the first half of the year has been massive, it would have been much worse if not for significant support from monetary and fiscal policy. Governments around the world have rolled

out a range of support measures, with a particular focus on protecting jobs and incomes. A number of governments have also introduced policies to support lending to businesses. In countries like Australia, Japan and the US, recently introduced spending has dwarfed the stimulus measures rolled out during the Global Financial Crisis.

It will be difficult for any form of stimulus to offset the disruptions to economic activity unless there are also comprehensive measures in place to protect public health.

While fiscal stimulus has been vital for the global economy, it's set to provide less of a boost to global growth as we head into the new year. Many of the stimulus measures that have been introduced are only providing a temporary 'sugar rush' for household incomes and spending. In addition, in countries like the US, a number of the measures that have been introduced will roll off over the coming months. And even if some programmes are expanded, new spending is not likely to be as generous as the initial packages were, especially given the huge cost of the measures that were introduced.

Figure 11: Announced Covid-related fiscal support measures

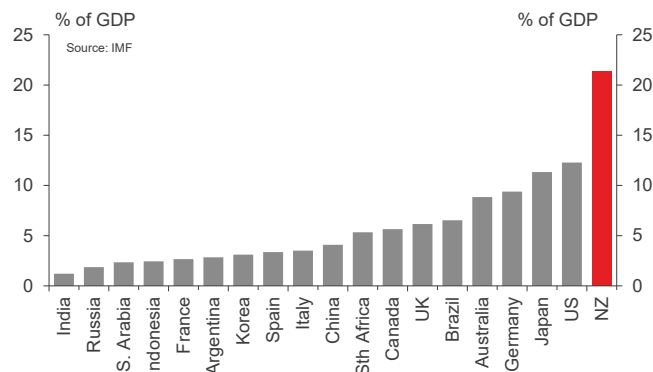
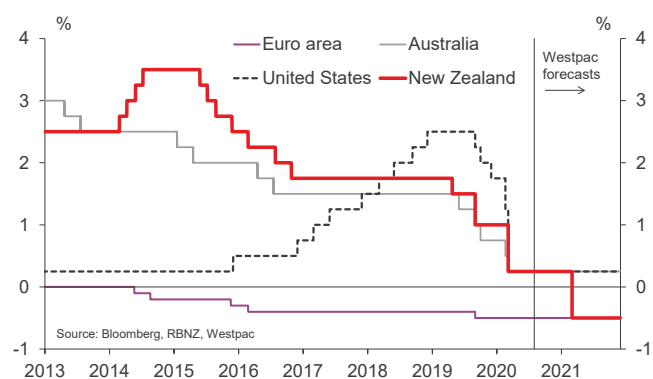
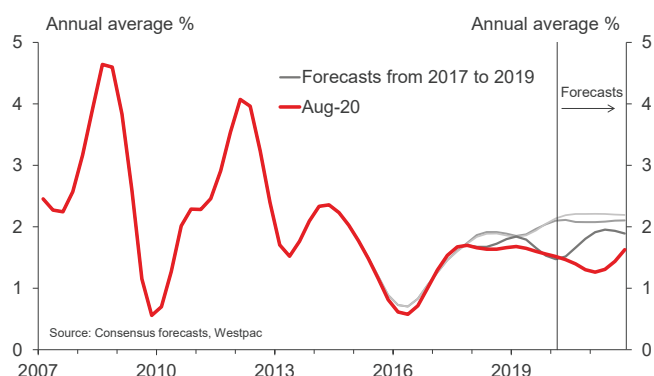


Figure 12: Central bank policy rates



With the virus continuing to spread and fiscal stimulus starting to lose its bite, many economies are staring down the barrel of very protracted recoveries. Furthermore, weakness in demand has seen global inflation falling to low levels. Against this backdrop, major central banks have, in recent months, been cutting their policy rates to extremely low levels, including the US Federal Reserve, Bank of England and Reserve Bank of Australia. A number of central banks are also making use of other 'unconventional' policy measures to support activity, including asset purchases (i.e. quantitative easing) and the provision of lending facilities.

Figure 13: Revisions to global inflation forecasts



We expect that major central banks will keep their main policy rates at the current very low levels at least until the end of 2021. However, several central banks (including the Federal Reserve) have highlighted the difficulties with using monetary stimulus to boost demand and confidence in the current environment, noting that fiscal stimulus could be more effective. But as noted above, there are also difficulties with a further expansion of fiscal policy at this juncture. This underscores the significant and complex challenges stemming from the health crisis. It will be very difficult for *any* form of stimulus to offset the disruptions to economic activity unless there are also comprehensive and effective measures in place to protect public health. And with the development of a vaccine potentially still some way off, the coming years are likely to test the bounds of effectiveness of both monetary and fiscal policy. That's particularly concerning as the longer the health crisis continues, the greater the risk of long-term economic scarring. Most notably, continued low confidence and related reductions in investment spending could be a drag on productive capacity, which would weigh on output and income growth in future years.

With the virus continuing to spread and fiscal stimulus starting to lose its bite, monetary policy across the globe is set to remain extremely accommodative for an extended period.

Inflation, RBNZ and exchange rates.

Covid flattens the inflation curve.

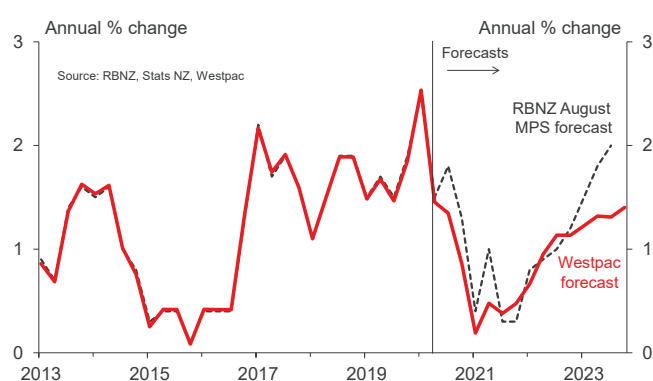
Falling inflation means the Reserve Bank needs to take vigorous action. Bond buying has been increased to \$100bn, but that is the maximum. The RBNZ's next tool will be a negative OCR combined with loans to banks, and we expect this will be deployed next year. The RBNZ's aggressive monetary policy will dampen the rise and rise of the New Zealand dollar.

The outlook is clear: inflation is set to fall, and the Reserve Bank will need to act aggressively if it is to meet its targets. We now have confirmation of the predicted plunge in inflation, with the annual rate stepping down from 2.5% to 1.5% at the June reading. We forecast that inflation will drop to 0.2% next year, and will remain below 1% until mid-2022.

- The slowdown in demand for goods and services, both in New Zealand and globally, has caused inflation to slow or go negative. This includes a sharp drop in global oil prices.
- There has been an increase in the use of e-commerce platforms. As online prices are often lower, this will suppress inflation.
- The pace of increase in dwelling rentals has slowed sharply due to the Government's rent freeze, the drop to zero net migration, and properties previously let out on the likes of Airbnb returning to the long term rental market.
- The lack of tourism has reduced prices for some services.
- There have been hardly any wage increases, except for the minimum wage hike.

There have been supply disruptions for some goods, and some specific prices have spiked as a consequence. This is moderating the downturn in inflation, but the overall inflation-suppressing effects listed above are clearly dominating.

Figure 14: Inflation forecasts

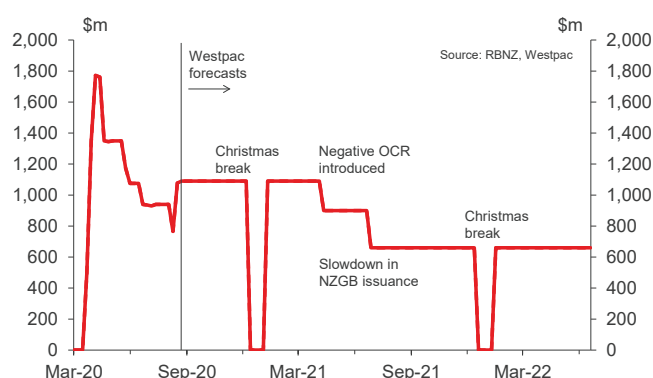


RBNZ needs all its firepower.

The Reserve Bank estimates that, in order to return inflation to 2% and reach full employment, it will need to deliver monetary stimulus equivalent to an OCR of -2% over a period of two years. This assessment has not changed recently. Although there has been a spate of better-than-expected economic data, from an inflation point of view this has been offset by worsening news on the likely duration of the border closure, a rising exchange rate, and the Government's decision to withhold some of its previously-planned fiscal stimulus.

The RBNZ is planning to achieve the equivalent of a -2% OCR by setting the actual OCR at 0.25% and buying about a billion dollars per week worth of bonds under the Large Scale Asset Purchase (LSAP) programme (money printing). RBNZ staff have been authorised to accumulate up to \$100bn of bonds by June 2022, and it appears that the plan is to frontload those purchases.

Figure 15: Westpac forecast of weekly RBNZ bond purchases



We think that the RBNZ is undercooking the requirement for monetary stimulus. Our own assessment is that inflation will remain close to 1% unless even more monetary stimulus is delivered – and that is based on our central scenario of Covid-19 remaining broadly under control, albeit with sporadic outbreaks. If there is another nationwide lockdown, the need for monetary stimulus will be even greater.

However, our calculations show that the LSAP will be maxed out at \$100bn by June 2022. Beyond that figure, the RBNZ would own so many bonds that the rest of the market would suffer illiquidity and may malfunction. These calculations were based on the Government issuing \$50bn of bonds in the 2020/21 fiscal year, and \$35bn the following year, lower than the Debt Management Office's current plan of \$60bn and \$40bn, as explained in the *Outlook for government debt* section.

Admittedly, if the economy takes a dive or there is another lockdown the Government would increase its spending and borrowing, which would increase the dollar value of bonds available for the LSAP. But in this scenario the need for monetary stimulus would increase by even more, so this is no escape from the limitations on the LSAP.

Clearly, the RBNZ will also need another tool. We have long been of the view that the RBNZ will cut the OCR to -0.5% in April next year (after the expiry of the RBNZ's commitment to not change the OCR before March 2021). For some months we have been the only bank forecasting a negative OCR. However, the idea is now likely to gain broader acceptance after the RBNZ said in its August MPS that a combination of a negative OCR and a term lending facility for banks (low interest loans) is its preferred next monetary policy tool.

We are now forecasting that the OCR will return to positive territory only in 2023, and will rise only slowly after that. This fits with our observation that the outlook is for low inflation, and with our expectation that the economy's battle with Covid-19 is going to last longer than previously thought.

No retail rates to go negative.

We do not expect any of the interest rates paid or received by New Zealand households and businesses to go negative. In overseas jurisdictions with negative official interest rates, retail rates have almost always remained positive. We do, however, expect 90-day bank bills and swap rates out to two years to go below zero, and that will have important implications for some hedging contracts.

The lower the OCR goes, the less additional impact it has on retail lending rates. That's because with a lower OCR, a greater proportion of bank deposits pay zero interest rates and can't go any lower – for example, the interest rate on transactional accounts dropped to zero years ago. When the OCR is already low, further cuts reduce only a portion of banks' funding costs, and therefore banks reduce lending rates less than one-for-one with the OCR. An OCR cut from 0.25% to -0.5% would probably reduce mortgage rates by only about 30 – 40 basis points, and OCR cuts below about -1% would have no effect at all.

A term lending facility (TLF) amounts to providing low interest loans to banks. This would reduce banks' funding costs both directly and indirectly by reducing banks' demand for term deposit and wholesale funding. With a TLF in place, term deposit rates and wholesale funding rates could fall further as the OCR went negative. By reducing banks' funding costs in this way, the TLF would cause retail lending rates to decline, amounting to a monetary easing.

Exchange rates.

The key global exchange rate trend has been weakness in the US dollar, and this is likely to continue due to the ongoing spread of Covid-19 in the US. However, the New Zealand dollar could experience weakness of its own, if the Reserve Bank continues with its aggressive quantitative easing and adopts a negative OCR, as we expect. We see no reason to forecast large moves in either direction for the NZD/USD exchange rate, particularly because this exchange rate is currently very close to its long-run inflation-adjusted average.

New Zealand's more aggressive approach to monetary stimulus will probably set it apart from Australia. We expect the NZD/AUD exchange rate to fall from its current high level to around 88 cents at the time New Zealand moves to a negative OCR, which would bring the cross closer to the historical average.

Financial market forecasts

	CPI	Interest rates				Exchange rates					
	Annual %	OCR	90-day bill	2 year swap	5 year swap	NZD/USD	NZD/AUD	NZD/EUR	NZD/GBP	NZD/JPY	TWI
Sep-20	1.3	0.25	0.30	0.20	0.30	0.66	0.93	0.56	0.51	69.3	71.9
Dec-20	0.9	0.25	0.30	0.10	0.25	0.66	0.92	0.55	0.51	70.0	71.4
Mar-21	0.2	0.25	-0.10	0.00	0.25	0.66	0.90	0.55	0.51	70.6	70.9
Jun-21	0.5	-0.50	-0.20	-0.10	0.25	0.65	0.88	0.54	0.50	69.6	69.2
Sep-21	0.4	-0.50	-0.20	-0.10	0.25	0.66	0.88	0.54	0.50	71.3	69.8
Dec-21	0.5	-0.50	-0.20	-0.10	0.35	0.67	0.88	0.54	0.50	72.4	70.3
Mar-22	0.7	-0.50	-0.20	0.00	0.45	0.67	0.88	0.54	0.50	73.0	70.1
Jun-22	1.0	-0.50	-0.10	0.10	0.55	0.67	0.89	0.55	0.50	73.7	70.1
Sep-22	1.1	-0.25	0.00	0.25	0.70	0.67	0.89	0.55	0.50	74.4	69.9
Dec-22	1.1	-0.25	0.05	0.40	0.80	0.67	0.91	0.55	0.50	75.0	70.1

Agricultural outlook.

Essential food essentially unmoved.

While Covid has left no sector untouched, agriculture has fared better than most. In fact, many parts of rural life and economic activity have been unchanged. With the global economy in recession, we anticipate modest overall price falls for agricultural exports over the next six months. That said, there will be exceptions to that rule and we continue to expect the agriculture sector to hold up better than most of the economy.

To date, agriculture has been relatively unscarred by Covid. This moderate impact stems from the classification of the food supply chain as an 'essential service', ensuring that households have continued to have ready access to (grocery) food.

Offshore, the picture is similar. After some initial disruptions at ports, overseas governments have prioritised food imports alongside other goods like medicines. Highlighting this fact was the creation of so-called 'green lanes' to fast-track these goods through customs and other border checks.

A key upshot of these moves is that agricultural economic activity and employment have been largely unchanged in recent months. Meanwhile, agricultural prices have fallen moderately this year, with food that is mainly eaten at restaurants and cafes (e.g. venison) or premium and discretionary goods (e.g. wool) taking the largest hits.

These general price observations come with some nuances. Drought compounded the Covid impact on sheep and beef farmers. Physical distancing requirements during the lockdown reduced processing capacity, which in turn led to processors paying lower farmgate meat prices. On the flipside, kiwifruit's high vitamin C content has helped it buck the trend, with little change in export prices this season.

From here, we expect a global recession to modestly weigh on overall agriculture prices. For example, we expect a 2020/2021 milk price of \$6.50/kg, down around 10% from 2019/2020.

The modest hit to prices aside, we expect agriculture's relative resilience to continue. In particular, we note China and East Asia's outperformance Covid-wise has seen demand rebound in these key markets (collectively they account for over 60% of New Zealand's food exports). Meanwhile, Covid supply disruptions in some of our key competitors like the US and Australia may open the door for some of our exports.

One way that Covid could again impact the agricultural sector is via processing, as we saw in the meat sector during the initial lockdown. Fortunately, the impact of the recent outbreak will be minor given low food production at this time of the year (winter). A spring outbreak, by contrast, would be more problematic, particularly for the dairy industry. Another key risk is Covid outbreaks at processing plants themselves – these would limit capacity as well as having the potential to erode any Covid-free price premia.

These potential risks aside, overall it seems that despite Covid the essential food sector remains essentially unmoved.

Commodity price monitor

Sector	Trend	Current level ¹	Next 6 months
Dairy	With NZ spring production upon us we expect prices to drift lower in the short-term. We are still sticking with our 2020/21 milk price forecast of \$6.50/kg.	Average	↘
Beef	Covid supply restrictions in US and Australia and firm Asian demand are likely to offset broader demand weakness.	Below average	→
Lamb	Different price fortunes for different cuts; those traditionally sent to Europe and US will be soft, while those sent to Asia could see a boost as activity rebounds.	Above average	→
Forestry	Prices are expected to rebound modestly as economic activity in China rebounds.	Below average	↗
Horticulture	Kiwifruit prices are bucking the Covid trend, but some overall fruit price moderation is still likely.	High	↘
Wool	Prices are expected to remain at depressed levels.	Low	→

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

Economic and financial forecasts.

New Zealand forecasts

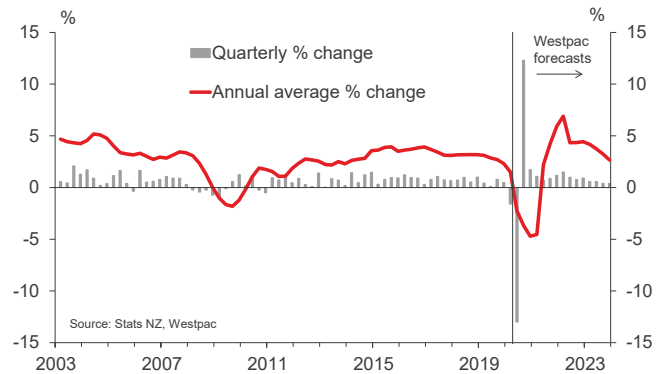
GDP components	Quarterly % change				Annual average % change			
	Mar-20	Jun-20	Sep-20	Dec-20	2019	2020	2021	2022
GDP (production)	-1.6	-13.0	12.3	1.7	2.3	-4.7	5.9	4.4
Private consumption	-0.3	-14.2	8.9	2.0	2.7	-5.9	8.4	4.9
Government consumption	0.0	3.0	1.5	1.3	4.3	5.8	5.3	2.7
Residential investment	-5.5	-40.0	69.5	0.5	4.3	-13.1	1.9	2.2
Business Investment	-2.2	-21.5	25.4	2.6	2.2	-8.3	2.8	5.0
Exports	-2.1	-16.4	1.0	0.2	2.1	-13.6	-0.5	11.0
Imports	-5.6	-19.1	9.0	1.7	1.7	-14.3	6.3	8.6
Economic indicators	Quarterly % change				Annual % change			
	Mar-20	Jun-20	Sep-20	Dec-20	2019	2020	2021	2022
Consumer price index	0.8	-0.5	0.6	0.0	1.9	0.9	0.5	1.1
Employment change	1.0	-0.4	-3.8	-0.8	1.0	-4.0	2.8	2.6
Unemployment rate	4.2	4.0	6.5	7.0	4.1	7.0	6.4	5.6
Labour cost index (all sectors)	0.3	0.2	0.4	0.1	2.6	1.1	1.2	1.0
Current account balance (% of GDP)	-2.7	-2.3	-2.0	-2.1	-3.0	-2.1	-3.5	-3.2
Terms of trade	-0.7	3.1	2.3	-0.8	7.1	4.0	-2.4	0.0
House price index	2.7	-0.1	-1.2	-1.2	4.6	0.2	8.0	8.0
Financial forecasts	End of quarter				End of year			
	Mar-20	Jun-20	Sep-20	Dec-20	2019	2020	2021	2022
90 day bank bill	1.00	0.28	0.30	0.30	1.17	0.30	-0.20	0.05
5 year swap	1.09	0.40	0.30	0.25	1.18	0.25	0.35	0.80
TWI	70.9	69.7	71.9	71.4	71.4	71.4	70.3	70.1
NZD/USD	0.64	0.62	0.66	0.66	0.64	0.66	0.67	0.67
NZD/AUD	0.96	0.94	0.93	0.92	0.94	0.92	0.88	0.91
NZD/EUR	0.58	0.56	0.56	0.55	0.58	0.55	0.54	0.55
NZD/GBP	0.50	0.50	0.51	0.51	0.50	0.51	0.50	0.50
RBNZ bond purchases (\$bn)	0.5	18.3	31.6	44.0	0.0	44.0	85.0	100.0
Net core Crown debt (% of GDP)	21.1	28.6	31.1	33.5	20.7	33.5	39.2	43.3

International economic forecasts

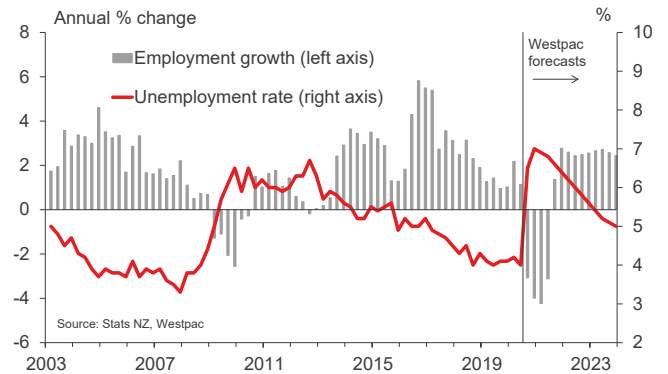
Real GDP (calendar years)	Annual average % change					
	2016	2017	2018	2019	2020f	2021f
Australia	2.8	2.5	2.8	1.8	-4.1	2.3
China	6.8	6.9	6.8	6.1	1.3	9.5
United States	1.6	2.4	2.9	2.3	-6.8	2.9
Japan	0.5	2.2	0.3	0.7	-5.0	1.0
East Asia ex China	4.1	4.6	4.4	3.7	-2.0	5.4
India	8.3	7.0	6.1	4.2	-4.0	6.0
Euro Zone	1.9	2.5	1.9	1.2	-8.5	4.1
United Kingdom	1.9	1.9	1.3	1.4	-7.0	2.5
NZ trading partners	3.6	4.1	4.0	3.5	-2.7	5.4
World	3.4	3.9	3.6	2.8	-4.3	5.0

The economy in six charts.

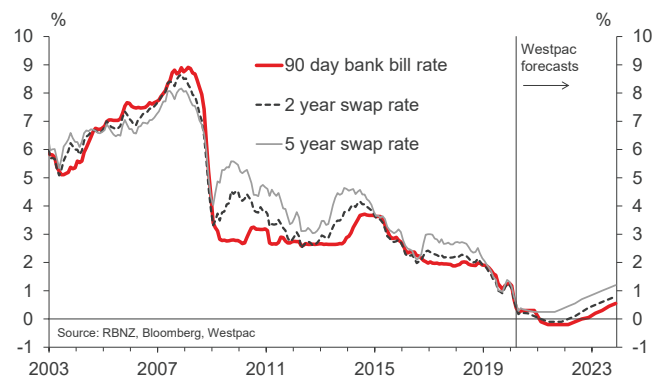
New Zealand GDP growth



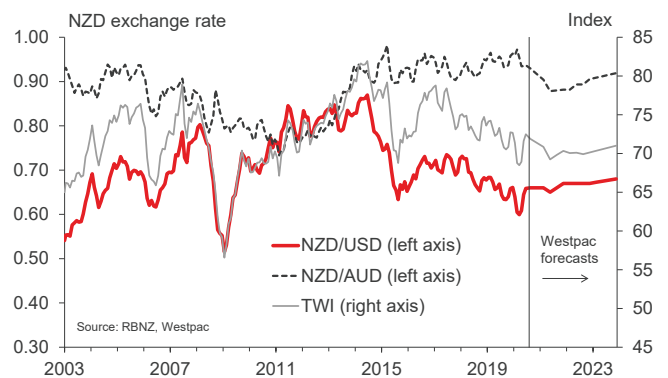
New Zealand employment and unemployment



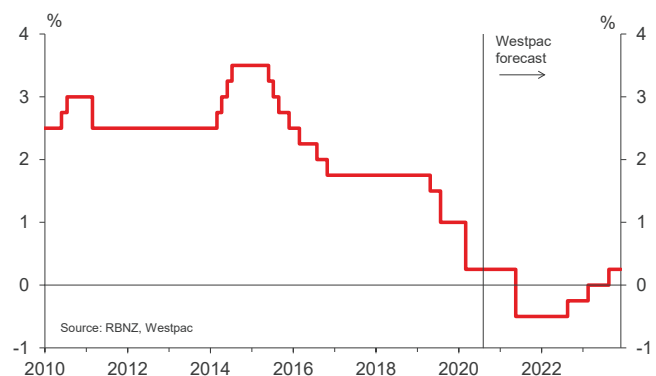
90 day bank bills, 2 year swap and 5 year swap rates



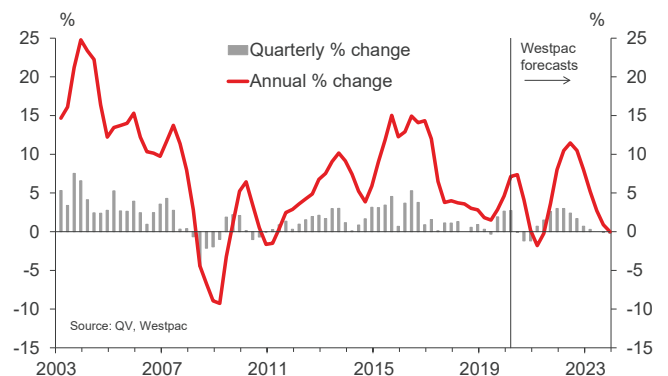
Exchange rates



Official Cash Rate



New Zealand house prices



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