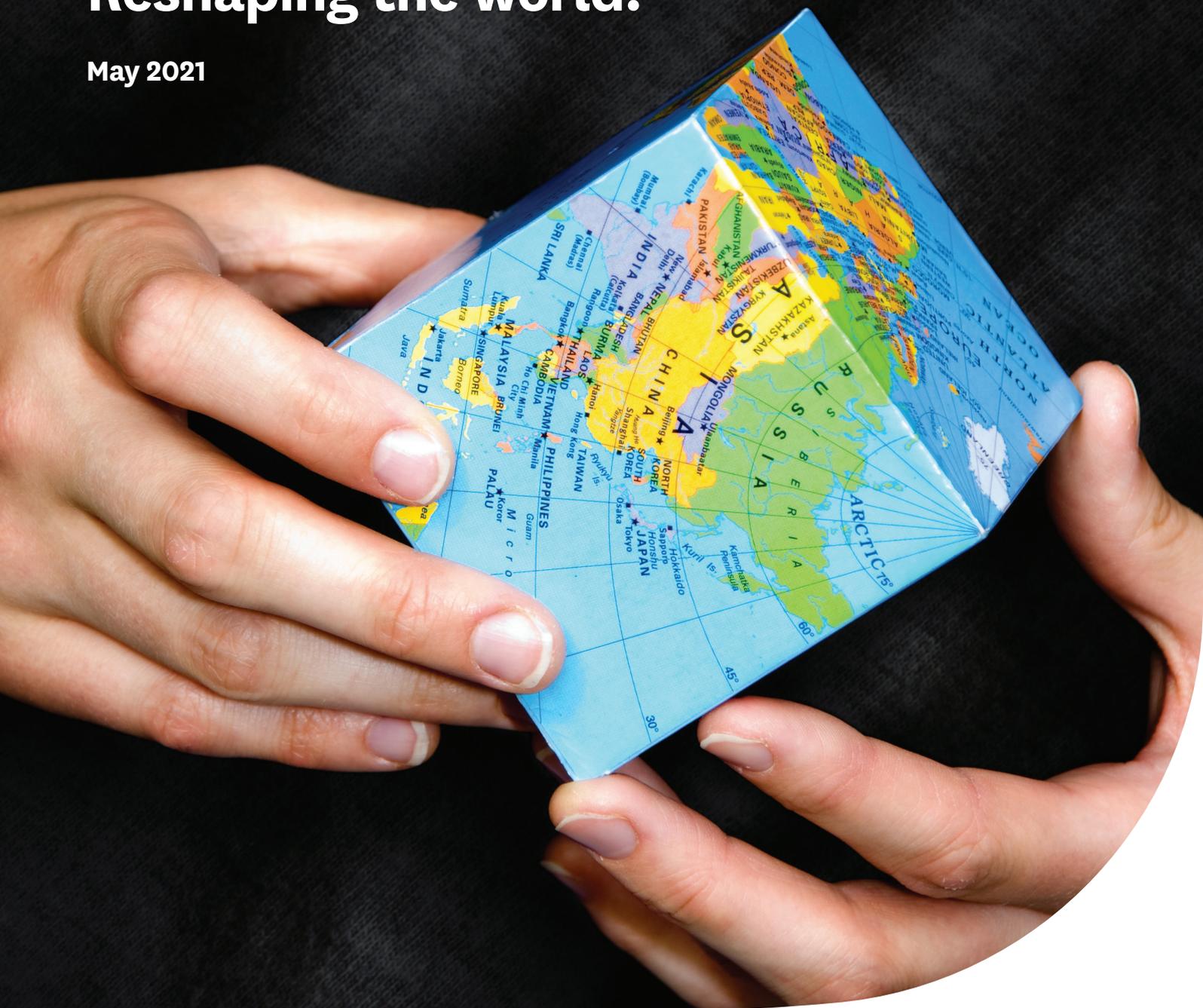


Economic Overview.

Reshaping the world.

May 2021



Economic Overview May 2021.

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Note from Michael.

It's increasingly clear that governments around the world are using the Covid-19 pandemic as an opportunity to stamp their mark on the economy – a stark contrast with the policy paralysis that followed the Global Financial Crisis in 2008. In the US for instance, the Biden administration is going all-out on its spending plans in an effort to secure the economy's recovery.

Here, the Government is taking advantage of its outright majority to expand its role in the economy. We've recently detailed the significant moves that it has made on the property market. That's just one part of an agenda that includes employment relations, climate change, healthcare, resource management and immigration, with no doubt more to come.

This direction of change won't always sit easily with private industries that are drawing their own post-Covid lessons. Our special topic this quarter on manufacturing notes how the Government's priorities could complement the sector in some ways, and clash with it in others.

Locally, the economy is progressing in line with what we set out in our February *Economic Overview*. There was the expected soft patch for activity over summer due to the absence of international tourists. But we're now past that phase, and we expect a moderate pickup in growth over the rest of this year. Concerns about inflation are running high, but we see this as a temporary spike. By next year, inflation should settle at a more moderate pace as the economy's spare capacity is gradually absorbed. We don't expect the Reserve Bank to increase the OCR until early 2024, although financial conditions will already have tightened between now and then.

Covid-19 remains a severe challenge in many countries, including our own. But at least among the advanced economies, the path out of Covid is becoming clearer, as vaccination programmes allow parts of the economy to reopen. We've upgraded our forecasts for world growth as a whole, though not for every region.



Michael Gordon - Acting Chief Economist

New Zealand economy.

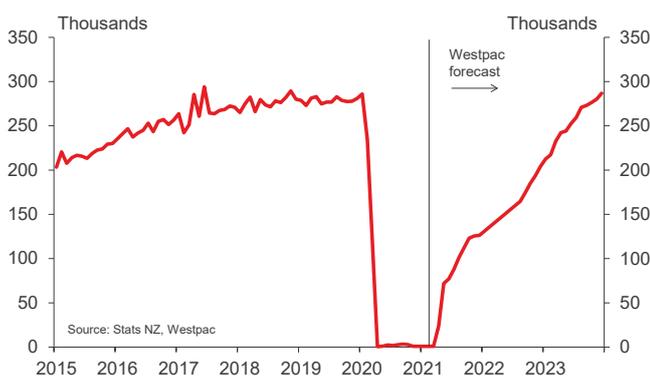
Brave new-ish world.

New Zealand's recovery is gaining traction and we expect economic activity will continue to strengthen over the year ahead. However, conditions are set to remain uneven across sectors for an extended period. At the same time, significant policy changes are being rolled out which will reshape key parts of the economic landscape over the coming years.

Home ground advantage.

Despite a rapid rebound after last year's lockdown, economic activity remains a little below the levels that prevailed prior to the pandemic. That's due to continued weakness in sectors that are closely linked to the international border, such as hospitality and travel. The drag from the loss of international tourist dollars has been particularly acute in recent months, with summer being the usual peak season for tourist inflows. And although travel bubbles with Australia and the Cook Islands have now been established, conditions in tourism-related sectors are set to remain challenging for some time. Ongoing health concerns mean that higher-value long haul routes are likely to open up only very gradually, with arrivals from other countries set to remain below pre-Covid levels for several years yet.

Figure 1: Monthly international visitor arrivals, s.a.



Balanced against ongoing weakness in international tourism have been firmer conditions in domestically-focused parts of the economy, with signs of growing momentum as we head into the middle part of 2021. Since our last *Economic Overview* in February, businesses across a range of industries have reported increases in trading activity and orders. There's been particular strength in construction, with annual residential building consent numbers rising to an all-time high of 41,028 in March. We've also seen firmer conditions in the manufacturing sector, along with continued increases in household spending

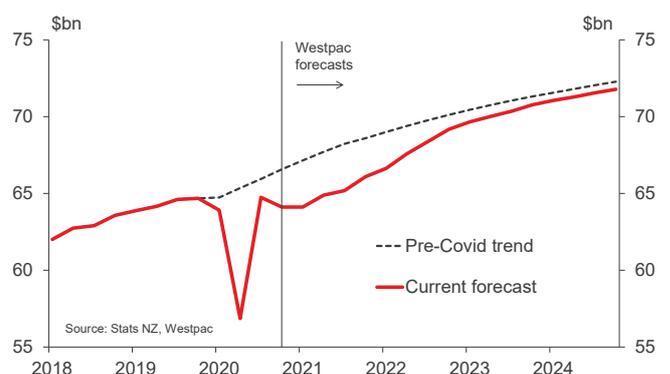
on items like home furnishings and apparel (which are up around 10% on their pre-Covid levels).

Adding to the strength of the local economy has been the rise in prices for some of our key commodity exports, as discussed in the *Agricultural outlook* section. While some of this is being used for debt repayment, the resulting lift in farm incomes is also boosting spending appetites in rural communities.

Firming domestic economic activity is also supporting a continued improvement in the labour market. Unemployment fell for a second quarter in March, dropping to 4.7%. And with a growing number of businesses reporting that they are planning to take on new staff, it's now looking like unemployment peaked at 5.2% back in September – much lower than we anticipated when Covid first arrived on our shores. We expect unemployment will continue to trend down over the course of this year.

With continued support from monetary and fiscal policy, we expect domestic economic activity will continue to firm through the back half of 2021 and into 2022. Over time, growth will also be boosted by the rollout of vaccines here and abroad, which will allow for restrictions on international travel to be relaxed. However, that's likely to occur only gradually, with GDP to remain below the path it was on before the pandemic for some time yet.

Figure 2: Quarterly GDP forecasts



Let's re-do this.

The benefits of last year's strict lockdown have not only been seen in terms of health outcomes, but also economically and financially. Activity and the labour market have been more resilient than expected. In addition, the fiscal accounts are in better than anticipated shape with the Government's operating balance running around \$5bn ahead of expectations at the end of March.

These conditions mean that the Government is now in a position to reorient its spending plans, with scope to continue supporting the recovery while also increasing spending in other policy areas. The Finance Minister has signalled that he will lift operating and capital allowances beyond what was announced in February's Budget Policy Statement, with spending likely to be directed into areas like health, welfare and infrastructure.

The Government is also continuing to roll out reforms in many areas, with the mooted policy changes likely to significantly reshape key parts of the economy over the coming years. That includes interventions to decarbonise the economy, such as incentivising electric vehicles. It also includes a range of reforms affecting the labour market, such as increases in the minimum wage and plans to introduce a Fair Pay Agreement system to increase the collective bargaining power of workers, with the aim of setting minimum standards for pay and working conditions.

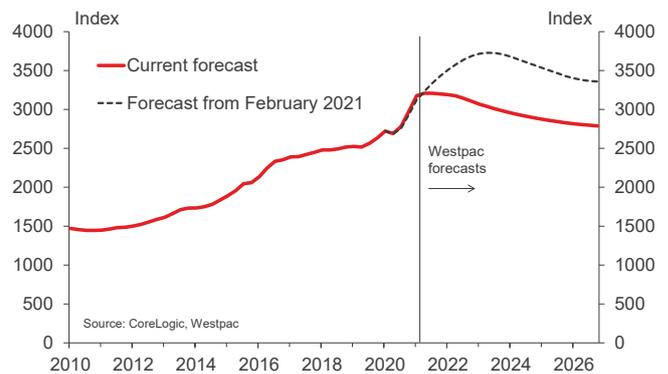
Significant policy changes are now being rolled out which will reshape key parts of the economy over the coming years.

One area where the Government is looking at particularly significant reforms is the housing market. The Government introduced a suite of policies in March that aim to reduce the incentives for investing in residential property and tilt the housing market in favour of first home buyers. That includes removing the ability to offset mortgage costs on residential investment properties against the income earned on those properties. The Government is also planning to extend the holding period for taxing capital gains on residential investment properties (otherwise known as the 'Bright-line test') from 5 to 10 years.

The proposed reforms signal the biggest changes in the residential housing market in over 30 years. Leveraged investors currently account for around one-third of sales in markets like Auckland and Wellington, and their search for yield has been a major factor underpinning house price increases in recent years. Removing the deductibility of interest costs will dramatically lower the yield on rental properties and reduce the prices that investors will be willing to pay for houses. That downwards pressure will be reinforced by the extension to the Bright-line test.

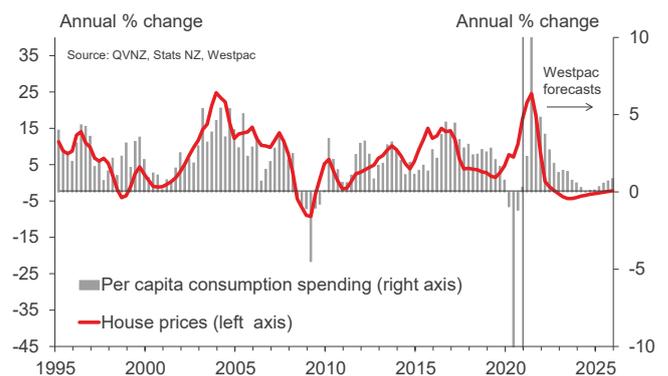
Previously, we had expected house prices to rise by a further 10% by the end of 2021, with further moderate gains expected in the following years. However, we now expect house prices to flatten off over the remainder of 2021. Looking further ahead, we expect longer term interest rates will creep higher over time in response to the firming in global activity. As that passes through to domestic borrowing rates, we are likely to see modest falls in house prices of around 3% to 4% per annum over 2022 and 2023.

Figure 3: House price level forecasts



The expected easing in house prices is fairly modest compared to the more than 20% rise over the past year. Even so, this signals a starkly weaker outlook than we had anticipated before the recent policy announcements. That's important as the housing market plays a key role in shaping demand conditions in the economy more generally. Now with a policy-related cooling in house prices on the cards, we also expect that household spending (which accounts for around 60% of total economic activity) will recover more gradually than would have otherwise been the case.

Figure 4: House prices and household spending



The Government has also announced a review into migration settings, with a focus on how migration has affected parts of the economy, such as the labour market and housing. We expect that this will result in a significant tightening in migration settings in the form of tougher skills requirements for new migrants. There could also be other changes affecting specific groups such as international students. Introducing such changes would aim to support the Government's goal of

improving employment opportunities for existing New Zealand workers and encouraging the development of skills onshore.

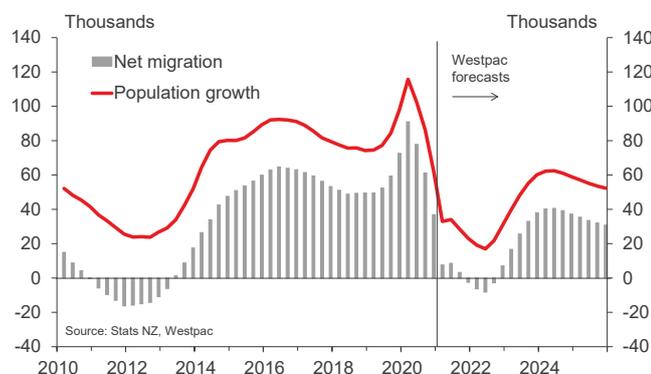
A tightening in migration settings along the lines we expect would mean that, when the borders do eventually reopen, net migration is likely to settle around 30,000 per annum through the middle part of the decade. That would be well down on the levels of around 50,000 to 60,000 per annum that we saw over much of the past decade. This would see annual population growth slow from rates of close to 2% prior to the outbreak to a little over 1% in the coming years. That signals a huge reduction in the economy's underlying growth rate and is a key reason why we expect GDP will linger below its pre-Covid trend for an extended period.

Changes in migration policy will involve some important trade-offs that will affect demand in the economy as well as our productive capacity.

The development of employment opportunities and skills onshore is a laudable aim, but involves some important trade-offs and will have a myriad of effects on the economy. On the demand side, this will moderate an 'easy' source of growth that businesses in sectors like retail and hospitality have enjoyed in recent years. It will also have an important impact on the housing market, with population inflows adding to the demand for both rental and owner-occupied housing.

In terms of the labour market, lower net migration will reduce the pool of available workers in some industries, which signals a related lift in wage pressures. However, with the Government looking at a targeted tightening of migration settings, impacts will be varied across sectors. In particular, we're likely to see fewer unskilled workers arriving, which will be particularly important in areas like hospitality and retail.

Figure 5: Population growth



Policy changes are likely to have a smaller impact on the availability of skilled labour. However, it will take time to grow the economy's skill base. And in the meantime, businesses in many sectors of the economy are already crying out for

labour with specialised skills. Furthermore, with the global environment improving, many businesses may find it tough to attract highly skilled staff over the coming years.

Shifting foundations.

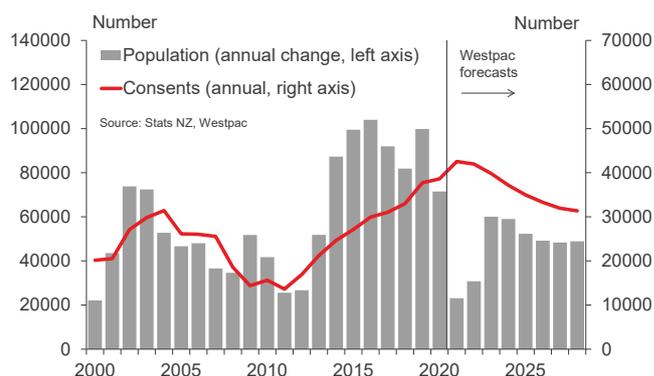
The residential construction sector has been a major contributor to economic activity and employment in recent years, with activity in the sector continuing to boom in the face of last year's outbreak. We expect home building levels to remain strong over the next few years, with a significant amount of work already in the pipeline.

However, as we approach the middle of the decade, we expect that the current period of very strong residential building will give way to a period of more moderate activity. That's in large part due to the changes to migration and housing market policies discussed above.

With the borders closed, home building levels are now well above what's needed to keep up with population growth. Shortages that developed over the past decade are being rapidly eroded. And even when the borders eventually reopen, slower population growth means that we'll need to build fewer houses than would otherwise have been the case.

The weaker outlook for house prices will also have a dampening impact on residential construction. However, this drag is likely to be more modest. New builds remain exempt from the extension to the Bright-line test and may have other tax advantages over purchasing an existing property (for instance, the Government may allow interest costs on new builds to be tax deductible for a limited period). The weaker outlook for house prices also signals downward pressure on land prices, which are a key hurdle for many housing developments.

Figure 6: Building consents and population changes



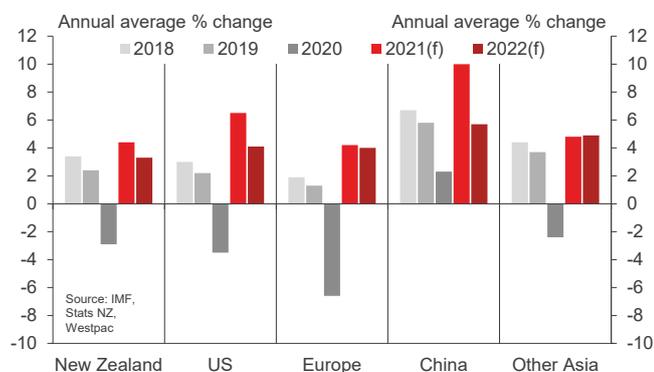
Global economy.

The world economy strikes back.

Global economic activity is on the mend, but the recovery is uneven. The US and China are at the head of the pack, while health concerns continue to present downside risks in emerging economies. Inflation has picked up after a Covid-driven slowdown, and is set to rise above central banks' targets. However, we doubt that policymakers will be in any rush to tighten policy settings.

Since our last *Economic Overview* we have further revised up our forecasts for growth in New Zealand's main trading partners, although not across the board. The advanced economies have continued with their vaccination efforts and are on the way towards a gradual reopening of their economies, aided by supportive monetary and fiscal policies. But there are still many parts of the world where vaccination rates are slow, leaving them vulnerable to further outbreaks. India and many parts of South-East Asia have recently seen a surge in Covid cases and a return to stringent control measures.

Figure 7: Global GDP growth



Among the major economies, the most significant improvement in the outlook has been for the US. GDP is expected to return to pre-Covid levels by the middle of this year, and to rise further to its pre-Covid trend after that. Indeed, for this year we expect the US to be in the unusual position of growing faster than the global average. This optimism about the US is shared by financial markets, with the major equity indices continuing to climb to new highs.

Unusually, the US economy is expected to grow faster than the global average this year.

Fiscal policy is playing a major role in this recovery. The Biden administration has broken away from the 'austerity' that characterised the US government's response to the Global Financial Crisis, and is looking to stimulate confidence and business investment in order to secure the economy's recovery. The US\$1.9 trillion package passed in March provided an immediate cash injection, and the administration is looking to follow this up with a substantial infrastructure investment programme.

The other major outperformer on growth this year will be China. Our forecast here remains unchanged: we expect a 10% lift in activity this year, strongly outperforming the government's official growth target. Crucially, the strength in Chinese growth appears to be from sustainable sources, with an emphasis on public and private investment rather than short-term stimulus for consumers. Initially, that suggests a larger benefit for 'hard' commodity exporters like Australia. But the overall momentum in the economy is a boon for New Zealand's 'soft' commodity exports as well.

Europe has been viewed as an underperformer at times, due to the slow rollout of its vaccination programmes (with the clear exception of the UK). However, vaccination rollouts are now picking up momentum, and the region's economy has the most potential to surprise to the upside as domestic activities are able to resume. Both fiscal and monetary authorities are committed to providing stimulus to support economic activity.

We have substantially upgraded our growth forecasts for Australia, in large part due to the strength of its recent momentum. Strong construction activity, supported by rising house prices, record low interest rates and the Federal government's HomeBuilder programme have provided a tailwind. The end of the JobKeeper wage subsidy scheme in March seems to have been less disruptive than feared. In addition, the recent Budget highlights the government's willingness to keep the recovery going through spending and incentives for business investment.

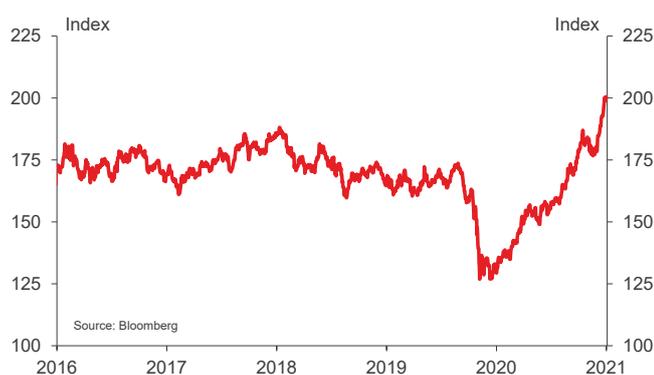
The rebound in the world economy has been accompanied by a strong lift in commodity prices. In the short term, both industrial and food commodities have faced production constraints, as lockdowns meant that mines and farms were

not able to operate at full capacity, seasonal workers were not able to travel and process raw inputs, and processing facilities were hampered by social distancing measures.

Supply constraints on many commodities have collided with a surge in global demand for physical goods.

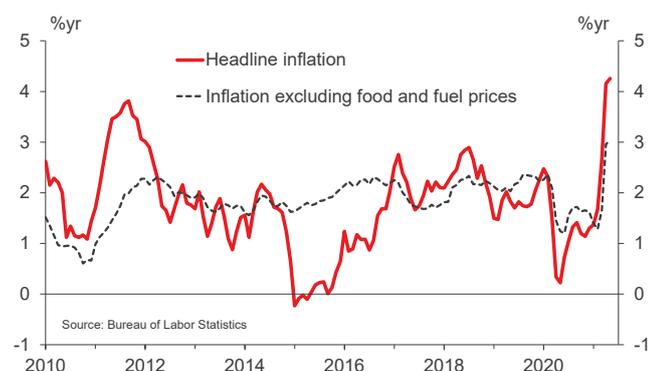
These supply constraints have collided with a rebound in global demand. In particular, the effective restrictions on travel and social contact have seen a marked shift in the mix of consumer spending, away from services and towards physical goods. While a reopening of the economy will alleviate the pressure on some commodity prices, some may rise even further. For instance, oil prices will benefit from an increase in travel, and meat prices will be boosted by a reopening of restaurants.

Figure 8: World commodity price index



The rise in commodity prices is one contributor to a growing global theme: the return of inflation. There's no doubt that inflation rates around the world will jump higher in the near term. Much of that comes down to year-on-year comparisons – many prices slowed or even fell during last year's Covid lockdowns.

Figure 9: US consumer price inflation



But there is a notable divergence between financial market opinion and central banks' forward guidance. Longer-term interest rates around the world have risen substantially since late last year, as investors have anticipated that central banks will need to raise policy rates soon in order to contain inflation. The uncertainty about the inflation outlook means that market interest rates also increasingly carry a risk premium.

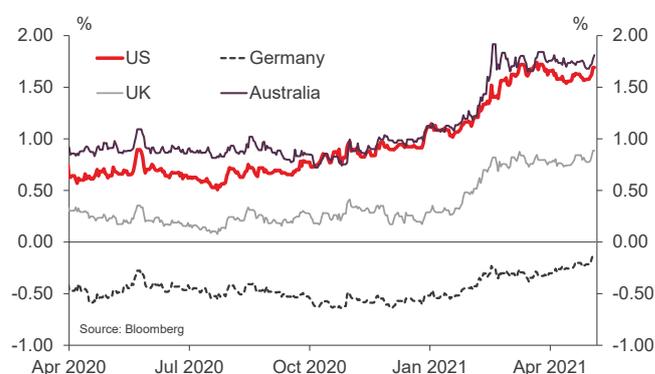
In contrast, central banks maintain that they see the impending rise in inflation as temporary, and are prepared to look through it. Economic activity is still running well below its full capacity, which is seen as a crucial element for a sustained rise in wage and price pressures.

In part, we're also seeing a change in policymakers' stance compared to their post-GFC responses. With hindsight, central banks have recognised that they were too quick to declare that their economies were back to full speed following the GFC, and that they tried to pre-empt a pickup in inflation that never emerged. As a result, many central banks have signalled that they're prepared to let things run, and to tolerate a temporary overshoot of their inflation targets.

Central banks have signalled that they're prepared to tolerate a temporary overshoot of their inflation targets.

Our view is on the side of the central banks – we expect a tightening of monetary policy to be some time away. But with the market's ongoing inflation concerns, the net result is likely to be a persistent steepening of global yield curves. Short-term interest rates will remain anchored by central bank decisions, while longer-term rates will be more influenced by economic growth and inflation expectations.

Figure 10: 10-year government bond yields



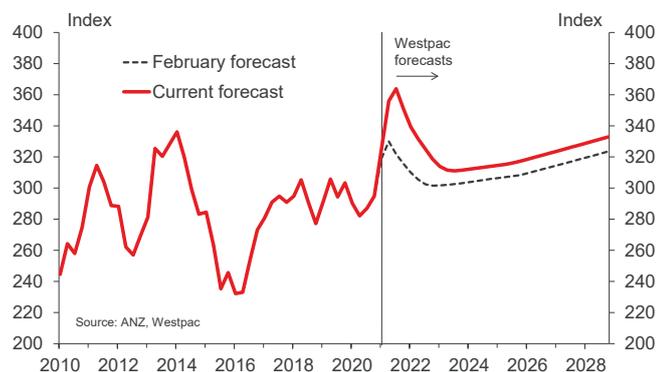
Agricultural outlook.

The records, they are a-tumbling.

New Zealand commodity prices are on a tear. Global supply is on the back foot, meaning prices can go higher still. Meanwhile, here in New Zealand, we expect the impact of surging prices on production and investment will prove modest, especially as the appetite for dairy expansion is subdued. On that basis, we anticipate a rather rare New Zealand event where commodity prices remain stronger for longer.

New Zealand commodity prices surged to fresh record highs in March and again in April. And we anticipate that more records will tumble over the remainder of 2021. All up, New Zealand's commodity prices have jumped 17% so far this year, and we expect a further lift of circa 5% through to the September quarter.

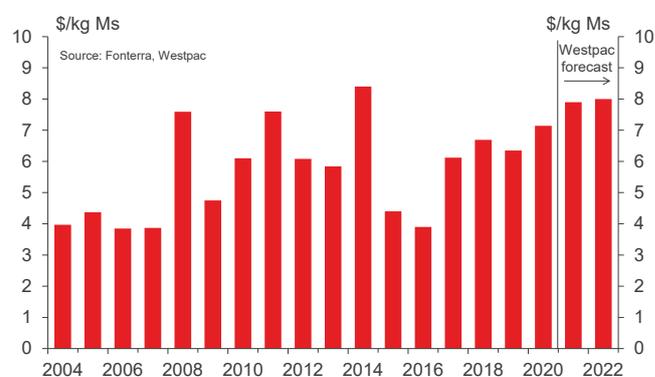
Figure 11: Global prices for New Zealand commodities



Surging Chinese demand has provided the initial catalyst. Recall that by the second half of 2020 Chinese demand was already growing strongly and thus managed to avoid negative growth over the calendar year. This year we expect a 10% further lift on top of that strong end to 2020. Importantly for New Zealand commodity exports, South-East Asia has had a similar growth experience, albeit at a slower pace than China. That said, some parts of South-East Asia remain vulnerable to fresh Covid outbreaks and slower vaccination rollouts.

So far, dairy, horticulture and forestry commodity prices has been the chief beneficiaries of the firmness in global demand. For example, on the back of surging global dairy prices we upgraded our 2021/22 milk price forecast to \$8.00/kg in April. In addition, kiwifruit grower returns for last season are on track to be the highest (for green kiwifruit) and second-highest (for gold kiwifruit) on record. At the same time, export log prices have jumped over 20% in the last six months.

Figure 12: Farmgate milk prices



Other agricultural sectors are also poised to share the commodity price gains. As the Covid vaccine rollout gathers pace in the US, Europe and UK, and as people head back to restaurant settings, we expect (prime) meat prices to spike.

So far, the signs are good for meat commodity prices. Indeed, farmgate lamb prices have been lifting over April and May at a time when prices normally fall. This rise bodes well for the new season and we expect lamb prices may test \$9.00/kg by the time prices normally peak in late spring.

The eventual normalisation of shipping costs will also give commodity prices a second wind, especially for bulky exports like forestry. Chinese demand for logs is very strong. However, very high shipping costs are acting like an export tax, crimping further price rises. As these costs eventually fall, the log component of the overall price will rise, increasing the returns to forestry exporters at the expense of shipping companies. Of course, all commodity exporters will gain to some degree as shipping costs fall.

We also expect this commodity price cycle will prove longer than recent cycles in the past. This marks a clear change from our February *Economic Overview* where we had expected the commodity price lift to prove temporary.

Notably, global feed grain prices are very high. These high prices will keep margins tight particularly for Northern Hemisphere meat and dairy producers. As a result, the supply response to higher prices is likely to prove modest, at least initially. Accordingly, New Zealand farmers will be able to keep more of the respective commodity price gains, as feed costs are kept in relative check by the dominance of New Zealand's pasture-based systems.

One upshot of higher commodity prices is that commodity export volumes will be higher than we previously factored. In particular, we expect forestry volumes to lift to record high levels over 2021 and 2022. Horticultural export volumes will also continue to expand, although we had already factored increased kiwifruit and apple plantings into our previous forecasts. That said, current labour shortages may mean that some of the horticultural export volume growth, particularly for apples, is deferred to 2022.

Meanwhile, we anticipate a modest uptick in dairy production of 2% next season above this season's level. Dairy farm cashflows are strong and this will support spending in areas like feed purchases, animal health, and (where within limits) fertiliser application. However, we anticipate less in the way of investment in expansion. As a result, we think this production lift will prove in part temporary.

2021 is shaping up as one for the record books.

Record high commodity prices also bode well for strong national incomes, and will also underpin the level of the New Zealand dollar and interest rates. This highlights the New Zealand dollar is the key risk to New Zealand agricultural and forestry sector incomes. That risk aside, 2021 is shaping up as one for the record books.

In the medium term, we expect prices will moderate as supply eventually catches up and demand growth reverts to more average levels. In particular, global production levels will lift as more farm workers return to work, allowing global harvests to return to more average levels. Normalisation of supply chains and costs will have a similar positive impact on global food supply.

As this dynamic plays out, we expect the horticulture sector to lead the price falls. Horticulture benefitted from increased or stable demand during 2020 as consumers sought out products with health benefits like kiwifruit. As health concerns ease over the remainder of 2021 and beyond, this demand is likely to recede as more normal consumption patterns return. Increased kiwifruit production, particularly from new gold kiwifruit plantings in New Zealand and China, will put additional pressure on overall horticulture prices.

From a longer-term perspective, environmental constraints are biting on global food production. Here in New Zealand, these constraints are most evident in land use change and the resulting shifts in agricultural and forestry production. The dairy sector is at the pointy end of these shifts, and we expect both less land and fewer cows next season compared to this season. Indeed, this shift is another reason we expect the New Zealand commodity price cycle to last longer than in the past. Essentially, supply has less capacity to respond to the surge in prices than it did in years gone by.

We also note that overall New Zealand commodity prices are likely to settle higher than what we had previously assumed. In addition to the long-term trend in commodity prices, the expected firmness in prices is due to the increasing importance of environmental constraints on our largest commodity export sector, dairy. These constraints are permanent and are thus resulting in lower dairy supply. We also note that these constraints are shared across other key dairy exporters like Europe. As a result, the associated increase in costs is likely to be passed on to global dairy consumers, resulting in a structural shift in global dairy prices.

Commodity price monitor

Sector	Trend	Current level ¹	Next 6 months
Dairy	Global dairy prices have jumped by more than 25% so far over 2021. We expect to maintain this strength until at least the New Zealand spring.	Above average	→
Beef	We expect that as Covid vaccines roll out globally, beef demand will rise, taking prices along for the ride.	Average	↑
Lamb/Mutton	We expect that as Covid vaccines roll out globally, lamb demand will rise, lifting prices. Lamb prices may even test the \$9.00/kg level.	Above average	↗
Forestry	Prices have steadily increased this year. If shipping costs ease, we expect prices to get a second wind.	Above average	↗
Horticulture	Horticulture prices are already very high. From here, new gold kiwifruit supply may see prices soften, while tighter apple and green kiwifruit supply may see prices hold up.	High	→
Wool	Prices have bottomed. Fine wools are likely to lead a price recovery over 2021; coarse wool prices may tentatively lift.	Low	↗

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

Inflation and the RBNZ.

Cresting the wave.

Inflation is set to spike higher this year as the effects of last year's Covid shock unwind. However, our view remains that this will prove to be temporary. We don't expect OCR hikes to begin until early 2024, though other factors will drive a tightening in financial conditions before then.

The inflationary drumbeat is growing louder, both here and internationally. Rising materials costs, disruptions to global supply chains, and a jump in shipping costs are all putting pressure on firms' margins. As a result, a record number of businesses are reporting that they intend to raise their prices in the coming months.

Despite this, the experience to date suggests that it's still a difficult environment in which to actually raise prices. Inflation in the March quarter was no higher than expected, and the items that did see meaningful price rises in the previous quarter have mostly dropped back again. There are some exceptions, such as in the red-hot construction sector. But for the most part the economy is still running short of its full capacity, and demand isn't yet strong enough to support a sustained bout of inflation.

We do expect annual inflation to spike higher this year, peaking at 2.7% in September. Some of that reflects what was happening with prices a year ago. World oil prices have more than doubled from their mid-2020 lows, when the world was in the grip of Covid-19 lockdowns. And some items such as public transport were free or discounted during our own lockdown.

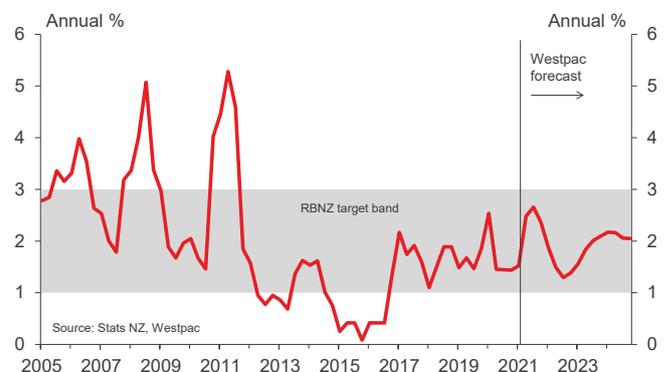
By next year these base effects will have passed, supply bottlenecks should be easing, and a stronger New Zealand dollar will be a drag on imported goods prices. We expect inflation to slow to just 1.4% in 2022, with a gradual climb back to the 2% midpoint of the Reserve Bank's target range over the following years.

The RBNZ will also be guided by its mandate to support 'maximum sustainable employment'. The current unemployment rate of 4.7% suggests that there's still some way to go to reach this mark, and as long as inflation remains well contained within the target range, the inclination will be to let things run.

We expect the OCR to remain unchanged until early 2024. We had recently moved this timing out to 2025, reflecting the expected dampening impact of the Government's housing policy changes. However, the surprise drop in March quarter unemployment suggests that the economy's spare capacity is closing up a little faster than we expected.

This may seem like an awfully long time for the RBNZ to stand pat in the face of a resurgent global economy. But it's important to recognise that there is a degree of de facto monetary tightening already happening, with more still to come, before the OCR itself is brought into play. The RBNZ has already slowed the pace of bond purchases in its Large-Scale Asset Purchase programme, even in the face of a sharp rise in long-term interest rates since last year. Looking ahead, the Funding for Lending Programme for banks is unlikely to be extended beyond the end of 2022. And from next year there will be a phased increase in banks' capital requirements, which will put some upward pressure on lending interest rates.

Figure 13: Consumer price inflation



Financial market forecasts (end of quarter)

	CPI inflation	OCR	90-day bill	2 year swap	5 year swap
Jun-21	2.5	0.25	0.35	0.45	1.10
Sep-21	2.7	0.25	0.35	0.45	1.15
Dec-21	2.4	0.25	0.35	0.45	1.20
Mar-22	1.9	0.25	0.35	0.50	1.25
Jun-22	1.5	0.25	0.35	0.55	1.30
Sep-22	1.3	0.25	0.35	0.60	1.35
Dec-22	1.4	0.25	0.35	0.65	1.40
Mar-23	1.6	0.25	0.35	0.70	1.50
Jun-23	1.8	0.25	0.40	0.80	1.60
Sep-23	2.0	0.25	0.45	0.90	1.70

Exchange rates.

Riding a wave of risk appetite.

The New Zealand dollar looks set to be one of the stronger-performing currencies over the coming months, even if not the top dog. We expect it to rise slightly on a trade-weighted basis over the next year, supported by improving global risk appetite and firmness in commodity prices.

The New Zealand dollar is similar to where it was at the time of our February *Economic Overview*, although there has been quite a bit of volatility in the interim. The most significant drop happened in late March after the Government announced a range of measures aimed at cooling the housing market, with those losses clawed back in the following weeks.

We expect the New Zealand dollar to rise further over the next year, reaching up to 76 cents against the US dollar and remaining there over the course of 2022. Our view assumes lingering softness in the US dollar, combined with particular strength in commodity-driven currencies, such as the Australian dollar and to a lesser extent the New Zealand dollar.

As we note in the *Global economy* section, we've further upgraded our outlook for growth among New Zealand's major trading partners. Historically, strengthening global growth makes investors less risk averse and more willing to invest in 'riskier' currencies like the New Zealand dollar.

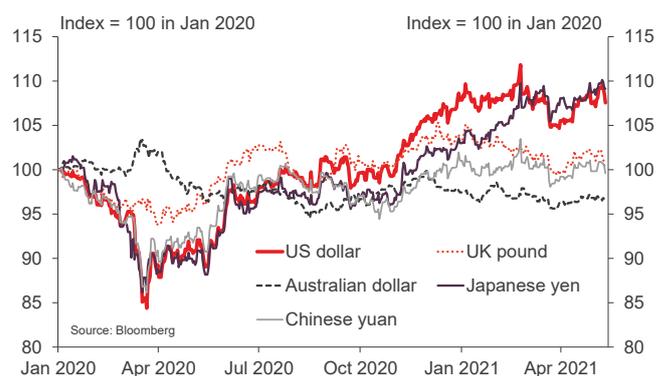
As we move deeper into the global recovery, risk appetite is likely to strengthen further and risks related to Covid-19 will fade, both of which will support risk currencies at the expense of the US dollar. In terms of general momentum, while the US economy is set to grow slightly faster than the global average in 2021, we expect it to slow to below-average again in 2022.

Financial markets expect that central banks both here and overseas will look through a spike in inflation this year, and that they will keep interest rates low for some time to support the economy's recovery.

We expect the NZD/AUD exchange rate to drop below 90 cents next year – not due to New Zealand dollar weakness, but because we see relatively more upside for the Australian dollar. Australia's economic recovery was initially slower than New Zealand's, due to a more prolonged period of Covid lockdowns, but it is now gaining substantial momentum. The closure of international borders has proven to be more of a net benefit to domestic spending in Australia, and policymakers across the ditch appear more inclined to let their housing market continue to run hot.

Both economies will benefit from stronger export commodity prices, fed by the rapid rebound in GDP growth and continued increases in demand from Asia. While commodity prices will eventually decline from their highs, Australia is better positioned to deliver an increase in export volumes as well. As we note in the *Agricultural outlook* section, New Zealand's capacity to increase export volumes is constrained in some respects.

Figure 14: NZ dollar exchange rate vs major countries



Exchange rate forecasts (end of quarter)

	NZD/ USD	NZD/ AUD	NZD/ EUR	NZD/ GBP	NZD/ JPY	TWI
Jun-21	0.73	0.92	0.61	0.52	79.6	75.6
Sep-21	0.73	0.91	0.60	0.52	80.3	74.9
Dec-21	0.74	0.90	0.60	0.52	82.1	75.0
Mar-22	0.76	0.89	0.61	0.54	85.1	76.1
Jun-22	0.76	0.89	0.60	0.54	84.4	75.7
Sep-22	0.76	0.89	0.60	0.54	84.4	75.5
Dec-22	0.76	0.89	0.60	0.54	83.6	75.2
Mar-23	0.75	0.89	0.59	0.53	82.5	74.4
Jun-23	0.75	0.90	0.59	0.53	81.2	74.0
Sep-23	0.74	0.90	0.59	0.52	80.7	73.6

Special topic.

Manufacturing's post-Covid transformation.

While economic growth prospects suggest a positive outlook for New Zealand's manufacturing sector over coming years, bigger changes are under foot. Given the vulnerabilities laid bare by Covid-19, we are likely to see a shift away from solely focusing on supply chain efficiencies towards greater resilience. Underpinned by new digital technologies, this shift will have big implications for how manufacturing operates in the future.

This time last year, the global economy had been turned on its head. Covid-19's spread around the world disrupted everything in its path, with no sector left unscathed. That included the global manufacturing sector, which found itself in the unenviable position of having to contend with plummeting demand and massive disruptions to supply chains.

These global developments were also reflected in New Zealand with local manufacturing activity plunging in the second quarter of 2020. However, there was some respite for food manufacturing, as its essential status allowed it to operate at something approximating normal levels.

Fast forward a year and much has changed. The global economy is clearly on the mend, following massive fiscal and monetary support delivered in major economies, and optimism has begun to return as the rollout of the Covid-19 vaccine has gained pace. New Zealand's economy has also performed better than expected, reflecting the economic benefits flowing from the elimination strategy adopted for Covid-19 last year, though we are still operating below potential because of a loss of international tourism.

The portents for the coming year look promising. Indeed, global manufacturing is currently in a sweet spot due to rebounding economies and a shift in consumption from services to physical goods. More is likely to come over the remainder of the year. Conditions though are likely to be less supportive in 2022 given a softer outlook for global growth and a shift back to spending on services once social distancing requirements are eased.

At a micro level Covid-19 has highlighted the disadvantages of pursuing supply chain efficiencies at the cost of resilience, with many manufacturers being caught short and unable to overcome disruptions at a global scale. Historically manufacturers have focused almost exclusively on maximising supply chain efficiencies to minimise costs, reduce inventory levels and improve capacity utilisation.

Addressing this deficiency is likely to be at the front of mind for many manufacturers, and that's likely to mean some

big changes not just for supply chains, but also how firms operate. Indeed, workplaces are set to transform, with the emergence of new cultural norms and new organisational structures. Business processes will be re-engineered and new work organisation methods adopted. Supply chains will be restructured, with production moving closer to consumption, and there will be new approaches to supply chain management, with an emphasis on managing inventory levels.

Digital technologies will be at the forefront of these changes. Artificial intelligence, robotic automation, remote sensors, cloud-based collaboration tools and analytics will not only transform business processes, but they will also facilitate the shift towards dynamic open supply chain networks that integrate information from many different sources to drive procurement, production and distribution activities.

Making this digital jump will require large amounts of investment, which is likely to be out of reach for many in the sector. Some manufacturers will make a go of it outside of the digital world. However, that can only last for a time and as the benefits of transformation become increasingly apparent, we think competitive pressures will force many to close shop or become targets for acquisition. On that basis, the number of manufacturers in New Zealand is likely to decline over time, although those that remain should be larger than those today.

Another lesson from Covid-19 is that firms will look for greater flexibility in their workforce. Many manufacturers are likely to dip into the 'gig' market, which is expected to expand as people embrace digital technologies, and on-demand workforce models and platforms.

The increasing role of government in the economy will both complement and conflict with efforts by the sector to transform itself. Government's commitments on climate change, for example, are likely to provide the certainty needed by manufacturers when investing in emissions friendly technology. By contrast, the push for workforce flexibility goes directly against the Government's desire for greater security for workers and bargaining power, which could undermine the competitiveness of local manufacturing.

Economic and financial forecasts.

New Zealand forecasts

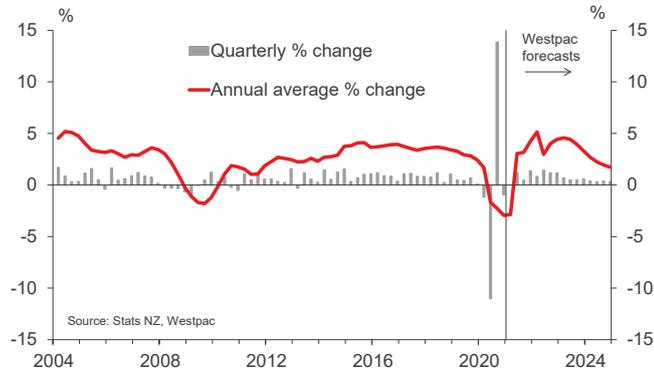
GDP components	Quarterly % change				Annual average % change			
	Dec-20	Mar-21	Jun-21	Sep-21	2019	2020	2021	2022
GDP (production)	-1.0	0.0	1.2	0.5	2.4	-2.9	4.2	4.4
Private consumption	1.0	1.5	1.5	1.5	3.6	-1.7	7.8	2.8
Government consumption	1.7	1.3	1.2	1.1	5.4	5.8	4.8	3.4
Residential investment	1.9	2.0	1.3	0.8	4.9	-4.3	16.2	1.4
Business Investment	-3.1	4.4	-0.3	1.1	2.4	-8.9	7.3	6.8
Exports	-1.1	-6.6	8.4	4.0	2.4	-12.0	-1.2	11.9
Imports	9.1	9.4	3.5	5.2	2.2	-16.5	21.0	5.4
Economic indicators	Quarterly % change				Annual % change			
	Dec-20	Mar-21	Jun-21	Sep-21	2019	2020	2021	2022
Consumer price index	0.5	0.8	0.5	0.8	1.9	1.4	2.4	1.4
Employment change	0.6	0.5	0.1	0.4	1.2	0.8	1.4	2.1
Unemployment rate	4.9	4.7	4.7	4.6	4.1	4.9	4.5	4.1
Labour cost index (all sectors)	0.4	0.4	0.6	0.5	2.6	1.6	1.9	2.1
Current account balance (% of GDP)	-0.8	-1.9	-2.9	-3.6	-3.3	-0.8	-3.7	-2.7
Terms of trade	1.3	1.5	6.2	2.0	7.1	-1.7	9.0	-3.0
House price index	9.0	7.4	1.0	0.0	4.6	17.5	8.1	-3.0
Financial forecasts	End of quarter				End of year			
	Dec-20	Mar-21	Jun-21	Sep-21	2019	2020	2021	2022
90 day bank bill	0.27	0.26	0.35	0.35	1.17	0.27	0.35	0.35
5 year swap	0.31	0.88	1.10	1.15	1.18	0.31	1.20	1.40
TWI	72.9	74.9	75.6	74.9	71.4	72.9	75.0	75.2
NZD/USD	0.69	0.72	0.73	0.73	0.64	0.69	0.74	0.76
NZD/AUD	0.94	0.93	0.92	0.91	0.94	0.94	0.90	0.89
NZD/EUR	0.58	0.60	0.61	0.60	0.58	0.58	0.60	0.60
NZD/GBP	0.52	0.52	0.52	0.52	0.50	0.52	0.52	0.54
RBNZ bond purchases (\$bn)	44.0	50.0	53.3	57.2	-	44.0	60.2	63.3
Net core Crown debt (% of GDP)	32.4	32.4	35.7	37.4	20.2	32.4	38.8	42.7

International economic forecasts

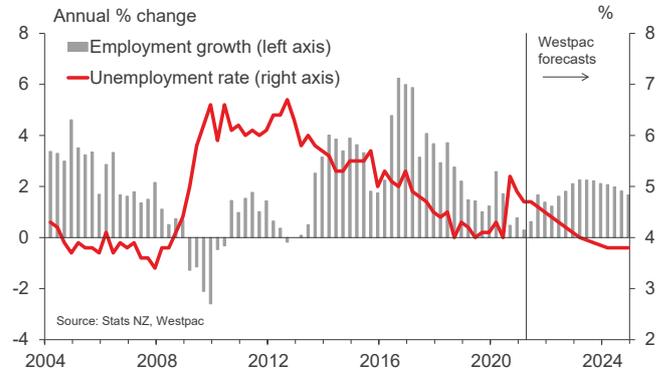
Real GDP (calendar years)	Annual average % change						
	2017	2018	2019	2020	2021f	2022f	
Australia	2.4	2.8	1.9	-2.4	5.2	3.6	
China	6.9	6.7	5.8	2.3	10.0	5.7	
United States	2.3	3.0	2.2	-3.5	6.5	4.1	
Japan	1.7	0.6	0.3	-4.8	2.7	2.1	
East Asia ex China	4.7	4.4	3.7	-2.4	4.8	4.9	
India	6.8	6.5	4.0	-8.0	10.0	8.5	
Euro Zone	2.6	1.9	1.3	-6.6	4.2	4.0	
United Kingdom	1.7	1.3	1.4	-9.9	5.5	5.5	
NZ trading partners	4.1	4.0	3.4	-1.8	6.7	4.6	
World	3.8	3.6	2.8	-3.3	5.9	4.5	

The economy in six charts.

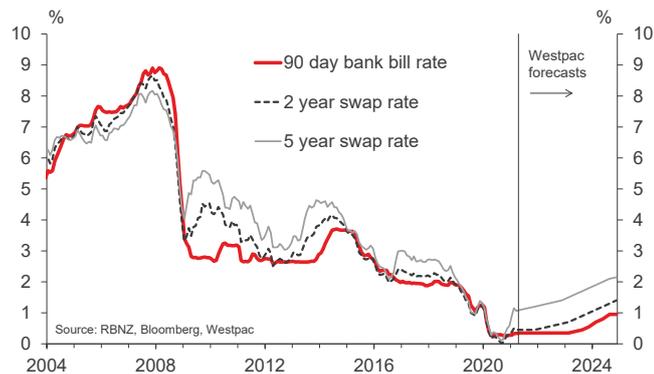
New Zealand GDP growth



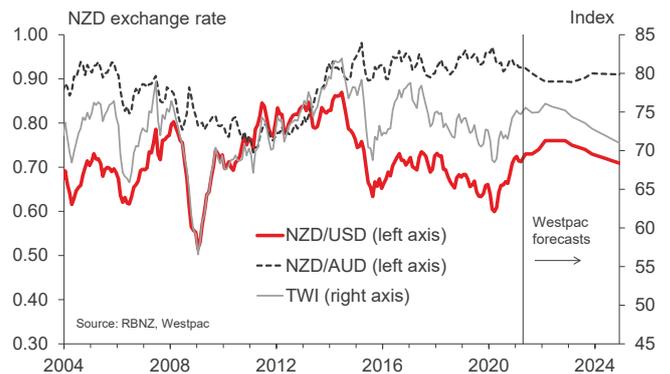
New Zealand employment and unemployment



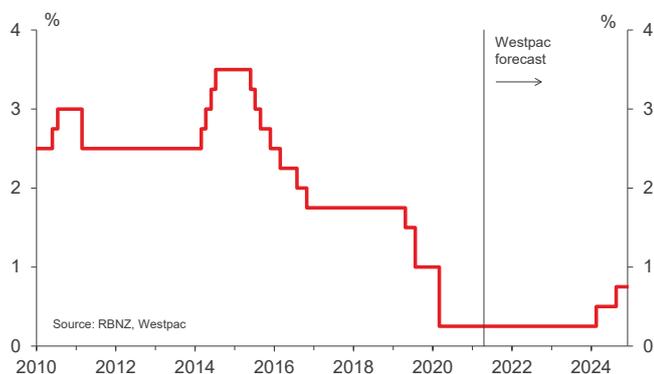
90 day bank bills, 2 year swap and 5 year swap rates



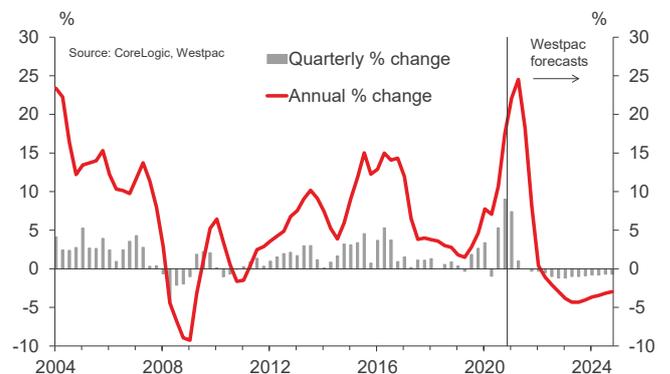
Exchange rates



Official Cash Rate



New Zealand house prices



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