

ECONOMIC OVERVIEW

No easy way down.

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Michael Gordon
Acting Chief Economist
+64 9 336 5670

Satish Ranchhod
Senior Economist
+64 9 336 5668

Nathan Penny
Senior Agri Economist
+64 9 348 9114

Paul Clark
Industry Economist
+64 9 336 5656

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Note from Michael

The cost-of-living crisis has leapt to the top of the list of New Zealanders' concerns, with whole generations discovering for the first time the perils of high inflation. Central banks, on the other hand, have plenty of experience in the matter. They know the causes of inflation, and more importantly, they know the solution.

The difficulty for them lies in the execution. Monetary policy always comes with lags, the first of which is in recognising the need for action. The Reserve Bank of New Zealand fared better than most on this front, but nevertheless the scale of today's inflation problem means that it has still found itself on the back foot. There is no easy way down from this inflation mountain, not without imposing some real pain of another kind.

The second issue is that it takes time for interest rates to have their full effect on the economy. As we detail in our *New Zealand economy* section, the average mortgage rate that borrowers are paying has barely budged so far, due to people having fixed at low rates in the past couple of years. That will change a great deal over the next 6-12 months, as those loans come due for refixing.

Consequently, it's really the year ahead that will tell us whether the RBNZ has done enough. We expect further increases in the cash rate, to a peak of 5% early next year. However, that will increasingly be accompanied by signs of softer consumer spending, slowing business investment, and an easing in the scramble to find (or replace) workers.

That leaves us forecasting an effective stalling of growth by the time we get into 2024. Indeed, it's much more likely that we would be predicting an outright recession were it not for the ongoing recovery in international tourism – an important point of difference for how the New Zealand economy will fare in the context of a worldwide slowdown.

Michael Gordon
Acting Chief Economist

NEW ZEALAND ECONOMY

Turning point.

Interest rates have been rising for a year now, and further large increases are on the cards. Households have yet to feel the full impact of those hikes. However, over the coming year many households will face large increases in their borrowing costs. That will see the recent strength in activity give way to a period of subdued economic growth and rising unemployment.

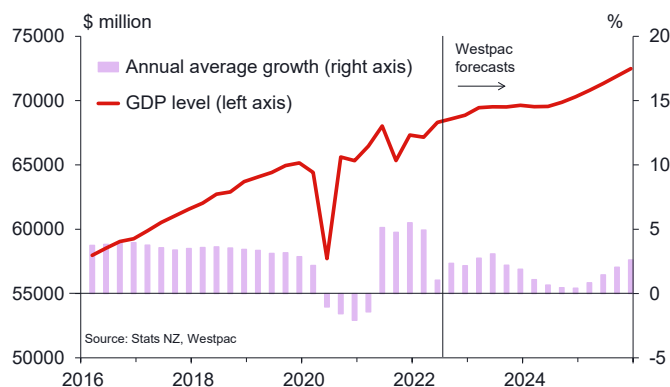
As 2022 draws to a close, the New Zealand economy is continuing to run hot, with household spending holding firm and businesses continuing to take on staff. That strength in domestic demand has been reinforced by the reopening of the borders and return of international tourists to our shores.

However, with resurgent demand and continued supply chain disruptions in the wake of the pandemic, the economy has become increasingly overheated, with inflation pressures boiling over in every corner of the country. Over the past year alone, consumer prices have risen by 7.2% and business operating costs have increased by an average of 10%.

The pressures in the economy have been most clearly evident in the labour market, with businesses struggling to attract and retain staff. The resulting competition for workers has pushed unemployment to just 3.3% and has seen wages rising at the fastest pace on record. It has also meant that businesses have increasingly had to take on less experienced staff to keep up with demand.

Importantly, those pressures aren't showing signs of going away anytime soon.

Figure 1: Economic activity (GDP)



Squeeze.

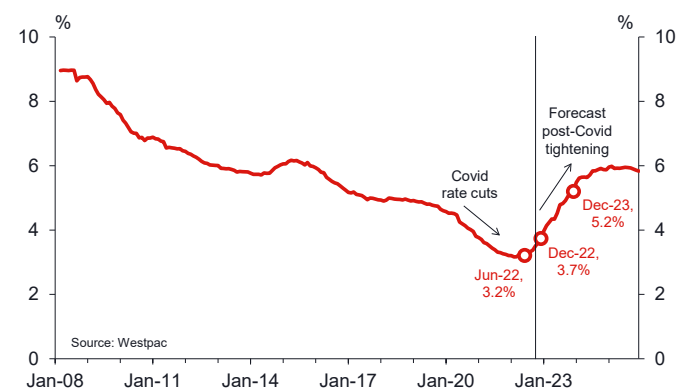
2023 will be a turning point for the economy. The strong economic conditions that we've seen over the past few years are set to give way to a period of weak domestic demand. In

fact, we're forecasting that economic growth will essentially stall through mid-2023 and early-2024.

Driving that slowdown will be the tightening in financial conditions that is already rippling through the economy, and which is set to become an increasing drag on demand over the year ahead. The Reserve Bank has been hiking the Official Cash Rate at a rapid pace to dampen down the red-hot inflation pressures that are sizzling away across the economy. But a year after the interest rate hiking cycle began, inflation is yet to show signs of cooling off. As discussed in the *Inflation and the RBNZ* section, that means further large interest rate increases are on their way over the next few months.

The resilience in inflation reflects that domestic demand has actually held up in the face of interest rate rises over the past year. That's in large part due to the prevalence of mortgage rate fixing. Around 90% of New Zealand mortgages are on fixed rates, and in the wake of the initial Covid outbreak, interest rates hit record lows. That's meant many borrowers have been shielded from the impact of recent interest rate increases. In fact, accounting for the large number of borrowers who are still on earlier very low fixed rates, the 'effective' average mortgage rate that New Zealand borrowers are paying is still only around 3.3%. As a result, the share of household incomes being spent on debt servicing is sitting close to multi-decade lows.

Figure 2: Effective mortgage rate*



* The 'Effective mortgage rate' is an estimate of the average interest rate borrowers are actually paying. It accounts for the fact that the vast majority of borrowers fix their mortgages, rather than paying the interest rates that are currently on offer.

But the picture for borrowers is set to become a lot tougher over the coming year. In addition to those on floating rates, close to half of all mortgages will come up for repricing over the next 12 months. And many of those borrowers will face repricing at rates that are significantly higher than those they are currently on. For example, a borrower who fixed their mortgage at 2.7% in 2020 will now face refinancing at a rate over 6%.

The resulting increase in debt servicing costs will take a large bite out of many households' disposable incomes. And combined with the ongoing increases in living costs (especially for necessities like food, housing and transport), that signals a significant squeeze on households' spending power.

The impact of those rate rises will feel very different for households across the country. For those households who took out a mortgage several years ago, the fall in interest rates in recent years has translated into a sizeable financial windfall, meaning that they could increase their spending while also saving more. That increase in savings is now providing a buffer from the other factors that are squeezing their purchasing power. In addition, while these borrowers are looking at potentially large increases in their interest payments, that is a rise from historically low levels – interest rates are 'only' going back to the sort of levels these borrowers faced during the past decade.

In contrast, for those households who first took out a mortgage over the past one to two years, the interest rate rise now in train signals a much larger squeeze on their finances. These borrowers will not have had the same chance to rebuild their savings since purchasing a home. Consequently, the rise in borrowing costs is likely to impose a much larger drag on their spending. At the same time, many of these borrowers will have seen the value of their housing assets falling since taking out a loan.

As pressures on households' finances continue to mount, economic growth will drop sharply. However, the slowdown will feel very different for households across the economy.

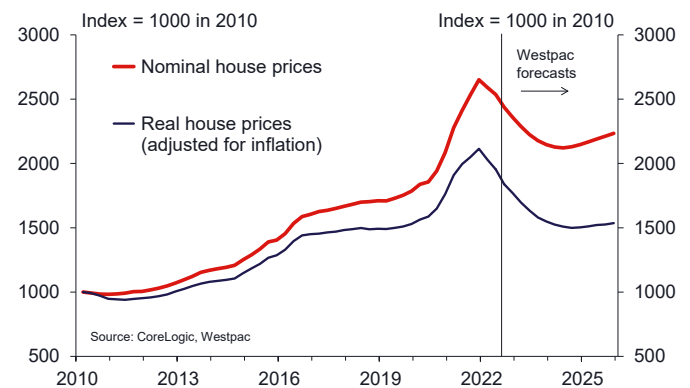
The dampening impact of interest rate hikes is already clearly evident in the housing market. Since mortgage rates began rising in 2021, house prices have fallen by an average of 11% across the nation. We've also seen house sales dropping to their lowest level in decades (barring the lockdown in 2020). The weakening in the housing market has been widespread, but it has been particularly stark in larger centres. Notably, prices in Auckland have fallen 16%, while prices in Wellington are down a whopping 18%.

With interest rates continuing to push higher, we're forecasting that nationwide house prices will fall by a further 10% over 2023 and 2024 combined. Coming on the back of the falls we've already seen, that will leave prices down 20% from their peak in 2021 (our previous forecast was a 15% fall).

The downturn in house prices comes at the same time that other prices in the economy (including building costs and wages) are charging higher. That means, relative to prices in the economy more generally, 'real' house prices are set to fall by 30% from their 2021 peak. That would completely erase the gains that we saw in recent years and take real house prices back to the levels we saw prior to the pandemic.

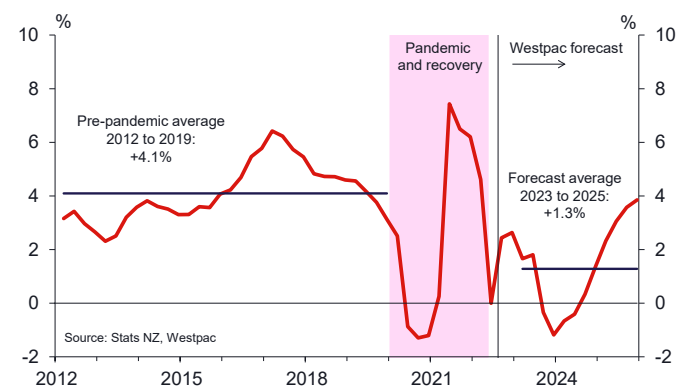
The housing market is a big influence on households' wealth and confidence. And just as the large increases in house prices in recent years have boosted spending appetites, the fall in prices now in train will be a drag on spending.

Figure 3: House prices



The combined impact of higher interest rates, large increases in the cost of living and a weaker housing market points to a significant slowdown in household spending over the coming years. Many households will be forced to wind back their spending due to the mounting pressure on their finances. And many others will do so out of an abundance of caution.

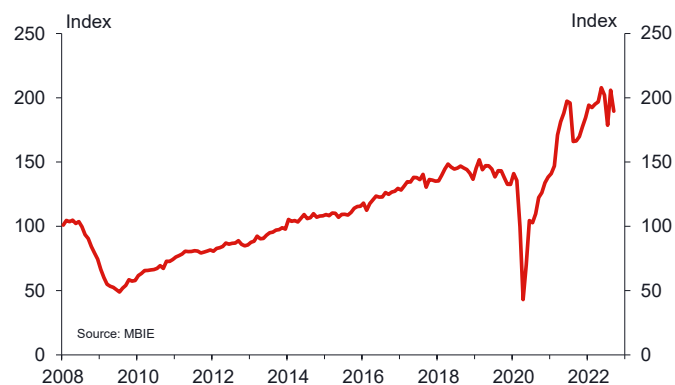
Figure 4: Household spending growth (annual average)



Household spending accounts for around 60% of total economic activity, and the expected weakening in demand will drive a broader slowdown in economic growth over the coming years. That will also see the labour market softening, with the unemployment rate set to rise from 3.3% currently to 4.5% by the end of 2024. Although that is a relatively mild softening in the labour market compared to previous downturns, for affected households it will further compound the pressure on their finances.

The expected rise in unemployment isn't simply because we expect to see businesses shedding staff. Indeed, even in the hottest of jobs markets, there are always thousands of people who move into unemployment each year. The critical factor in coming years will be a pullback in hiring as demand slows, with businesses taking on fewer new workers and not replacing some of those who leave. As we discuss later, that also signals less pressure on wage rates which have been charging higher recently as businesses have struggled to keep up with resurgent demand.

Figure 5: Online job advertisements, seasonally adjusted



This slowdown in domestic demand and the labour market is actually what is needed – and what the RBNZ has been trying to engineer – to dampen the inflation pressures that are running red-hot across the economy. However, even at the best of times, steering the economy through a slowdown is no simple task. And this is definitely not the best of times. In addition to the cornucopia of challenges we are facing domestically, we are also being buffeted by powerful crosswinds from the global economy. That combination means that the risks for economic growth are skewed to the downside, and there is a real risk that the economy could slip into recession at some point over the next 18 months.

The economy is overheating, with the labour market stretched drum tight and inflation pressures boiling over everywhere you look.

Safe as houses?

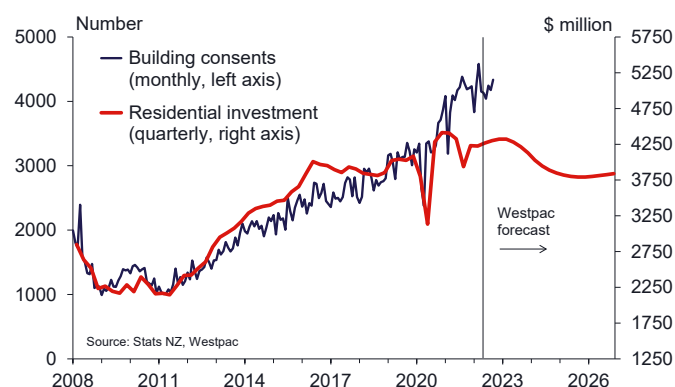
Big changes are also on the cards for our building and construction sector. Building activity has been running hot in recent years, buoyed by the earlier low level of interest rates and related sharp rises in house prices.

However, financial conditions in the building sector are becoming increasingly unfavourable. In addition to higher financing costs, material prices have skyrocketed, rising by more than 10% over the past year alone. The sector is also struggling to source the skilled labour it needs, which has seen labour costs climbing rapidly.

Combined with the fall in house prices, those developments mean that many prospective buyers are nervous about making purchases, and developers are becoming more hesitant to bring new projects to market. A number of small to mid-size construction firms are already reporting a drop off in forward orders, and we're also hearing anecdotes about planned projects being shelved.

Given those less favourable financial conditions, we expect to see a pullback in construction activity, and are forecasting a 12% decline in home building over the next few years. However, this is a decline from historically elevated levels of activity. And rather than a sudden drop, the downturn is likely to be gradual (at least in the near term). With over 50,000 new dwellings consented over the past year, there is a large pipeline of projects in the works that will help to underpin activity levels for some time yet. In addition, shortages of labour are continuing to constrain the pace of building activity, with completion times stretching out.

Figure 6: Dwelling consents and residential construction



Nau mai hoki mai – welcome back.

While domestic demand is set to take a step down, the post-pandemic recovery in international tourism is continuing apace. International visitor numbers have climbed rapidly since the border reopened, and as discussed in our *Special topic*, we're expecting continued gains over the months ahead. That will provide a very welcome boost to demand for our hospitality and accommodation sectors following some very tough years.

The resulting lift in services exports will be an important boost to demand, helping to fill the void left by the pullback in consumer spending. In fact, if not for the recovery in services exports, it's much more likely that we would be looking at an outright recession over the next few years. Even with the return of international tourist dollars, we are still looking at a subdued outlook for economic activity.

GLOBAL ECONOMY

Economic long Covid.

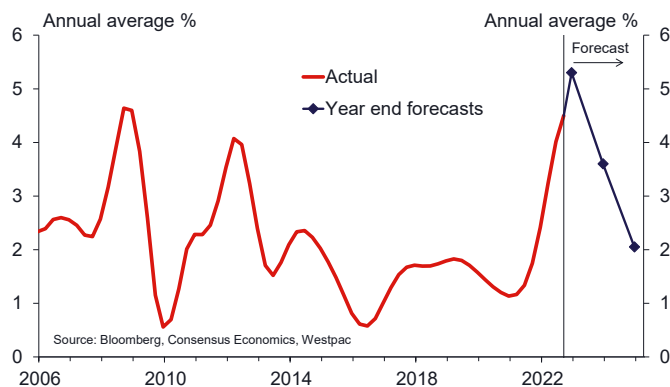
Three years after its initial outbreak, Covid is continuing to disrupt economies. And as inflation runs red hot and global interest rates ratchet higher, the downside risks to global growth are mounting.

Despite the best efforts of central banks, global inflation is still running red hot. In Europe and the UK, annual inflation has cracked double figures, posting whopping 10.7% and 10.1% increases, respectively, in the latest reads. In Australia, it hit 7.3% in the September quarter. Only in the US is it showing signs of abating, down to 7.7% in October from a peak of 9.1% in June.

Despite the best efforts of central banks, global inflation is still running red hot.

And arguably it may get worse before it gets better. Looking at global inflation, the market consensus is that it has yet to peak. Indeed, data for the September quarter has inflation in New Zealand's main trading partners running at 4.5%, with inflation set to jump higher to a peak of 5.3% in the December quarter. That peak would surpass the previous peak of 4.6%, set back in September quarter of 2008.

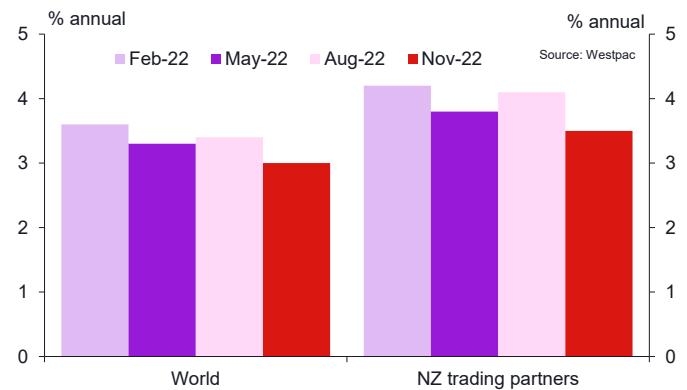
Figure 7: New Zealand trading partner inflation



With inflation yet to show signs of cooling, central banks have continued to aggressively hike interest rates. The US Federal Reserve has hiked its policy rate in 75-basis-point chunks at its four most recent policy meetings. Similarly, the European Central Bank and Bank of England's most recent decisions were also to lift their rates by 75 basis points. And we expect the next move for our own Reserve Bank will also be a 75-basis-point move. In the western world, only the Reserve Bank of Australia stands out as moving in more cautious smaller steps.

The longer inflation stays high and the more central banks hike, the larger the likely slowdown in the global economy. Indeed, over the past year, we have stepped down our trading partner growth forecast for 2023 from 4.2% in our February *Economic Overview* to an anaemic 3.5% in this *Overview*.

Figure 8: Evolution of 2023 GDP growth forecasts



In addition, as the risks to the global growth outlook have increased, financial markets have become more risk averse. Notably, global sharemarkets have slumped, with the MSCI (an index representing the major sharemarkets in developed countries) falling by more than 20% from its peak. The flipside of slumping global sharemarkets has been the rise in the value of safe haven assets such as the US dollar. Indeed, the New Zealand dollar traded as low as US\$0.55 in October.

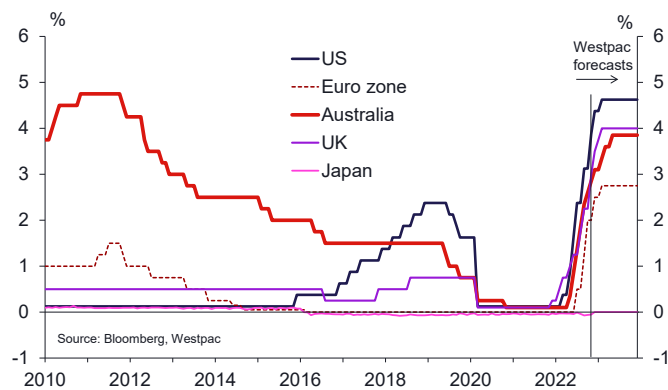
Figure 9: Global sharemarkets



Nonetheless, this global monetary policy cycle is reaching its zenith. In the US, we expect that the US Federal Reserve will slow the pace of its rate hikes to 50 basis points in December. The following meeting at the end of January will likely see another reduction in the pace of rate hikes to 25bps (assuming the current trends in inflation, wages and employment persist).

We anticipate that the resulting Fed funds rate of 4.625% will prove tight enough to get inflation back to target in time. However, it was clear from recent comments that Federal Reserve Chair Powell still sees inflation risks as biased to the upside, potentially creating a need for further interest rate hikes until the middle of 2023.

Figure 10: Global central bank policy rates



Similarly, we expect the ECB to slow the pace of its interest rate hikes. On that basis, we expect the ECB's benchmark rate to reach a peak of 2.75% in March 2023, from 2.0% currently, with an initial 50 basis point rise followed by a 25 basis point move the likely path to get there. Meanwhile, we expect the Bank of England's policy rate to peak at 4.0%.

The Reserve Bank of Australia is an outlier globally, having moved later and more tentatively than most other central banks. At this juncture, we are torn between forecasting what the RBA should do in response to runaway inflation and what it will actually do. For now, we are most confident in our forecast peak policy rate of 3.85%. We have tentatively pencilled in four 25 basis point hikes as the path to this end point.

The longer inflation stays high and the more central banks hike, the larger the likely slowdown in the global economy.

Against the backdrop of high inflation and rising interest rates, the Australian economy is set to slow sharply in 2023. We expect growth of only 1% in 2023, a well below trend pace and a sharp slowdown from an expected 3.4% for 2022. Importantly, we expect private demand to slow to an anaemic pace of 0.2%, a rapid deceleration from a 5.4% expansion this year. With the economy at "stall speed" in 2023, a negative quarter of activity is a risk, but we do not expect a recession.

The Chinese economy continues to march to the beat of its own drum. The country recorded a 3.9% annual rise in GDP in the September quarter, though this was substantially below its trend growth rate. Unlike other major economies, Covid restrictions continue to constrict economic activity, reflecting China's ongoing pursuit of its Covid Zero policy.

In the short term we expect these restrictions to continue to crimp economic growth. However, as these restrictions eventually ease, we expect Chinese economic growth to pick up. We expect the Chinese economy to grow by 3.5% over 2022, but regaining some lost ground with a 6% rise over 2023.

The Chinese economy continues to march to the beat of its own drum, with its Covid Zero policy crimping demand for New Zealand exports.

We expect the weak short-term picture for Chinese economic growth to be an ongoing drag on the demand for New Zealand's goods exports. Elsewhere around the globe, we expect that relatively low growth will also add to the downward pressure on the demand and prices for many New Zealand exports. In the medium term, we anticipate that Chinese demand will pick up over the course of 2023 as the Chinese economy improves.

There are some important offsets in play. The weak global growth outlook is going hand in hand with a weak New Zealand dollar, boosting New Zealand's export receipts in NZD terms. Similarly, global food markets remain very tight, offsetting some of the weakness in global demand. Lastly, the rebound in tourism is due to the reopening of the border and pent-up demand for travel and is therefore less dependent on the global growth outlook.

INFLATION AND THE RBNZ

Danger zone.

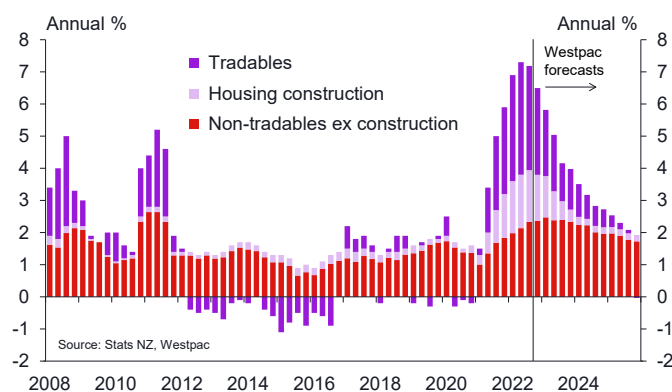
Inflation remains stubbornly high, and the pressure on wages has significantly escalated. The Reserve Bank is increasingly at risk of finding itself in the situation that it aimed to avoid – a self-perpetuating cycle of rising prices that would be painful to break. The rise in the OCR to date will have a more meaningful impact on the economy over the year ahead, but we think that further increases will still be needed.

Inflation continues to run hot in New Zealand, as it does elsewhere. As we expected, the annual rate of increase does seem to have passed its peak now, albeit barely – easing from 7.3% in the June quarter to 7.2% in September. But what’s more worrying is that the breadth and persistence of price rises is still gathering strength, making the challenge of returning to low and stable inflation even more formidable.

Up to now, it’s still fair to say that global forces have accounted for a greater share of the rise in inflation. Prices for internationally-traded goods (tradables) rose by 8.1% in the year to September, led by categories such as food, fuel and household goods. There’s also been a surge in prices for newly-built homes, up 16.8% in the last year. The construction sector is the most extreme example of strong demand running up against capacity constraints, but there has been a sizeable element of rising costs for imported materials as well.

Going forward, it’s less likely that these overseas forces will be a source of ongoing inflation. World commodity prices haven’t kicked on after the initial shock of the Ukraine invasion, and in some cases have actually declined as concerns about the slowing global economy have come to the fore. Supply chain disruptions are easing, notwithstanding China’s ongoing use of Covid lockdowns. And global shipping costs have fallen dramatically from last year’s peak, although they remain above their pre-Covid levels.

Figure 11: Contributions to annual inflation

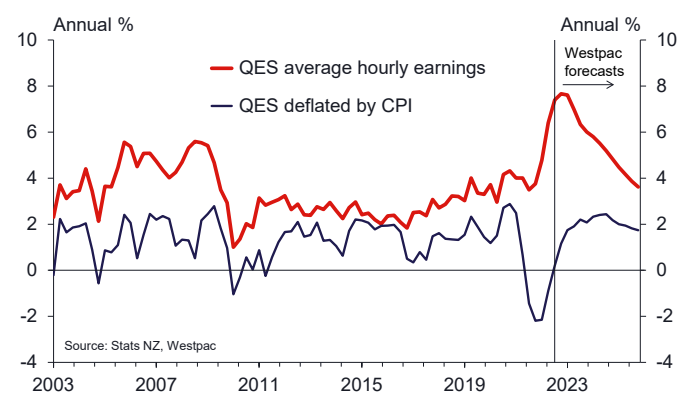


With those international price pressures easing, we expect to see a more meaningful drop in the overall inflation rate over the next few years, to 6.5% by the end of this year and to around 4% by the end of 2023. That would still put it outside the Reserve Bank’s 1-3% target range for an extended period, but would at least provide the RBNZ some comfort that inflation is on the right path.

However, that path is increasingly dependent on what happens with non-tradables – prices that are largely determined by local conditions. This group is strongly weighted towards services, and crucially, to more labour-intensive activities. And it’s clear that wage pressures are playing an increasing role in the rise in inflation.

Wage growth was initially slow to pick up, and fell substantially behind the rising cost of living in 2021. But this year has seen it accelerate sharply, on some measures reaching the fastest pace of growth that we’ve seen in the inflation-targeting era going back to 1990. Average hourly pay rates are now starting to outpace consumer price inflation (though not broader measures of the cost of living, which include interest payments).

Figure 12: Nominal and inflation-adjusted wage growth



The pattern of the last couple of years broadly matches how the Covid pandemic has played out. At first it was largely a productivity shock to the economy, as supply chains gummed up and worker absences increased. In these conditions, we

would expect real (inflation-adjusted) wages to fall. But we're hearing much less from firms about supply chain issues these days. The overwhelming issue now is labour shortages – or more accurately, an excess of demand for workers. And that is a recipe for rising real wages.

The other major concern for the Reserve Bank will be that inflation expectations remain higher than what would be consistent with the RBNZ meeting its medium-term target. Of course, what matters is not just what people expect future inflation to be, but their ability to act on it. And in the current environment, workers are increasingly able to act on this by securing larger pay rises, and businesses are willing to do so because they believe they can pass on the cost into their own prices.

That's a sign that the economy faces the real risk of an inflationary spiral – the exact situation that the RBNZ had hoped to head off by making a relatively early start on interest rate hikes. But the extent of overheating in the economy, and the cautious pace of rate hikes at first, means that the advantage appears to have been lost. Interest rates will need to go higher than first thought, and the odds of managing a soft landing for the economy are getting slimmer.

Interest rates will need to go higher than first thought, and the odds of managing a soft landing for the economy are getting slimmer.

We expect that the Official Cash Rate will rise to a peak of 5% in the early part of next year, and that it will remain there through to the middle of 2024. With the OCR currently at 3.5%, and with little room for delay, that suggests a need for more jumbo-sized OCR hikes to come.

Notably, the RBNZ's Monetary Policy Committee revealed that it debated between a 50 and a 75 basis point move in its October review, reviving the 'stitch in time saves nine' reasoning that led it to step up the pace of rate hikes earlier this year. That stands in contrast with overseas central banks, which – rightly or wrongly – have favoured slowing down the pace of rate hikes in recent weeks.

As we've highlighted before, we see the OCR rising to a cyclical peak, rather than a permanently higher level. Interest rates will need to remain high for some time, to have the required braking effect on the economy, before dropping back to more 'neutral' levels over the long term. And if it seems like current interest rate settings aren't particularly restrictive, it's because monetary policy inevitably operates with a lag. Our *New Zealand economy* section details how many borrowers will be exposed to the rise in interest rates for the first time over the next 6-12 months.

The question of the 'neutral' level of interest rates remains a vexed one. We've updated our assumption about the long-run level of the OCR to 3%, from 2% previously. (This means we expect around 200 basis points of rate cuts over 2024

and 2025 as economic growth stalls and inflation returns to target.) Financial market pricing currently implies that an OCR of around 4% is sustainable over the long term, although this pricing has swung around wildly over recent months.

Figure 13: 90-day bank bill rate forecasts



Ultimately the problem is that the neutral cash rate can't be observed, only inferred using statistical techniques – and there's no agreement on the 'right' technique. Recent work by the Reserve Bank of Australia, using a range of approaches, came up with an average estimate of 1% in real terms. To the extent that the neutral level of interest rates is a product of global forces, we wouldn't expect it to be meaningfully lower than this for New Zealand. With an inflation target midpoint of 2%, that would give us a neutral rate of 3% in nominal terms.

We also have to emphasise that the neutral rate is a long-run concept – it's where we would expect the cash rate to settle when demand and supply in the economy are balanced, and inflation is anchored at the midpoint of the target range. We're clearly not in that situation at the moment. And that means that the OCR will need to go substantially higher than 3%, at least for a while, in order to have the required restraining effect on the economy.

Financial market forecasts (end of quarter)

	CPI inflation	OCR	90-day bill	2 year swap	5 year swap
Dec-22	6.5	4.25	4.55	5.00	4.70
Mar-23	5.9	4.75	5.00	4.90	4.60
Jun-23	5.1	5.00	5.10	4.80	4.50
Sep-23	4.1	5.00	5.10	4.60	4.35
Dec-23	3.9	5.00	5.10	4.40	4.20
Mar-24	3.5	5.00	5.10	4.15	4.05
Jun-24	3.1	5.00	4.80	3.90	3.90
Sep-24	2.8	4.50	4.30	3.70	3.80
Dec-24	2.7	4.00	4.00	3.50	3.70
Mar-25	2.5	3.75	3.75	3.40	3.65

AGRICULTURAL OUTLOOK

Everything in moderation.

New Zealand's commodity prices continue to moderate, and prices have further to fall. Meanwhile, high agricultural input prices are moderating farm and orchard profit margins. However, with many of these factors being cyclical, we expect commodity prices and sector profits to pick up once again from the second half of 2023.

New Zealand's commodity prices continue to moderate. Since the August *Economic Overview*, commodity prices in world terms have fallen 7.2%. However, the weak New Zealand dollar has offset much of that weakness. In NZD terms, commodity prices have dipped just 1.1% since August.

We expect commodity prices will fall further in the short term. Global demand is at a low ebb, with many economies battling high inflation and rising interest rates. Chinese growth remains weak due to ongoing Covid struggles. In addition, the NZD has begun to strengthen, rising to US\$0.59, from a low of US\$0.55 last month, reducing its support for NZD prices.

On that basis, we have cut our 2022/23 milk price forecast to \$8.75/kg. This softer price outlook reflects weak demand in our largest market, China. In contrast, global supply remains very weak, providing some offset to weak demand.

For the 2023/24 season, we expect Chinese demand to rebound as Covid restrictions eventually ease – we expect the Chinese economy to grow by 6% over 2023, up from 3.5% in 2022. With some of the weak NZD/USD already locked in for next season, we have set our 2023/24 forecast at \$10.00/kg.

Meanwhile, meat prices are under downward pressure on several fronts. Meat demand is notably weak in China and is also soft in Europe and the UK. Meanwhile, South America and US beef supply is strong, with the US continuing to slaughter breeding stock following drought. Locally, processing capacity

is very tight on the back of labour shortages. That's putting added downward pressure on farmgate prices. As a result, we anticipate that prices will post larger than average falls through to the autumn. Beyond that, we expect global meat prices to pick up as global demand recovers and as US beef supply falls on the back of a smaller US beef herd.

Turning to forestry, export log prices remain relatively low on the back of weak Chinese construction activity. Looking to 2023, log prices are expected to improve modestly as the Chinese economy regains strength.

The horticulture sector is a mixed bag. Kiwifruit orchard gate prices slid over 2022 with picker shortages resulting in fruit quality issues. Meanwhile, apple prices have risen on a smaller crop and a weak NZD. Lastly, there's good news out of the viticulture sector, with the 2022 grape harvest setting a record high. In addition, returning backpackers are set to boost the availability of pickers, meaning we can expect improved apple and kiwifruit crops.

Rapid cost increases have been eating away at farm profit margins, with input costs rising by around 13% over the past year. We expect margins will continue to contract in the near term. While prices for some inputs like fuel have turned lower, wage and feed costs remain high. Staying on top of cost pressures will remain a challenge for all. That said, we expect the sector to remain profitable and for margins to improve from the second half of 2023.

Commodity price monitor

Sector	Trend	Current level ¹	Next 6 months
Dairy	We have cut our 2022/23 milk price forecast to \$8.75/kg on ongoing demand weakness. However, with global dairy supply very weak and Chinese dairy demand set to rebound, we have set our 2023/24 forecast at \$10.00/kg.	High	↓
Beef	Farmgate beef prices peaked at around \$6.80/kg this spring. From here, we expect prices to soften as global demand remains weak, global supply remains high, and processing capacity tightens.	Average	↓
Lamb/Mutton	Farmgate lamb prices have peaked at around \$9.50/kg this spring as meat processing capacity issues have returned. From here, we expect prices to decline further on weak global demand.	Above Average	↓
Forestry	With soft activity in China's construction sector, we expect forestry export prices to remain relatively low. Prices should improve modestly over 2023 as Chinese growth rebounds on the back of easing Covid restrictions.	Below average	→
Horticulture	Kiwifruit orchard gate prices have fallen on issues with fruit quality. Apple prices, though, are up on last season's levels, although that's on the back of a disappointingly small crop as well as the weak NZD.	Average	→

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

EXCHANGE RATES

Out of favour.

The New Zealand dollar has been under pressure for much of this year, reflecting a broader trend towards the US dollar as a safe haven in an uncertain environment. We expect the NZ dollar to regain some ground next year once investors are satisfied that global inflation is turning the corner and that the peak in interest rates is near.

The New Zealand dollar experienced one of the steeper declines in its history this year, falling by as much as 20% compared to a year ago. Remarkably, this fall occurred during what has been a fairly benign period for the New Zealand economy, with domestic activity remaining firm and interest rates on the rise.

Our 'fair value' model of the currency shows that conditions have turned against the NZD in recent months. Global prices for our commodity exports have fallen, though they remain high compared to history. In addition, while New Zealand made a relatively early start on tightening monetary policy, other regions have rapidly caught up as the extent of their inflation problems became apparent. That's meant the NZD's interest rate advantage has narrowed over recent months.

Nevertheless, our estimates suggest that the NZD was already on the undervalued side at the start of this year, and it has become significantly more so in recent months. That points to less tangible factors such as risk appetite being the main driver of the currency's decline.

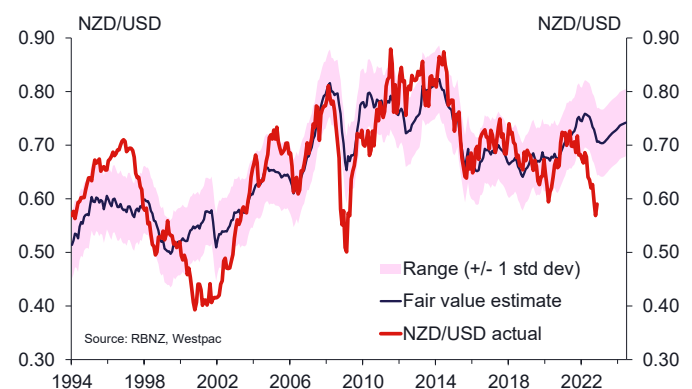
Indeed, the fall in the NZD has been part of a broad-based rise in the US dollar against all other currencies. Growing nervousness about how much central banks will need to do to bring inflation under control, and whether they will end up driving their economies into recession, has seen investors pile into the US dollar. That's not because the US economy itself is doing particularly well, but because the USD is the deepest, most easily traded currency market in the world, and hence is seen as a 'safe haven' in uncertain times.

With that in mind, we think that the US dollar's appeal will wane only once investors are satisfied that global inflation has turned a corner, and that the peak in central bank policy rates is in sight. That could be a while away yet, with core inflation measures still on the rise in many economies. However, we do expect to see some weakening in the USD over the coming year in response to a strengthening in the Chinese economy and more confidence around Europe's energy security. This would see the NZD rise from around 59 cents currently to 65 cents by the end of next year.

The NZ dollar has notably underperformed relative to the Australian dollar for much of this year, falling as low as 87 cents in September, its lowest since 2013. However, it has rebounded

above 90 cents in recent weeks, reflecting a shift in the relative stances of the Reserve Bank of Australia and Reserve Bank of New Zealand. The RBA has scaled back the size of its interest rate increases, citing the need to keep the economy 'on an even keel', while the RBNZ remains focused on stronger early action. We don't think this difference in approach will last for long – Australia still ultimately needs a higher level of interest rates to bring inflation pressures under control. As such, we expect the NZD/AUD to hold its ground at around 90 cents over the next year or two.

Figure 14: NZ dollar 'fair value' estimates



Exchange rate forecasts (end of quarter)

	NZD/USD	NZD/AUD	NZD/EUR	NZD/GBP	NZD/JPY	TWI
Dec-22	0.59	0.91	0.59	0.52	86.7	69.5
Mar-23	0.60	0.91	0.59	0.53	87.0	69.6
Jun-23	0.61	0.91	0.60	0.53	87.2	69.6
Sep-23	0.63	0.91	0.61	0.53	88.2	70.3
Dec-23	0.65	0.90	0.61	0.54	88.4	71.1
Mar-24	0.66	0.90	0.60	0.54	87.1	70.8
Jun-24	0.66	0.89	0.60	0.53	85.8	70.8
Sep-24	0.67	0.89	0.59	0.53	85.1	70.8
Dec-24	0.67	0.89	0.59	0.53	84.4	70.9
Mar-25	0.67	0.90	0.58	0.53	83.3	70.7

SPECIAL TOPIC

Visitor arrivals into New Zealand: Shifting gears.

The lifting of border restrictions this year has resulted in a sharp pickup in visitor arrivals. There is more to come, with growth increasingly being driven by visitors on long-haul flights rather than those from Australia or returning New Zealanders. The resulting increase in tourism activity will be an important support for the economy, though it will add to the challenge of reining in inflation.

The return of overseas tourists has long been an important part of our economic forecasts. But even we have been surprised with how fast the rebound has been following the lifting of border restrictions.

Most of what we've seen has been due to visitors from Australia and expat Kiwis looking to reconnect with friends and family, following an imposed two-year hiatus. The relative proximity and an already established familiarity with New Zealand will have provided some comfort to those not confident enough to travel to faraway Europe and the US. Conducive skiing conditions in Queenstown during the winter season will also have tempted many to cross the Tasman.

By contrast, the return of holidaymakers from other key source markets, such as the EU, UK, and US, has been more measured. In part that was due to timing issues – travel plans made during the northern hemisphere summer were locked and loaded well before New Zealand opened its borders to these countries. The familiarity of nearby holiday destinations will also have favoured short-haul travel.

Looking forward, we expect overseas visitors to New Zealand to continue growing, albeit at a slower pace. While short-haul travel has driven the recovery to-date, long-haul travel is set to become the dominant driver of growth over coming years. By the end of 2025, visitor arrivals to New Zealand should be in touching distance of pre-Covid levels.

There are several factors that support this view. Air capacity is being added as we speak. Mothballed planes are coming back into operation, old connections are being re-established, and airlines are making new ones. At the same time, people are learning to live with Covid. And with memories of the last two years starting to fade, their confidence to travel further afield is growing.

However, there are factors that could dampen growth. That includes a new wave of Covid infections during the northern hemisphere winter. There is also the cost-of-living crisis, which is currently pressuring household budgets around the globe. Arguably that will have more of an impact on short-term, rather than long-haul travel, with the latter generally more of a 'once in a lifetime experience' that people save for. Finally, the

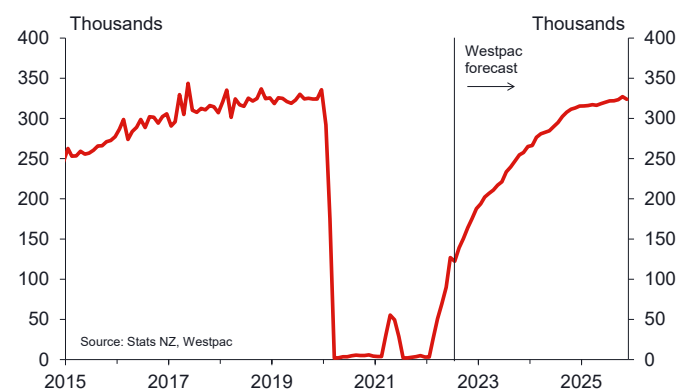
return of travellers from China remains subject to changes in their zero-Covid policy. We are not expecting a pickup in these numbers before the second half of 2023.

The return of overseas visitors is important to New Zealand's overall economic growth outlook. Prior to Covid, inbound tourism directly contributed a sizeable 4% to GDP. After adjusting for the number of New Zealanders who travel abroad, tourism activity still contributed 1.5% to GDP. The scale of that net positive contribution is a point of difference for New Zealand compared to many other advanced economies. For instance, pre-Covid patterns suggest that the return of tourism will be a net minus for the Australian economy, which normally sees more outflows than inflows.

While this contribution will be welcome in many parts of the country, it comes at a time when the RBNZ already faces an uphill struggle to slow domestic demand and get on top of inflation. Adding a fresh source of demand to the mix is likely to make that challenge even more difficult.

Finding labour to meet this additional demand is also likely to be a challenge, given that labour market conditions are even tighter now than they were before Covid. Some of that might be addressed through the return of foreign migrants and working holidaymakers, but even then, it is highly likely that shortages will persist. That will increase the pressure on tourism-related firms to lift wages, in order to attract workers back from the sectors that they had moved to over the last few years.

Figure 15: International visitor arrivals, seasonally adjusted.



ECONOMIC AND FINANCIAL FORECASTS

New Zealand forecasts

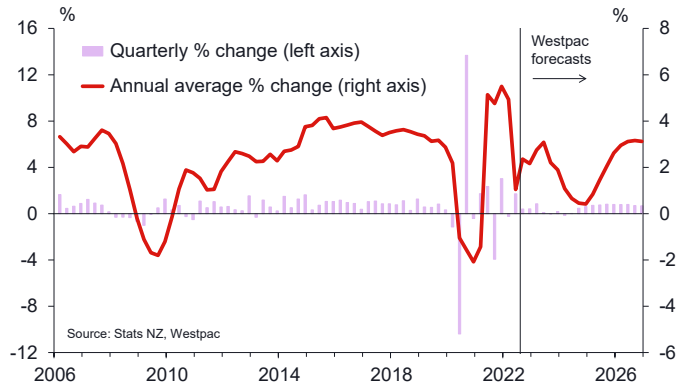
GDP components	Quarterly % change				Annual average % change			
	Sep-22	Dec-22	Mar-23	Jun-23	2021	2022	2023	2024
GDP (production)	0.4	0.4	0.9	0.1	5.5	2.2	1.9	0.4
Private consumption	0.7	-0.1	-0.3	-0.5	6.2	2.6	-1.2	1.4
Government consumption	-0.5	-0.5	-0.5	-0.5	9.9	6.6	-1.8	-1.1
Residential investment	0.8	0.5	0.0	-1.0	7.8	1.3	-1.0	-7.3
Business Investment	3.2	1.6	1.2	0.7	9.7	5.3	3.7	1.4
Exports	3.8	-0.5	2.4	1.9	-3.6	-0.1	12.0	7.1
Imports	4.9	0.2	-0.9	0.2	14.9	3.4	2.1	5.8
Economic indicators	Quarterly % change				Annual % change			
	Sep-22	Dec-22	Mar-23	Jun-23	2021	2022	2023	2024
Consumer price index	2.2	0.8	1.2	0.9	5.9	6.5	3.9	2.7
Employment change	1.3	0.1	0.1	0.1	3.3	1.3	0.5	0.5
Unemployment rate	3.3	3.3	3.4	3.5	3.2	3.3	3.8	4.5
Labour cost index (all sectors)	1.1	1.1	0.9	1.2	2.6	4.2	4.1	3.4
Current account balance (% of GDP)	-8.0	-7.5	-6.4	-5.8	-6.0	-7.5	-4.7	-4.3
Terms of trade	0.5	5.6	-0.2	-0.3	2.8	4.1	-1.0	0.3
House price index	-3.9	-3.2	-3.0	-2.8	27.1	-11.0	-9.0	0.0
Financial forecasts	End of quarter				End of year			
	Sep-22	Dec-22	Mar-23	Jun-23	2021	2022	2023	2024
90 day bank bill	3.33	4.55	5.00	5.10	0.81	4.55	5.10	4.00
2 year swap	4.12	5.00	4.90	4.80	2.08	5.00	4.40	3.50
5 year swap	3.94	4.70	4.60	4.50	2.46	4.70	4.20	3.70
10 year bond	3.77	4.50	4.50	4.30	2.39	4.50	4.00	3.50
TWI	70.6	69.5	69.6	69.6	74.3	69.5	71.1	70.9
NZD/USD	0.61	0.59	0.60	0.61	0.69	0.59	0.65	0.67
NZD/AUD	0.90	0.91	0.91	0.91	0.95	0.91	0.90	0.89
NZD/EUR	0.61	0.59	0.59	0.60	0.61	0.59	0.61	0.59
NZD/GBP	0.52	0.52	0.53	0.53	0.52	0.52	0.54	0.53

International economic forecasts

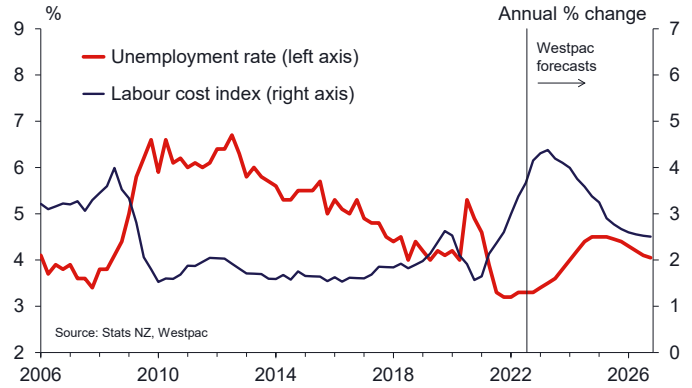
Real GDP (calendar years)	Annual average % change					
	2018	2019	2020	2021	2022	2023
Australia	2.8	2.0	-2.1	4.9	4.2	1.9
China	6.8	6.0	2.2	8.1	3.5	6.0
United States	2.9	2.3	-3.4	5.7	1.9	0.4
Japan	0.6	-0.4	-4.6	1.7	1.7	1.5
East Asia ex China	4.5	3.8	-2.3	4.2	4.5	4.4
India	6.5	3.7	-6.6	8.7	7.0	6.7
Euro Zone	1.8	1.6	-6.1	5.2	3.2	0.4
United Kingdom	1.7	1.7	-9.3	7.4	3.6	-0.2
NZ trading partners	4.1	3.5	-1.5	5.9	3.5	3.5
World	3.6	2.8	-3.0	6.0	3.2	3.0

THE ECONOMY IN SIX CHARTS

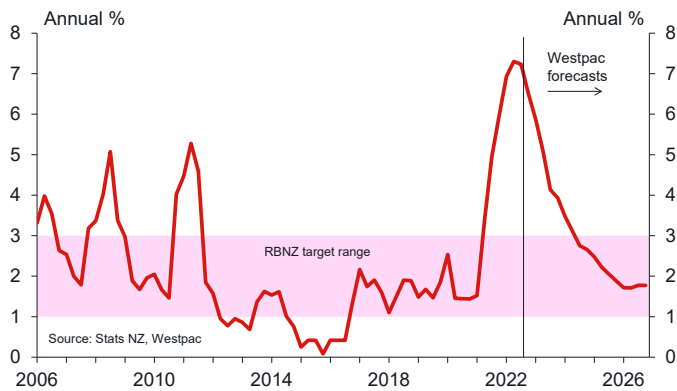
GDP growth



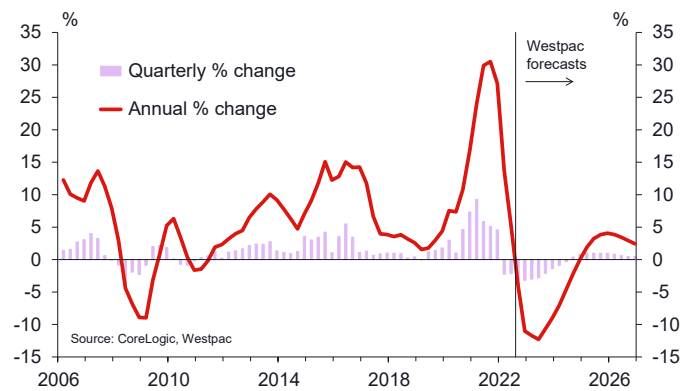
Employment and wage growth



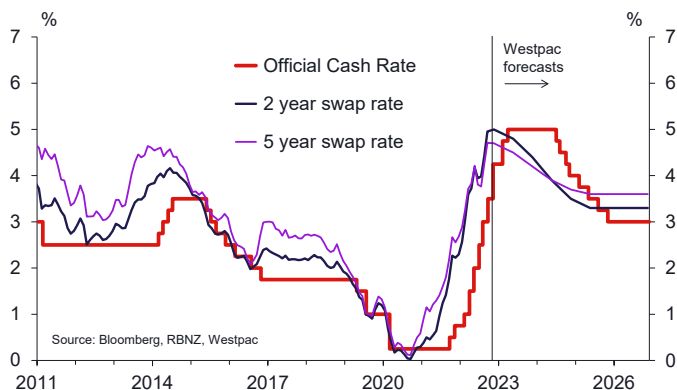
Consumer price inflation



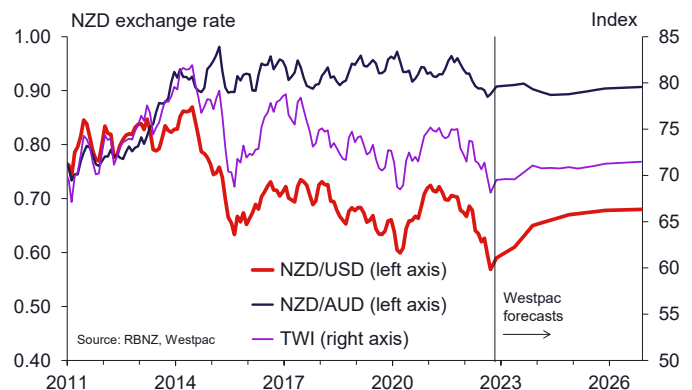
House prices



Official Cash Rate, 2 year swap and 5 year swap rates



Exchange rates



Contact the Westpac economics team

Michael Gordon, Acting Chief Economist

+64 9 336 5670

Satish Ranchhod, Senior Economist

+64 9 336 5668

Nathan Penny, Senior Agri Economist

+64 9 348 9114

Paul Clark, Industry Economist

+64 9 336 5656

Any questions email:

✉ economics@westpac.co.nz

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