



May 2019 Economic Overview

Note from Dominick

The dramatic decline in interest rates over the past few months is going to be a game changer. For the past year or so the global and New Zealand economies have been slowing. But that is going to change, partly due to the dose of monetary stimulus that has just been delivered. Over the coming year we are expecting the global economy to stabilise and the New Zealand economy to pick up to above 3% GDP growth.

Central banks around the world have veered towards lower interest rates because inflation is once again falling short of expectations. We have been talking about lowflation for years, and it has not gone away. New technologies and globalisation are holding consumer prices down across the world, including New Zealand. We are currently going through yet another iteration of what has become a familiar process. Low inflation allows low interest rates, which cause higher asset prices and a period of stronger GDP growth.

In New Zealand's case, much of this works through the housing market. The recent sharp drop in fixed mortgage rates, combined with the cancellation of capital gains tax, will be a major stimulus for house prices. We expect annual house price inflation to accelerate from 1.3% now to 7% over the coming year or so. That should spur consumer spending and remove the need for a further OCR reduction from the Reserve Bank.

It is not all roses, however. The flip side of lowflation is that New Zealand businesses are struggling to pass on the cost increases that they are currently experiencing. Business confidence is low, and firms have become wary of investing or employing. This business malaise will be hard to shift, although it might ease a little over the year ahead.

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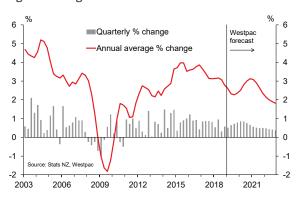
New Zealand Economy

Better times ahead

New Zealand's economic growth has slowed recently, with firms concerned about their profitability and holding back on expansion plans. But we think that the sharp fall in interest rates and the elimination of the proposed capital gains tax will help to revive growth over the coming year, supported by fiscal stimulus and a lift in building activity.

New Zealand's recent economic performance has been on the disappointing side. GDP growth averaged around 0.4% in the last two quarters of 2018, essentially no more than population growth. Based on the indicators to hand, we're expecting a similarly subdued 0.5% increase in the March quarter. However we expect momentum to pick up again gradually over the remainder of this year.

Figure 1: GDP growth forecasts



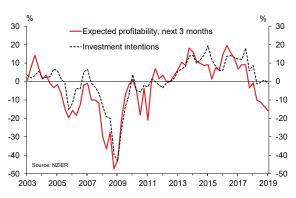
Initially, the slowdown was led by consumers reacting to the cooling housing market. House prices have been flat to falling in Auckland and Canterbury, and although prices in the rest of the country have continued to rise at a solid pace, nationwide house price inflation has slowed from a peak of 15% in 2016 to 2% today. The pace of growth in household spending has accordingly slowed from its peaks, though it continues to be supported by household income growth via rising employment and wages.

In more recent times, the slowdown has become businessled. Surveyed business confidence has been weak for an extended period, and over time there have been more signs of this manifesting in business decisions. Even though firms are citing capacity constraints and difficulty in finding workers, growth in business investment has been sluggish and private sector job advertisements have flattened off.

No doubt some of this grumpiness relates to dissatisfaction with Government policies that have added to business costs, such as minimum wage increases, changes to employment law, and increased regulatory requirements. But an equally important aspect is that firms are not confident about their ability to pass on cost increases. Technology changes and international competition have put more power in the

hands of consumers, and moreover, demand isn't expanding quickly enough for firms to be able to justify price increases. As a result, firms see a squeeze on their profitability and are scaling back their expansion plans accordingly.

Figure 2: Profitability and investment intentions



Some of the recent shortfall in growth has also been due to restraints that will prove temporary. Dry weather and disruptions to natural gas supplies have at times weighed on activity in the agriculture, electricity generation and manufacturing sectors. But overall, we judge that capacity constraints have played only a limited role - if anything, the economy has been running a little below its potential in recent quarters.

We assign only a small role in the slowdown to international developments. As we note in the Global Economy section, world growth has slowed from its recent peaks. But the mix of activity has been relatively favourable for New Zealand, and demand for our agricultural exports has been robust.

Policy choices change the game

The factors that have weighed on growth recently are likely to stick around for a while yet. Nevertheless, our view remains that there are forces already in train that will support a significant, albeit temporary, lift in growth over the next couple of years. We expect GDP growth to start picking up from the second half of this year, accelerating to a peak of 3.1% over 2020.

As we've detailed before, fiscal stimulus will play an important role in boosting the economy over the next couple of years. The last Budget incorporated a substantial lift in spending on public services, especially for this year as a catch-up on the previous year's under-spending. The Families Package will also continue to support household incomes, with the winter energy payments coming into full effect this year. Finally, the Government's planned capital spending will also ramp up significantly over the next couple of years.

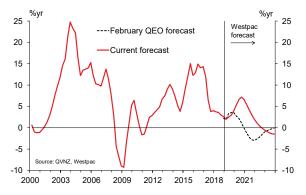
Fiscal stimulus is certainly not a new part of our story. In fact, we've toned down how long-lasting the fiscal boost is in our forecasts. The softer than expected starting point for the economy will flow through into the Treasury's projections of the level of GDP, and hence the expected tax take, over the years to come. That suggests smaller projected surpluses in future Budgets, and it limits the scope for a ramp-up in spending beyond what the Government has already signalled.

What's new in our forecasts are two recent policy changes - or in the first case, the absence of a change. The Government has long expressed a desire to introduce a capital gains tax (CGT), and early this year the Tax Working Group recommended a CGT covering business assets as well as investment properties. In our earlier forecasts we had assumed that a CGT would be introduced in some form, if not the full-blooded version that was proposed.

But in April the Government announced that will it not proceed with a CGT, and the Labour Party said it will not campaign on introducing a CGT for the foreseeable future. That decision could go some way to alleviating the gloom among businesses in recent months, perhaps giving a boost to investment and hiring. It also significantly alters the outlook for the housing market. We were previously forecasting a modest fall in house prices by 2020 in anticipation of a CGT taking effect in 2021.

The second major policy development is the Reserve Bank's shift to further monetary easing, as we detail in the Reserve Bank and Interest Rates section. History shows that interest rates have a powerful impact on the housing market, and the fall in mortgage rates over the last few months is the most substantial move that we've seen in some time. Between the cancellation of the CGT and the sharp fall in borrowing rates, we now expect house price growth to re-accelerate to 7% next year. That in turn will help to underpin household spending growth over the next couple of years.

Figure 3: House price growth



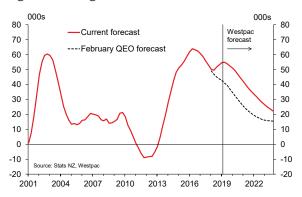
To keep this in perspective, a 7% rise in house prices is fairly modest compared to previous upswings. There are still policy-related headwinds for the housing market, such as the foreign buyer ban and the ringfencing of losses on rental properties. And we expect that the differences in regional housing markets will persist for a while longer: Auckland prices could go from falling to slightly rising, while prices elsewhere may accelerate slightly.

Population and building continue to support growth

There are a few other factors that have led us to upgrade our GDP growth forecasts for 2020. The first is that population growth, led by migration, is shaping up as less of a drag in the near term. In our previous Economic Overview, we noted that a change in Stats NZ's methodology for measuring permanent and long-term migration revealed that net inflows in recent years have been less than previously thought. Among other things, that implied a lower rate of homebuilding needed to meet population growth and address housing shortages.

But while net migration is off its earlier peak, recent data suggests that there has been a renewed upswing. We've been cautious about factoring this into our forecasts, as under the new methodology the most recent figures can be subject to large revisions. Nevertheless, there is some basis for a more positive view on net migration. Job prospects are turning relatively more favourable on this side of the Tasman, with the Australian economy slowing and unemployment expected to rise.

Figure 4: Net migration forecasts

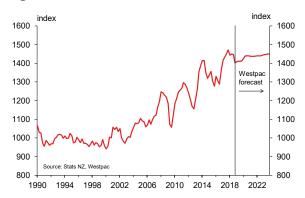


The upgraded outlook for net migration gives more support to our view that housing construction is set to take another leg higher this year. Growth has been harder to achieve in recent times, now that building activity has reached a relatively high share of GDP and capacity constraints are an issue. Nevertheless, there has been fresh momentum in building consents in recent months, particularly in Auckland which has reached new multi-decade highs. That points to a significant amount of work in the pipeline for the next year or so. We think that this year will prove to be something of a last hurrah for growth in homebuilding, as activity is now reaching the levels needed to meet population growth and address the shortage of housing that had accumulated in past years.

Non-residential construction is also expected to lift this year. While this sector tends to experience longer and more variable cycles than housing, interest in commercial property remains strong and a significant number of projects have been consented or announced. This activity is likely to be spread across the country, with Auckland accounting for a large share.

We expect export earnings to rise this year, though they will provide less support to GDP growth compared to last year. New Zealand's terms of trade have eased back from their highs, but they remain at historically high levels, and we expect prices for our commodity exports to remain robust this year. Despite high meat and dairy prices, confidence in the agricultural sector remains low. The cancellation of the CGT may help in that regard, but other concerns such as environmental regulation remain.

Figure 5: Terms of trade



The outlook for tourism is less favourable, with arrivals running below year-ago levels (partly because Chinese visitor numbers were exceptionally strong last year). We have further downgraded our forecast of tourism earnings this year, reflecting higher fuel costs for overseas travel and the softening Australian economy.

Unemployment to fall further

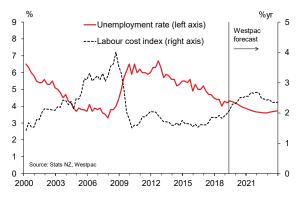
New Zealand's labour market has continued to tighten in recent years, with the unemployment rate falling to its lowest levels since 2008. However, employment growth and hiring intentions have softened in recent quarters, in line with the slowing in GDP growth over that time.

The unemployment rate itself tends to lag behind the wider economy, so we expect it to rise a little in the near term in light of the slowdown in GDP growth to date. Beyond this, however, we see scope for unemployment to fall to fresh lows as GDP accelerates again.

The issue of how low unemployment can go is an open question. While firms are increasingly citing labour shortages as a constraint on growth, the subdued pickup in wage growth points to only limited stretch in the labour market. And with the Reserve Bank now in favour of adding further stimulus to the economy to generate more inflation, we see scope for the labour market to move further into 'tight' territory in coming years.

We expect wage growth to accelerate gradually, from around 2% today to a peak of 2.7% in 2021. That partly reflects a tightening jobs market and higher expected inflation, but government actions such as minimum wage hikes and sectoral pay agreements will also make a sizeable contribution.

Figure 6: Unemployment and wage growth



Growth more restrained in the longer term

While we are more optimistic about GDP growth in the next year or so, we expect a substantial slowing in growth as we progress into the next decade. That is in part a product of lower population growth. Despite the apparent upturn in net migration recently, we expect net inflows to decline over the next few years. History suggests that the large inflows in previous years will be echoed by large outflows a few years later, reflecting those who arrived on temporary visas.

We also believe that the level of building activity is close to reaching its required levels, and with population growth slowing, it will not need to grow further beyond 2020. In addition, the ongoing wind-down of quake-related building work will act as a drag on growth for several years to come.

While we expect an upswing in house prices over the next couple of years, we think this will prove to be short-lived. Once the housing market has adjusted to a lower level of mortgage rates and the 'relief' from the cancellation of a CGT, there will be little to support further gains. And over the longer term, interest rates will eventually rise from their current stimulatory levels, which will weigh on the housing market.

Impact of bank capital requirements

In our forecasts we've also allowed for the impact of the Reserve Bank's proposed increase in bank capital requirements. Higher capital ratios will increase the average cost of funding for banks, which they will look to recover to some degree through wider interest margins higher lending rates and lower deposit rates. Credit growth will be slower due to a combination of higher interest rates and tighter lending standards.

We have assumed a 0.7% impact on the level of GDP by 2023, the end of the proposed phase-in period. The impact will be felt most keenly in the more credit-reliant parts of the economy: household spending (via house prices), business investment and construction. Given that the bank capital requirements aren't yet finalised, our estimate allows for the possibility of some softening of the original proposal. If it instead goes through unchanged, the impact on the economy would be even larger.

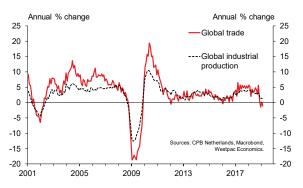
Global Economy

No inflation, no rate rises, no worries

Growth in New Zealand's major trading partner economies has cooled. We've also seen global inflation continuing to fall short of central banks' expectations. These developments have prompted a dovish tilt from policy makers, which we expect will provide a floor under growth over 2019 and 2020.

After peaking at 3.8% in 2017, global GDP growth slowed to 3.6% over 2018. We expect a further deceleration to 3.3% over calendar 2019, with economic growth slowing in most regions including the US, China and Australia. This cooling in growth has already been a drag on global manufacturing and has resulted in the volume of global trade falling in recent months.

Figure 7: Global trade and industrial production



In addition to the slowdown in growth, global inflation has remained muted. In part, that's due to the softening in activity in economies that are major producers of internationally traded consumer goods. However, the persistent sluggishness in global inflation is not just a recent cyclical development: inflation has undershot expectations in many economies for several years now, even as labour markets have tightened and spare capacity has been eroded.

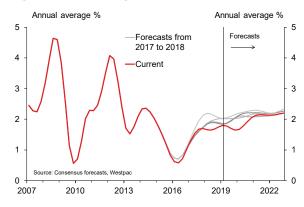
Much of the softness in inflation in recent years has been a result of long-running trends in global trade. For decades now, globalisation has resulted in downward pressure on the prices of many consumer goods as manufacturing has shifted to countries with lower wages.

However, as we have been highlighting for some time, we are now in the midst of a new phase of globalisation. New technologies are allowing firms to deliver what consumers want at lower prices, and the resulting competitive pressures are forcing businesses to keep prices low. The continued growth of online trading has eroded the 'tyranny of distance' by effectively increasing the presence of large multinational retailers with greater pricing power in local markets. It has also increased the buying power of consumers, providing them with easy access to a larger variety of goods and the ability to compare prices. And

technological changes haven't just affected traditional retail goods: they have also reduced barriers to entry and increased competition in service sectors, like hospitality and entertainment. But whatever form these changes to business models have taken, the impact for consumer prices has been firmly to the downside. Importantly, such changes are likely to continue dampening price growth for years to come.

Along with local factors that have dampened price growth in many regions, this overarching change in the global retail environment has meant that inflation has not been rising as fast as central banks were expecting. And combined with recent softness in real activity, we've seen a run of downward revisions to inflation forecasts over the past year.

Figure 8: Revisions to global inflation forecasts

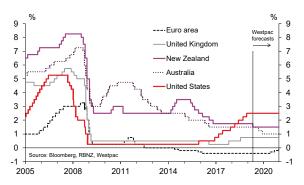


In response to this ongoing softness in inflation and the recent cooling in GDP growth, we have seen dovish tilts from a number of central banks. While official interest rates have remained unchanged, several major central banks have shifted to a 'low for longer' stance. That includes the US Federal Reserve, which we now expect will remain on hold through 2019 and 2020 (previously we expected a hike in the funds rate in late 2019). The European Central Bank has also signalled a longer pause in rates than previously forecast, while the Reserve Bank of Australia has adopted an easing bias.

Complementing supportive monetary policy, fiscal policy is also expansionary in a number of economies. Most notably, Chinese authorities have now introduced support measures equivalent to 2% of GDP including tax cuts and increases in infrastructure spending.

Combined, we expect that support from monetary and fiscal authorities will help to shore up global growth over the coming years. Supportive policy has also helped to boost sentiment in financial markets following a bout of nervousness earlier in the year. Equity markets have risen strongly in recent months as concerns about the downside risks for growth have eased. There has also been a related narrowing in credit spreads.

Figure 9: Central bank policy rates



Looking at our major trading partners, economic conditions are expected to remain uneven over 2019 and 2020. The US remains at the head of the pack, with above-trend GDP growth of 3.2% in the year to March and firm growth in non-farm payrolls. Growth in the US is expected to cool over the coming years, as the boost from fiscal stimulus unwinds. However, we still expect the economy to expand at an above trend pace, supported by low interest rates and robust fundamentals in the household sector.

Chinese GDP growth has continued to moderate, slowing to 6.4% over the past year. Much of this slowdown has been engineered by policy makers, with a focus on longerterm financial stability dampening investment spending. However, while GDP growth has cooled, it appears to be approaching a base. Gauges of manufacturing activity

and investment spending have been firming in recent months. Over the coming year, fiscal spending and easier liquidity conditions will help to provide a floor for growth. This stabilisation in Chinese economic growth will help to support economic conditions in the Asia-Pacific region more generally, though we don't expect a significant increase in growth in the near-term.

Across the Tasman, the Australian economy has lost considerable momentum. GDP growth fell to 2.6% in the year to March, with a sharp slowdown over the past six months. We expect that economic growth will remain subdued at around 2% over the coming years – a pace that is well below Australia's trend rate of growth. Underlying this slowdown is continuing weakness in the housing market and related softness in household spending. In response to these conditions, we expect the RBA will cut the cash rate in August and again in November.

Simmering away in the background are some important headwinds for global growth. Trade tensions between the US and China have dragged on. The two sides failed to reach a compromise in early May, which saw President Trump announcing that the existing 10% tariff on \$200bn of imports from China would rise to 25%. He also threatened to impose a tariff on the remaining \$325bn of imports from China. In response, China has signalled that it will introduce retaliatory measures. As a protracted trade war is in neither side's best interest, we expect that they will eventually reach a compromise. However, it may take some time for this to eventuate. And in the meantime, the resulting disruptions pose a downside risk for trade, investment and GDP growth, with potential spill-overs to other economies.

Political tensions are also bubbling away in Europe and could see ructions in the economy. Such risks are particularly acute in the UK where Brexit negotiations are dragging on. Increasing euro-sceptic sentiment could also see some political changes in Europe more generally, and there is concern that related shifts in fiscal policy could dampen activity.

Economic forecasts (calendar years)

Real GDP annual average % change	2015	2016	2017	2018	2019f	2020f
New Zealand	3.5	3.9	3.1	2.8	2.3	3.1
Australia	2.5	2.8	2.4	2.8	1.8	2.2
China	6.9	6.7	6.8	6.6	6.1	6.0
United States	2.9	1.6	2.2	2.9	2.4	2.1
Japan	1.2	0.6	1.9	0.8	0.7	0.6
East Asia ex China	3.8	4.0	4.6	4.3	4.1	4.1
India	8.0	8.2	7.2	7.1	7.1	7.1
Euro zone	2.1	2.0	2.4	1.8	1.2	1.4
United Kingdom	2.3	1.8	1.8	1.4	1.4	1.4
NZ trading partners	3.8	3.6	4.0	4.0	3.5	3.5
World	3.4	3.4	3.8	3.6	3.3	3.5

Inflation

We'll get there one day

Inflation has lingered below 2% for an extended period, and a range of factors is continuing to dampen price growth. That includes technological changes that have reshaped the retail environment globally, as well as softness in some domestic prices. As a result of those factors, we still expect only a gradual rise in inflation over the coming years, even with the OCR now at a fresh record low.

Consumer price inflation slowed to 1.5% in March, down from 1.9% at the end of 2018. Much of this recent fall in inflation, as well as its earlier increase, was related to swings in international oil prices. Excluding fuel costs, inflation has been rising only gradually in recent years, and has lingered below the 2% mid-point of the Reserve Bank's target band for seven years now.

As we've previously highlighted, a range of factors are continuing to dampen inflation. One of the most important of these is the ongoing softness in the retail prices of consumer goods. This isn't a situation that is unique to New Zealand. In fact, much of the softness we are seeing in prices locally is actually a reflection of the reshaping of the global retail environment. As discussed in the Global Economy section, ongoing technological developments are resulting in major changes to traditional retail business models, with increases in competitive pressures and downward pressure on retail margins. This has affected prices for both goods and services, and we expect it will continue to dampen price growth for years to come.

Also limiting the rise in New Zealand inflation are charges for many government related services, which have been rising at a more gradual pace than in the previous decade. We expect this trend will continue for some time.

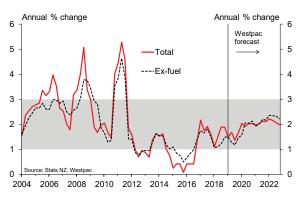
The fact that the New Zealand economy has lost some steam has also contributed to the softness in inflation. Measures of capacity pressure have moderated in recent months, and some components of domestic inflation (like construction costs) have fallen from their earlier highs.

In recent years, the above factors have seen the RBNZ fighting an uphill battle to push inflation back to 2%. As discussed in the Reserve Bank and Interest Rates section, the RBNZ responded by cutting the OCR to a new record low of 1.50% in May. This will reinforce what we already expected to be a marked acceleration in domestic demand. And combined with a tightening in the labour market, that will support a lift in inflation back to levels close to 2% in the early 2020s. Nevertheless, the factors noted above mean we still expect that inflation will rise only gradually. And barring an unexpected shock, like an oil price spike, we don't think that there is much chance of inflation rising to levels that would alarm the RBNZ any time soon.

While we don't expect a rapid increase in inflation over the next few years, we think the RBNZ's focus on maximum sustainable employment means that they will be more

accommodating of higher inflation outcomes when they do occur. That could cause inflation to linger at a higher level than otherwise, and in turn lead to a self-fulfilling rise in inflation expectations for businesses and consumers. In the very long term, that could see inflation settling at levels closer to 2.5% than 2%.

Figure 10: Consumer price inflation



Financial market forecasts (end of quarter)

	CPI inflation	OCR	90-day bill	2 year swap	5 year swap
Jun-19	1.7	1.50	1.70	1.55	1.70
Sep-19	1.4	1.50	1.65	1.60	1.75
Dec-19	1.7	1.50	1.65	1.65	1.80
Mar-20	2.0	1.50	1.65	1.70	1.85
Jun-20	1.8	1.50	1.65	1.75	1.90
Sep-20	1.9	1.50	1.65	1.75	1.95
Dec-20	1.9	1.50	1.65	1.80	2.00
Mar-21	1.9	1.50	1.65	1.85	2.10
Jun-21	2.0	1.50	1.65	1.90	2.20
Sep-21	2.1	1.50	1.65	1.95	2.30

The Reserve Bank and Interest Rates

That's all, folks

Fixed interest rates have plunged in recent months, following a change in stance and an actual OCR cut from the Reserve Bank. There is a possibility of another cut, but we think the OCR is more likely to remain unchanged. The recent drop in interest rates is likely to stimulate the housing market and economy, eliminating the need for further OCR reductions.

There has been a stunning and unexpected fall in interest rates since our last *Economic Overview*. Back in February the two year swap rate was 2%, and we forecast that it would track sideways. In reality, it dropped to 1.6% in the space of three months. The long end of the curve has dropped even further – ten year government bond rates have fallen from 2.25% to 1.77%.

Two year mortgage rates have fallen 40 basis points since March, commensurate with the drop in swaps. The importance of that for the housing market cannot be overstated. An aspiring home buyer can now service a 10% bigger mortgage while still making the same interest payments, fixed for two years. The drop has been even more extreme for long-term fixed mortgage rates. Since March five year fixed mortgage rates have dropped by 80 basis points to an all-time low of 4.6%.

The main reason for the drop in interest rates was the Reserve Bank's hint, back in March, that it might reduce the OCR, which was followed by an actual OCR cut in May. Inflation has been undesirably low for years, and the Reserve Bank has been banking on an economic upturn to lift it. But with the New Zealand economy slowing and the globe wobbling recently, the RBNZ has lost patience. It has concluded that the economy needs more of a helping hand in order to boost inflation. The other key motive was the fact that other central banks have rapidly altered their monetary policy outlooks. If the RBNZ had failed to follow suit, the exchange rate might have risen, which in turn would have suppressed inflation.

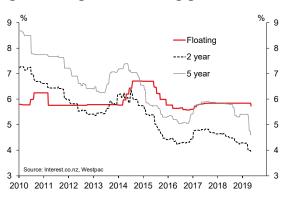
A further OCR reduction this year is certainly possible, depending on how the data plays out. But we think the OCR is more likely to remain unchanged. The Reserve Bank itself thinks that the odds of another OCR cut are evenly balanced. That implies that some form of downside surprise would be required before they actually deliver a cut. But the RBNZ is already braced for a few more months of weak economic data. For example, its forecast of March guarter GDP is just 0.4%, and it expects unemployment to rise next quarter. Getting surprised on the downside of the RBNZ's pessimistic near-term forecasts seems unlikely.

Beyond the near term, we are expecting the global economic situation to stabilise and the New Zealand economy to pick up – on both fronts, we are optimistic because interest rates have fallen so far. In New Zealand's case, lower interest rates will stimulate the housing market, boosting domestic demand. That should be enough to convince the Reserve Bank that there is no need to cut the OCR below 1.5%.

Some people are worried that the Reserve Bank is using up its ammunition, leaving little room to cut the OCR should a recession strike in the future. That argument makes no sense. If an unexpected recession strikes in say, two years' time, the RBNZ will be very glad that it cut now. Reacting at the time the downturn strikes is far too late. Not to mention that running with a lower OCR for two years would reduce the chance of a recession striking in the first place.

Another question we have fielded is whether monetary policy is effective when the OCR is at such low levels. It is. True, when the OCR gets low, floating mortgage rates tend to respond less to further OCR cuts. That's because more of a bank's deposit base will already be at zero interest rates, so bank funding costs do not fall one-for-one with the OCR. However, the RBNZ has leverage over much more than floating mortgage rates. Recently we have witnessed a massive drop in fixed mortgage rates at a time of only a small change in the OCR – a dramatic illustration of monetary policy effectiveness at a low OCR level. Furthermore, small changes in interest rates have arguably more impact on asset markets and household budgets when interest rates are low. Finally, overseas experience has demonstrated that quantitative easing and negative interest rates are effective options for central banks that are encountering the "zero bound" for their policy interest rates.

Figure 11: Average advertised mortgage rates



Agricultural Outlook

A new silk road

Despite the subdued global growth backdrop, New Zealand's export commodity prices have continued to enjoy a strong run. Dairy prices firmed in the first few months of this year and prospects for next year's milk price appear favourable. What's more, meat exporters stand to benefit from Chinese farmers' misfortunes as Chinese consumers look for pork alternatives.

If not a purple patch, the recent period for New Zealand agricultural exports has at least been a decent shade of lilac. Despite markets generally becoming more circumspect on the outlook for global growth and economic growth in our biggest trading partner slowing, New Zealand's export commodity prices have to date remained relatively unscathed.

For years we have been talking about China's insatiable demand for protein and the impact on New Zealand farmers. Now, it is the state of Chinese protein *supply* that is a hot topic. Concern about the impact of an outbreak of African Swine Fever on China's pork supply is rippling through agricultural markets. Not only is China expected to import substantially more pork as large numbers of its pigs are culled, but there is also likely to be increased demand for substitute proteins such as beef and lamb. This should help support beef and lamb prices over the remainder of the year despite growth in supply in some key exporting regions.

China is the world's biggest importer of dairy and has ambitious plans to improve the competitiveness of its own domestic dairy industry by 2025. Consolidation in the sector could be one factor supporting demand for dairy

imports now. The lift in global dairy prices over the last six months has coincided with firm buying from China in GlobalDairyTrade auctions. And with global growth in milk supply expected to be relatively modest this year (including in New Zealand), much will depend on how Chinese demand evolves. We expect dairy prices to soften slightly over the second half of this year. But even factoring this in, we're still forecasting a very healthy \$7.20 farm gate milk price for the 2019/20 season.

In the horticulture sector, the success of gold kiwifruit has also hinged in part on strong demand from China. While Zespri expects to export more gold kiwifruit than green for the first time this season, kiwifruit exports to China are already much more heavily dominated by gold fruit. Almost 70% of the volume of kiwifruit exports to China over the last year were gold. And with Chinese consumption of kiwifruit far exceeding New Zealand's production, domestic Chinese supply will also be important. Zespri continues to investigate the expansion of offshore production in China, amongst other countries, as it expands sales of non-New Zealand grown fruit.

Commodity price monitor

Sector	Trend	Current level ¹	Next 6 months
Forestry	Export log prices fell in April, with reports of higher inventories in China weighing on prices. We expect further easing in the coming months. Local demand is set to remain firm this year thanks to strong construction activity.	High	*
Wool	Strong wool prices remain in the doldrums but may have temporarily benefitted from the suspension of South Africa wool exports to China due to foot and mouth disease. Higher oil prices will increase the cost of synthetic substitutes to wool, although we expect this will be temporary.	Average	*
Dairy	Dairy prices have improved 23% since the start of the year on the back of reduced NZ supply and firm Chinese demand. We expect prices to moderate a little over the second half of the year as supply conditions locally normalise and international milk supply growth remains modest. We've shaded up our milk price forecasts for this season and next to \$6.50 and \$7.20 respectively.	Above average	*
Lamb	Lamb prices have remained relatively buoyant, supported by strong demand from less traditional markets, in particular China. Expected pork shortages should support demand.	High	*
Beef	Strong demand from China has been increasing competition for NZ beef exports and supporting beef prices. Prices are likely to remain well supported this year.	Above average	*
Horticulture	The horticulture sector remains the darling of New Zealand's agricultural sector. While growth in supply of some products is expected to weigh modestly on prices, demand remains firm.	High	*

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

Exchange Rates

Times they are a changin'

Over the last year our view has been that a slowing New Zealand economy, ongoing soft inflation and a dovish RBNZ would weigh on the NZ dollar. With the NZD/USD now having fallen considerably, there is only a little further for this story to run. Starting late this year we expect the NZ dollar to start drifting higher, supported by a firm terms of trade, improving sentiment around the outlook for global growth and eventually a gradual normalisation of monetary policy.

A year ago, we were adamant that the economy would prove slower than the Reserve Bank expected, the RBNZ would become more dovish, and consequently the New Zealand dollar would underperform. So far, so good. The core elements of this view have come to pass and the NZD/USD has almost, but not quite, reached our 64 cent target.

Over the coming months, we're braced for another spate of soft data. March quarter GDP growth is likely to be just 0.5%, while the improvement in dairy prices over the last few months has probably run out of steam. That means markets will continue to price in a decent chance of an OCR reduction for a few months yet. All of this will put a little more downward pressure on the currency - we still expect it will average 64 cents in the September quarter.

Beyond that we expect a change in direction for the currency. Later this year we believe the RBNZ and financial markets will go cold on the idea of further OCR cuts, with the tone of domestic data set to improve. Substantial fiscal stimulus is still working its way through the economy, building activity is expected to take another leg higher and the housing market should be showing clear signs of acceleration. There should also be a bit more confidence about global growth prospects. If we are correct, markets will react by adjusting their pricing to remove the prospect of interest rate cuts. In turn, that could see the exchange rate rise

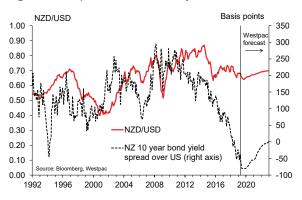
As we head into 2020 and beyond, we expect the NZ dollar will appreciate gradually. New Zealand's terms of trade are expected to remain elevated. In addition, some of the pessimism around the outlook for global growth is likely to fade as the consequences of the substantial falls in global interest rates become increasingly apparent. While this will inevitably be punctuated by periods of volatility, perhaps sparked by the latest Trump tweet or a fresh misstep on Brexit, a more pervasive "risk on" sentiment in global markets should be a supportive backdrop for an appreciation in the NZD/USD. Over a longer horizon we expect the NZD/USD to drift toward its fair value as New Zealand interest rates rise to less stimulatory levels - a point we think US policy rates have already reached.

While the NZD/AUD has tracked lower over the last few months, we expect this to reverse over the second half of the year as monetary policy cycles in the two countries diverge. While the RBNZ should remain content to leave the OCR on hold at 1.5%, we expect the Reserve Bank of Australia

has some work to do yet. We continue to expect it to cut its policy rate in both August and November which should put a bit of downward pressure on the Australian dollar.

Over the past two years the fall in the New Zealand dollar has been much less significant than the change in interest rate differentials (see figure 12). This illustrates the fact that exchange rates are influenced by many more factors than interest rates alone. In this case, New Zealand's high terms of trade and the sound fundamentals of our economy have held the exchange rate aloft, counteracting the influence of low local interest rates.

Figure 12: NZD/USD and relative 10 year interest rates



Exchange rate forecasts (end of quarter)

	NZD/ USD	NZD/ AUD	NZD/ EUR	NZD/ GBP	NZD/ JPY	TWI
Jun-19	0.65	0.93	0.59	0.50	72.8	71.4
Sep-19	0.64	0.94	0.58	0.48	72.3	71.0
Dec-19	0.65	0.96	0.59	0.49	73.5	71.9
Mar-20	0.66	0.96	0.59	0.50	73.9	72.3
Jun-20	0.66	0.96	0.59	0.50	73.3	71.9
Sep-20	0.67	0.96	0.59	0.50	73.7	72.2
Dec-20	0.67	0.96	0.58	0.50	73.7	71.8
Mar-21	0.68	0.95	0.57	0.49	71.6	71.5
Jun-21	0.68	0.94	0.56	0.49	71.4	71.4
Sep-21	0.69	0.94	0.56	0.49	71.9	71.3

Special Topic

Food manufacturing

Big mega-trends are re-shaping the operating environment in which New Zealand's food manufacturers compete, creating opportunities for some, but threatening the survival of others. Those that succeed will depend on the use of new technologies, not just to improve supply chain and operating efficiencies, but also to deliver foods that meet an expanding range of customer expectations.

The fortunes of New Zealand's food manufacturing sector, like its global counterpart, are being shaped by some big mega-trends.

One of these is population size. Simply put, the more people there are, the greater the demand for food. Each year the world adds another 82m people that need to be fed.

Another is economic growth, particularly in poorer countries where sharply higher incomes have increased spending on food, particularly processed foods and those rich in animal proteins, such dairy and meat. Fortunately, these are foods for which New Zealand manufacturers enjoy a comparative advantage.

Even as global demand for food rises, supply side constraints are becoming increasingly binding, mainly because of climate change impacts, competing land uses and soil degradation. Add water shortages, pollution and a slowdown in agricultural yield growth into the mix, and the future supply side implications of having to feed a much larger global population become stark. New Zealand, blessed with significant natural resources, is probably better placed than most to take advantage of this.

On the supply side, the biggest mega-trend is the industrialisation of food production. Digitisation, where the unique characteristics of crops grown in one part of the world are digitally recorded so they can be reproduced in simulated environments in other parts, offers much promise. So too, the development of new substitute foods, with bio-tech researchers already designing an array of foods with unusual ingredients. Artificial meat is already here and is going mainstream. The industrialisation of food raises the probability of moving food production closer to the point of consumption and is a threat to New Zealand's geographically distant manufacturers.

At the other end of the spectrum, consumers in richer countries who can already afford good food are becoming much more fussy about what they eat. They want to know more about where their food comes from, what's in it, and whether it is safe to eat. They also want to know how it has been produced, with broader social considerations such as fair trade, "green" production and environmental impacts increasingly coming to the fore.

For New Zealand's food manufacturers, these mega-trends pose a number of challenges. The first is how to use their

comparative advantages to pursue export opportunities, while simultaneously addressing the challenges posed by scientific and technology based disruptors. The second is how to address the increasingly vocal demands of high-end consumers.

New Zealand manufacturers are responding in a number of ways. They are becoming far more transparent about how they produce food. In conjunction with retailers, firms are increasingly introducing "clean" labels to specify food ingredients in a way that is easy to understand. A few have even introduced app based tracing systems, which enable end consumers to trace food products from "farm to fork".

They are also starting to interact more with consumers. In an environment where consumers want what they want, when they want it, and with speed, food manufacturers are beginning to cut out the middlemen, using new communication technologies to go directly to customers. Examples include new community sourced and prepared meals solutions that are delivered directly to the consumer. Retailers, however, are responding in kind, with innovative store layouts and other value added services.

Manufacturing firms are also focusing on developing foods that more closely align to the values of specific consumer segments. Using data analytics and AI, they are developing a much better understanding of what consumers want and this is leading to the development of new innovative food products (often in rapidly evolving product categories). Local manufacturers often bring a unique value proposition to food that is not easily copied.

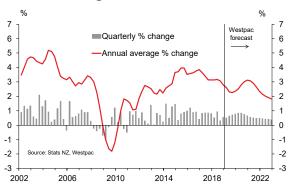
They are also moving up the value chain, producing more processed foods for export. New Zealand has significant untapped potential to produce more food and to add value to the large volume of raw material ingredients which are currently exported as unprocessed foods.

Finally, they are using technology and innovation to improve competitiveness. This is especially true of large volume food manufacturers. Technologies, such as the internet of things, wireless and mobile technologies, data analytics, block chain and network infrastructure are not only beginning to reshape supply chains, both upstream and downstream, they are also resulting in big changes to work organisation methods, automating many processes, reducing wastage and minimising operating costs.

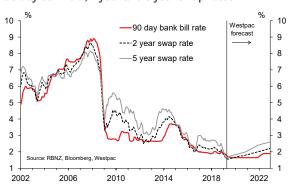
Forecasts and key charts

		Quarterly % change			Annual average % change			
	Dec-18	Mar-19	Jun-19	Sep-19	2018	2019	2020	2021
GDP (production)	0.6	0.5	0.6	0.7	2.8	2.3	3.1	2.4
Private consumption	1.3	0.7	0.6	0.9	3.3	3.6	3.6	3.0
Government consumption	0.7	1.0	1.2	1.1	2.2	3.4	4.2	3.9
Residential investment	2.1	2.5	3.0	2.0	2.7	8.3	2.1	-2.6
Business investment	1.3	-0.8	-0.8	0.2	4.3	-1.2	2.9	2.1
Stocks (% contribution)	-0.1	-0.7	0.6	0.2	0.3	-0.5	0.2	0.0
Exports	1.1	1.9	-1.3	-0.6	3.0	1.9	0.9	2.1
Imports	-0.7	1.1	0.5	0.7	5.5	1.4	3.2	3.1
		Quarterly % change			Annual % change			
Consumer price index	0.1	0.1	0.6	0.6	1.9	1.7	1.9	2.1
Employment change	0.0	-0.2	0.8	0.3	2.3	1.3	2.0	1.8
Unemployment rate (end of period)	4.3	4.2	4.3	4.3	4.3	4.2	3.9	3.7
Labour cost index (all sectors)	0.5	0.4	0.6	0.7	1.9	2.3	2.5	2.7
Current account balance (% of GDP)	-3.7	-3.4	-3.3	-3.4	-3.7	-3.4	-3.7	-3.9
Terms of trade	-3.0	0.3	0.3	-0.1	-4.7	0.7	2.0	-0.1
House price index	0.7	0.7	0.5	1.0	2.6	4.0	6.7	2.0
90 day bank bill (end of period)	1.87	1.85	1.70	1.65	1.87	1.65	1.65	1.65
5 year swap (end of period)	2.40	2.04	1.70	1.75	2.40	1.80	2.00	2.40
TWI (end of period)	73.5	74.0	71.4	71.0	73.5	71.9	71.8	71.4
NZD/USD (end of period)	0.67	0.68	0.65	0.64	0.67	0.65	0.67	0.69
NZD/AUD (end of period)	0.93	0.96	0.93	0.94	0.93	0.96	0.96	0.93
NZD/EUR (end of period)	0.59	0.60	0.59	0.58	0.59	0.59	0.58	0.55
NZD/GBP (end of period)	0.52	0.52	0.50	0.48	0.52	0.49	0.50	0.49

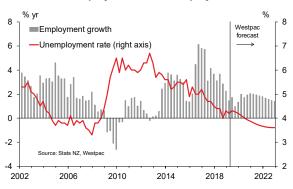
New Zealand GDP growth



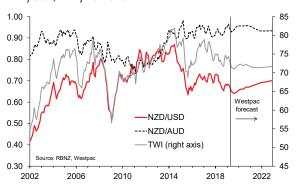
90 day bank bill, 2 year and 5 year swap rates



New Zealand employment and unemployment



NZD/USD, NZD/AUD and TWI



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