



November 2016 **Economic Overview**

Note from Michael

In this issue we've made some substantial upgrades to our economic growth forecasts for New Zealand, motivated by a range of factors. Firms are becoming increasingly confident about their prospects, and hiring is on the rise. The nation's population looks set to keep growing at a strong pace for longer than we expected, and the pipeline of building work is correspondingly larger. On top of this, surging milk prices have taken some of the financial strain off the dairy industry.

All of these amount to stronger growth in the near term, and a milder slowdown later in the decade, than in our previous forecasts. Even so, we remain wary of extrapolating too far from the economy's recent good fortunes. If there were ever a reason to avoid complacency, the events of the last couple of weeks have certainly provided it. The effects of both the US election and the Kaikoura earthquake are mired in uncertainty, and we will no doubt have more to say about them in future issues.

One of the most striking challenges for New Zealand at the moment is the need to build more homes. Low rates of building in past years, followed by a population surge more recently, has left the country with an alarming shortfall of housing, largely concentrated in Auckland.

Something has to give. The passing of Auckland's Unitary Plan will help to spur more building in the city, but the industry faces other constraints in terms of skill shortages and funding. Internal migration might relieve the pressure on Auckland, but would simply relocate the demand for housing to other parts of the country. And the soft Australian jobs market means that trans-Tasman emigration is unlikely to provide the escape valve that it has in times past.

We simply cannot avoid the need to build more homes. And our forecasts assume that, in time, the nation will find a way to do so.

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New Zealand Economy

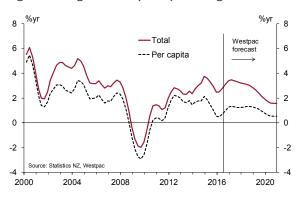
Stronger for longer (but not forever)

New Zealand's economy has continued to strengthen as domestic growth has become increasingly broad-based. What's more, some of the big negatives that were on the horizon have diminished in recent months. Although we don't think the economy will maintain its current pace of growth indefinitely, the eventual slowdown is now likely to be a little later and slightly more moderate than we anticipated three months ago.

Humming along

The New Zealand economy is humming along nicely. Annual GDP growth hit 3.6% in June, and the economy appears to have maintained this commendable pace of growth through the second half of the year, with 2017 also shaping up well. International events, however, still clearly have the capacity to surprise. It's not difficult to identify potential catalysts for a deterioration in the global economic backdrop, increased volatility in financial markets and more challenging international trade conditions. Uncertainty arising from a Trump presidency and protracted Brexit negotiations are just two contenders. For now, the New Zealand economy looks set to maintain a steady course. But further down the track, slower population growth, the wind-down of the Canterbury rebuild, higher borrowing costs and high debt levels will combine to slow growth.

Figure 1: GDP growth and per capita GDP growth



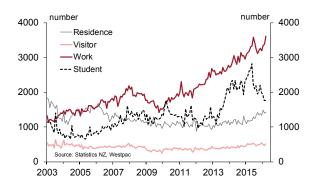
The creditable performance of the New Zealand economy is not new news. Indeed, it's been a feature of our recent Economic Overviews. However, a new facet of the story has been the broadening nature of that growth. While familiar engines of growth including construction and tourism are continuing to chug along, in recent months there has been a broader improvement across sectors. In addition, there has been a notable improvement in the dairy sector, which we had expected to remain a drag on the economy.

As we outline in our *Agricultural Outlook* section, dairy prices have improved substantially in recent months. So much so that, instead of facing a third consecutive season of negative cashflows, most farmers will be headed firmly back into the black this season. However, this doesn't

mean we expect to see a big rebound in farm-related investment and spending. Most farmers will have taken on additional debt in recent years to carry them through the period of low prices, and this will need to be repaid. Instead, any additional spending in the near term is likely to focus on maintenance and operational spending that was deferred when times were tough. Some farmers could also be looking at additional spending on feed and fertiliser to help lift production to take advantage of higher prices. So while we're certainly not back to the heady days of an \$8 plus payout for the sector, the outlook is certainly more optimistic than we feared last quarter.

Also in contrast to expectations, annual net migration has continued its record-breaking run, rising to a new all-time high of almost 70,000 in September. Although student arrivals have continued to track lower (down almost 40% after peaking late last year) reflecting tighter enforcement of entry requirements, this has been partially offset by ongoing growth in people arriving on work visas (up 16% in the last 6 months).

Figure 2: PLT arrivals by visa type

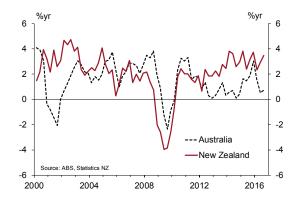


Policy plays an important role when it comes to arrivals of migrants on the various visa categories, and the government has recently announced measures aimed at reducing these inflows. However, much of the swing in net migration relates to trans-Tasman migration of both Australians and New Zealanders, for whom there are no significant restrictions on most people's ability to live and work in either country. For these people, economic incentives dictate flows. For most, that boils down to labour market opportunities.

At a glance, simply comparing unemployment rates suggests New Zealand's labour market is outperforming. But in reality, New Zealand's outperformance is even more marked. Australia's unemployment rate has been declining against a backdrop of falling participation, and a shift toward part-time work. That's in stark contrast to the $\,$ situation in New Zealand. Consequently, the very weak net outflows of New Zealanders to Australia is a trend we're likely to see continue for some time yet.

However, we do expect this situation to eventually reverse. At the same time as the late in the decade slow down in the New Zealand economy is expected to lead to rising unemployment and slower wage growth here, Australian employment prospects are expected to be improving. In addition, we expect the growth in temporary arrivals to be echoed by a rise in departures in coming years. Combined, this should see the net inward flow of migrants slow. But, with net migration currently at record levels, even this slowdown will mean net migration remains at historically high levels for some time yet.

Figure 3: NZ and Australian labour hours



Strong net migration inflows in prime working age cohorts have supported a big lift in participation in the labour force. But employment growth has been even stronger. This has seen the unemployment rate fall to 4.9% - its lowest level since 2008. We expect to see the unemployment rate decline further next year, as strength in economic activity leads to further hiring by firms.

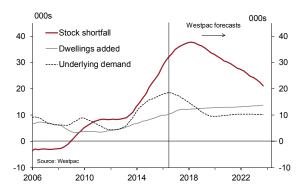
The tighter labour market, in tandem with rising inflation and inflation expectations, should eventually see wages squeezed higher. Already there are signs of this in some sectors (e.g. construction), with employers reporting difficulty finding the right people.

With more people we need more houses

Very strong net migration has lifted New Zealand's total population growth above 2% - the fastest pace since 1974. And this is putting pressure on housing supply, most notably in Auckland. We estimate that there is currently a shortfall of around 35,000 dwellings nationwide, almost all of which has accumulated in Auckland. And with population growth expected to remain strong for some time, we expect this shortfall to get worse before it gets better.

This worsening shortfall is despite strong construction growth remaining a feature of our forecasts for some time

Figure 4: Auckland housing stock shortfall

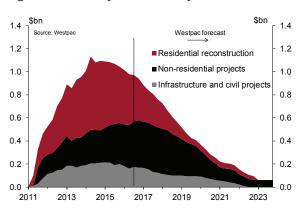


yet. One reason the shortage persists for so long is that we are sceptical of the construction sector's ability to ramp up activity significantly above current levels. Auckland's new Unitary Plan should help provide greater certainty to developers and increase potential supply, but this process will take time. In addition, although slowing residential rebuild activity in Canterbury will help free up resources, this won't provide a silver bullet for Auckland's capacity constraints. Convincing Cantabrians (or indeed others) to relocate to Auckland is a not an easy task, especially when there are opportunities in other high growth areas like the Bay of Plenty. And at the least it will probably require chunkier pay packets. Already, builders are finding it increasingly hard to attract skilled labour. Consequently, construction costs, already up 6% over the last year, are likely to come under continued pressure.

The shaky isles, still shaking

In Canterbury, the post-quake rebuild continues to progress. In aggregate, the peak period of rebuild activity has now passed, and a gradual wind-down has started. Yet within this, the composition of activity is undergoing considerable change. Most notably, residential reconstruction has slowed while commercial reconstruction is still ramping up. And, six years after the first earthquake, we're seeing the return of business as usual building activity (until recently squeezed out by the rebuild).

Figure 5: Canterbury rebuild activity



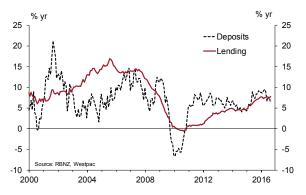
More recently, the country has been hit by another series of severe earthquakes, this time centred near Kaikoura in North Canterbury. While the regional location of these quakes means we haven't seen the same scale of damage wrought by the Canterbury quakes (which occurred near New Zealand's second largest city), there has been major damage and significant disruption especially to infrastructure such as roading and rail in the affected areas. It's too early yet to judge the costs of disruption and recovery (which will in part reflect policy choices by the government). The forecasts in this Overview do not make any explicit allowance for the economic impact of these quakes, though we don't expect it will become a dominant theme in the same way the Canterbury earthquakes did.

Aside from earthquake reconstruction and the Auckland housing shortage, the other factor that has been supporting residential construction nationwide has been low interest rates and buoyant house prices. And while Auckland house prices continue to command a big premium compared to those in other parts of the country, the region is no longer leading the pack when it comes to the pace of house price inflation. Instead, house prices have been growing faster in property hotspots such as Waikato, Bay of Plenty and even Wellington. On a nationwide basis, we expect annual house price inflation to slow from 14% this year to 5% in 2017.

The Reserve Bank remains uncomfortable with the rising risks in the banking system due to the associated rapid build-up in mortgage debt. Its most recent round of macroprudential tightening, which broadened restrictions on investor lending to areas outside of Auckland, started to affect lending from July this year. As expected, at this early stage, the impact has been lower sales volumes and some slowdown in price growth. While the RBNZ is looking into further lending restrictions, recent developments have made it more likely that house price growth will cool of its own accord

Demand for credit running strong

Figure 6: Credit and deposit growth



Credit growth is currently running at 7.8%, led by very strong growth in mortgage lending. This is far outpacing growth in deposits, which is running at around 6%. Strong demand for credit in the current low interest rate and solid growth environment shouldn't come as any surprise, and indeed is an important channel that monetary policy works through to stimulate demand. However, funding this pace

of credit growth has become more of a challenge for banks, reducing their appetite to grow their lending. Banks are now looking to source a greater proportion of their lending from local deposits. While this should help make the banking system less vulnerable to changes in credit conditions offshore, generating deposits is proving challenging with deposit rates at very low levels.

It remains to be seen how this plays out, but the upshot is that borrowers are likely to face higher interest rates in the period ahead, even if, as we expect, the RBNZ sits on its hands and leaves the OCR unchanged for an extended period.

Low interest rates, strong population growth, the buoyant housing market and an improving labour market have all supported a lift in household spending. We expect continued strength on this front over the year ahead. The other factor that has been supporting the retail and hospitality sector has been ongoing strength in tourism. Visitor arrivals are up 13% in the year to September, and looking ahead to 2017, the sector will get a further boost from events such as the Masters Games and Lions tour. Although the latest earthquakes could potentially put some visitors off, a key challenge for the sector will continue to be capacity constraints, with accommodation particularly stretched. This is likely to see increased activity in traditional shoulder seasons. The anticipated decline in the NZ dollar should help support spending going forward.

One notable beneficiary of the stronger domestic economy has been the government accounts. Tax revenue has been running well ahead of forecasts. Looking ahead, ongoing growth in household spending and more tourist arrivals should boost the GST take, while the improving labour market points to higher PAYE, and expanding business activity will contribute to stronger corporate tax. An improved tax take leaves the government well positioned to deal with emerging demands on the public purse. Although the costs associated with the recent earthquake are uncertain, the damage to infrastructure means much of the cost will fall to the government. In addition, stronger-thanexpected population growth may require the government to top up spending in sectors such as health, education and superannuation, as we saw with the additional \$1bn spending announced earlier this year.

It won't happen overnight... but it will happen

The stars may be in alignment for the NZ economy for now, but we don't expect this situation to persist indefinitely. The pace of population growth will eventually slow, additional household debt taken on in recent years will need to be repaid, the wind-down of the Canterbury rebuild will reduce construction activity, and house prices won't keep heading north at their current eye-watering pace forever. What's more, with credit conditions getting tighter, retail interest rates are likely to head higher from here, even if the RBNZ leaves the OCR unchanged for an extended period. All this means we continue to expect the economy to slow in the latter part of this decade. GDP growth is forecast to slow from 3.4% this year, to below 2% by the end of 2019.

Global Economy

The apprentice and the dragon

Demand in many economies remains lacklustre, and global trade remains subdued. Combined, these conditions have resulted in lingering weakness in global inflation, and mean policy makers are continuing to fight uphill battles. On top of this, the unexpected result of the US election, as well as other geopolitical events, means that there is the continuing risk of volatility in global financial and economic conditions.

Make America great again...

Since our last Economic Overview, global attention has been squarely focused on the US, where economic conditions have continued to strengthen. This has been underpinned by low interest rates and ongoing improvements in the labour market, which together are supporting household spending and activity in the services sector. Hand-in-hand with this has been a lift in US core inflation to a little above 2%.

However, the unexpected outcome of the US election means that there is heightened uncertainty around its trajectory over the next few years. We're still waiting for clarity around the details of President Elect Trump's policies. Some of his early announcements imply a substantial boost to US growth, including reductions in corporate taxes and increases in infrastructure spending. But at the same time, they imply a large amount of pressure on the US fiscal position, and if enacted, could provide a brake on future growth.

Mr Trump's election has also cast a shadow over global conditions more generally. His protectionist focus, particularly in relation to China, could reinforce what is already a weak environment for global trade. This adds some downside risks to our forecasts.

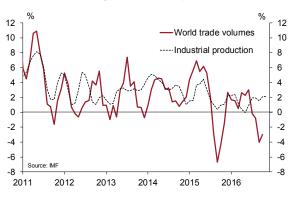
Importantly, the increased uncertainty around US and global conditions is adding a layer of uncertainty around the outlook for US monetary policy and the possible flow-on effects for financial markets globally. We still expect the Fed to hike rates in December, and to follow this with additional hikes in 2017. However, this is an evolving situation, and we will continue to review the outlook over the coming months as the shape of the Trump presidency comes into sharper focus.

...because conditions in many other regions are still soft

While the recent strengthening of US economic conditions has been positive for global demand, the outlook for global growth remains subdued. Over the coming year, the global economy is projected to grow by 3.5% - up modestly on the past few year, but still well below pre-financial crisis rates. Many advanced economies, including Japan and a number of countries in the euro area, are continuing to operate with some excess capacity, with lingering softness in both

domestic demand and investment spending. Furthermore, demand in a number of regions is still being propped up by monetary and fiscal policy.

Figure 7: World trade and industrial production growth (three month averages, annualised)



China's ongoing reorientation

One of the major factors weighing on global growth continues to be the reorientation of Chinese demand. The ongoing shift away from state-led investment and towards private consumption and services ultimately aims to place the Chinese economy on a more sustainable trajectory. However, this refocusing of spending has been a sizeable drag on manufacturing. In addition, much of the lift in Chinese spending that we have seen has been underpinned by increases in government spending, as well as easy monetary policy and rising debt levels. This casts doubt on the sustainability of growth.

China's rapid growth over the past decade has made it a key global market for many consumer and intermediate goods. And the refocusing of its demand is consequently having reverberations around the globe.

Coming on top of the more general softness in global demand in recent years, the shift in Chinese demand has contributed to a weak environment for global trade. This is having a particularly marked impact on economies in East Asia, where activity is heavily centred around manufacturing, and where growth is expected to remain sub-par over the coming years. Weakness in global demand has also seen investment spending pared back in many regions.

On top of this, subdued global demand has weighed on the prices for many industrial and hard commodities. This has dampened income and spending growth in commodity exporting nations. It is also weighing on inflation more generally around the globe.

The Australian economy is particularly exposed to the shifts in global commodities demand. Although supply disruptions are providing a temporary boost to the prices of some commodity exports, soft demand in recent years has seen the terms of trade fall sharply from its peak earlier in the decade. This has been a considerable drag on nominal income and GDP growth. Export volumes have been more resilient, however, with earlier increases in capacity supporting a 15% gain over the past year. Looking forward, we expect the Australian economy to grow by around 3% per annum over the coming years. Growth is being supported by low interest rates and an improving labour market, both of which are helping to boost household sector activity. In addition, the lower dollar is supporting service exports. On top of this, drags from declining mining investment and public spending have been dissipating. However, growth remains uneven, with mining states still the laggards.

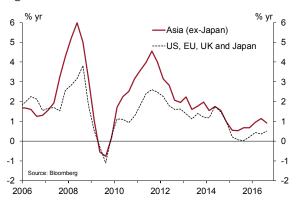
Policy stretched to the limits

Weakness in global demand and the related softness in commodity prices is contributing to an extended period of weak inflation globally. This is a big concern for central banks, many of whom are already struggling to offset soft domestic demand. The longer inflation remains low, the greater the risk that inflation expectations will take a step down. And as expectations play a key role in how businesses adjust wages and prices, that could erode the effectiveness of monetary policy, making it harder for policy makers to boost inflation and activity over the long run.

With lingering weakness in global demand and inflation, the extraordinary degree of stimulus that central banks have introduced in recent years will need to remain in place for some time yet. However, in many regions conventional (and unconventional) policy tools have already reached the edges of their effectiveness. In

addition, continued loose monetary policy since the financial crisis has given rise to growing concerns about financial stability.

Figure 8: Global inflation



Concerns about the build-up of debt are particularly acute in many Asian economies in light of the existing challenges for economic activity. There have been large capital inflows into many of these economies. If investor sentiment turns, the resulting changes in currencies and debt servicing burdens could see the headwinds for growth turning into full blown gales. On this front, evolving geopolitical situations, like the negotiations around Brexit, the changing political environment in the US, and ongoing concerns around the European financial system, could all be catalysts for bouts of nervousness and increased volatility in financial markets.

With monetary policy already stretched, some central banks have called for additional fiscal stimulus to bolster demand. However, outside the US, this may not be forthcoming. In many economies, fiscal positions are already stretched and governments remain wary of how increased spending could affect longer-term public debt levels. Furthermore, even in countries where there is scope for increased spending, determining appropriate targeting of stimulus is not simple and can take time to be effective. It appears likely that the burden of supporting activity will continue to fall on monetary policy.

Economic forecasts (calendar years)

Real GDP % yr	2013	2014	2015	2016f	2017f	2018f
New Zealand	2.4	3.8	2.5	3.4	3.3	2.9
Australia	2.0	2.7	2.4	2.9	3.0	2.8
China	7.7	7.3	6.9	6.7	6.5	6.0
United States	1.5	2.4	2.6	1.5	2.1	2.1
Japan	1.4	0.0	0.5	0.6	0.6	0.7
East Asia ex China	4.2	4.1	3.7	3.7	3.9	3.8
India	6.6	7.2	7.3	7.7	7.4	6.5
Euro zone	-0.3	0.9	1.6	1.6	1.2	1.3
United Kingdom	2.2	2.9	2.2	2.1	1.6	1.4
NZ trading partners	3.5	3.8	3.6	3.4	3.4	3.3
World	3.3	3.4	3.1	3.3	3.5	3.4

Forecasts finalised 11 November 2016

Agricultural Outlook

Down, but not out

A recovery in global dairy prices has provided welcome relief for the beleaguered dairy sector, with cash flows for most farmers headed firmly back into the black this season. While other parts of the agricultural sector have been performing better in recent times, insipid global growth and rising supply are expected to keep the prices of most commodities contained. And with the NZ dollar lingering higher, and competition heating up in many key markets, exporters will need to keep working smarter to stay competitive.

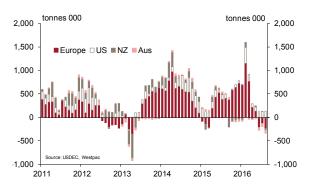
The dairy sector has found itself on firmer ground over the past few months, courtesy of a 50% lift in global dairy prices. This recovery in prices (back to mid-2014 levels) reflects supply and demand moving into better balance. although sentiment and prices look to have run a bit ahead of fundamentals. While this makes prices vulnerable to some retracement as we move into 2017, a more balanced market should see prices remain well clear of this year's lows. For New Zealand's farm gate milk price, the timing of the price moves is critical. With higher prices coinciding with peak production, we're now forecasting a farm gate milk price of \$5.80/kgMS this season. And we see further improvement ahead, with a \$6.10/kgMS milk price pencilled in for 2017/18.

While a higher payout this season will see a return to positive cash flow for most farmers, we're not expecting farmers to rush out and spend. After two seasons of negative cash flow that required most farmers to take on additional debt to carry them through, the focus will now be now on getting balance sheets back in order. But nonetheless, the outlook is certainly more optimistic than we expected three months ago.

Clear signs around the middle of this year that global milk supply was moderating (after the previous year's surge higher) has been the key factor lifting prices. Notably, European milk production in July and August was running 1.4% below 2015 levels, with payments by the European Commission to reduce production providing farmers further incentive to scale back supply. Australian production has also fallen sharply, as farmers grapple with low returns and wet weather. But bucking the trend has been US milk production, on track to grow 2% this year.

New Zealand milk production has also been tracking lower, off the back of a smaller national herd and a swing back to a predominately pasture-based regime. But it was news of a soggy spring sharply lowering production in some regions that really caught the attention of dairy markets, and gave prices a second wind. While Fonterra is forecasting a 7% decline in its milk collections this season, we are not as pessimistic about nationwide supply. If anything, the sharp lift in prices helps limit downside in supply, as it encourages farmers to raise production by adjusting feed regimes. Moving into next year, we expect broader production dynamics to weigh on dairy prices. Barring a significantly dry summer, New Zealand production should be less dire than many fear, while the pace of decline in European production is likely to ease.

Figure 9: Global milk production, annual change



Demand has also chipped in to support higher dairy prices. Improving demand has been dominated by China, with imports of whole milk powder in the year to date up 20%, while demand in the rest of Asia has remained sluggish. We see a more gradual pace of demand growth ahead, as global growth remains subdued, and as previous low prices gave buyers ample opportunity to stock up. Meanwhile, the unexpected US election result has created additional uncertainty about the outlook for global demand and commodity prices.

A brighter hue

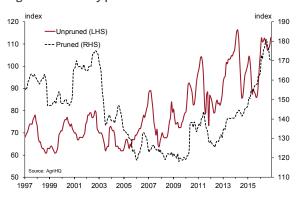
It's been a bumper year for the forestry sector, buoyed by solid domestic and export demand. Strength in domestic demand isn't surprising given the boom in construction. But a surge in exports this year has been surprising, with record volumes of logs and timber shipped in the September quarter, while prices have hovered around record highs.

An acceleration in demand from China, which takes the lion's share of New Zealand's log exports, has driven the shift in momentum this year. After treading water through 2015, real estate construction has picked up, as rapid house price growth has broadened across cities. Developments in other key export markets have also been positive. In Korea, a solid pipeline of construction has seen log demand recover, while demand from India continues to trend higher.

With the large standing of early-1990s plantings ready to be harvested, New Zealand is well placed to capitalise on high prices. But other exporters are also eyeing up opportunities. Russia was exporting record volumes of lumber to China through the middle of this year, as

producers benefit from the weak ruble and improving productivity. And with the US and Canada struggling to renegotiate a lapsed trade agreement for softwood lumber, more Canadian supply might end up on the Chinese market.

Figure 10: Forestry prices



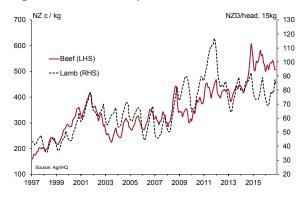
Heading into next year, prices are likely to feel the pinch from both directions. At the same time as large suppliers look poised to increase supply, demand growth may falter as Chinese construction continues to be buffeted by several headwinds - not least, a lingering oversupply of new homes in some areas.

Mixed bag

Beef and lamb farmers have seen diverging fortunes in recent years. Beef farmers have benefitted from exceptionally high prices since mid-2014, as global supply has been constrained by herd rebuilding in the US and Australia following severe droughts. But with herd rebuilding in the US now well advanced, US beef production and exports are set to rise this year and next. Global production is expected to rise 1% in 2017. This would be the largest rise since 2013, and should eventually be reflected in lower prices.

But even with global prices remaining favourable, life might become more difficult for New Zealand beef farmers, as a reduction in trade barriers increases competition in key markets. China has announced the removal of a 13-year ban on some US beef products, and the US has also eased import restrictions, with the first fresh beef exports shipped from Brazil recently.

Figure 11: Beef and lamb prices



Meanwhile, the sun hasn't been shining so brightly on lamb farmers. Prices have been oscillating around an average level for the past few years, as relatively tight supplies of lamb from New Zealand and Australia have been countered by subdued demand in key European markets. The fall in oil prices has also hampered demand from the Middle East, and exports to China have been very disappointing, down 17% in the year to September.

Prices are expected to track broadly sideways over the next year as supply remains tight, although the Brexit vote has clouded the demand outlook. In the near term, the sharply weaker pound makes British lamb much more competitive in the UK and other European markets, which will weigh on NZ dollar returns. And over the medium term, access to the UK market is uncertain, with British sheep farmers likely to push for tighter restrictions on New Zealand lamb.

While the meat sector faces numerous challenges in growing export returns (not least, the downtrend in sheep and beef numbers over time), our recent *Industry Insights* report highlighted several opportunities for the sector.1 The prospect of chilled meat exports to China presents a significant opportunity, although there are a number of hoops to jump through first. Another opportunity is to create a coherent New Zealand "brand" internationally that would help "tell the story" of New Zealand products, in order to shape preferences and attract a premium price in the way that other sectors have.

Commodity price monitor

Sector	Trend	Current level ¹	Next 6 months
Forestry	Prices have held up surprisingly well, but we don't expect this to persist as international supply responds and Chinese demand moderates.	High	*
Wool	Synthetic substitutes to remain attractive while oil prices remain low.	Average	*
Dairy	Modest retracement expected in coming months after big lift in prices since mid-year.	Average	*
Lamb	Uncertainty over demand in key markets to continue to weigh on prices.	Below average	>
Beef	Prices to be underpinned by relatively tight supply in the near term, but downside risk further out.	Above average	*
Horticulture	Benefitting from strong demand and productivity improvements. Further improvement expected heading into next year.	Above average	1

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

¹ http://www.westpac.co.nz/assets/Business/Economic-Updates/2016/ Bulletins-2016/Industry-Insights-Meat-and-Wool-November-2016.pdf

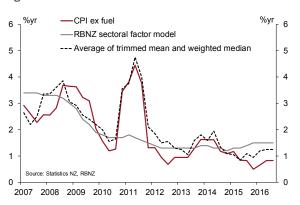
Inflation and Interest Rates

Turning points

Inflation has been very low for the past two years but is set to rise gradually from here, boosted by technical factors in the near term and a strong economy over the medium term. We expect the Official Cash Rate to remain on hold for a substantial length of time, but market interest rates are likely to be pressured higher by other forces.

The inflation story in New Zealand is approaching a milestone of sorts. For the last two years, annual inflation has been below the Reserve Bank's 1-3% target range. The shortfall was exacerbated by some temporary factors. One was a steep fall in world oil prices, stretched out over two years; another was a pair of cuts to the ACC levy component of car registrations. Both of these factors cropped up at a time when 'core' inflation was also softening according to a range of measures.

Figure 12: Measures of core inflation



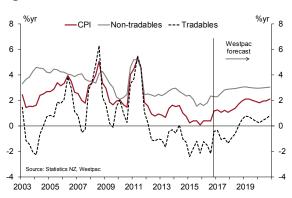
We can now be more confident that inflation will be back within the target range at the end of this year, even if only marginally. Some of the temporary depressing factors will start to drop out of the annual inflation rate soon. In the December quarter, last year's sharp fall in fuel prices looks set to be replaced by a modest increase. And from the September quarter next year, the ACC levy cuts will no longer have an influence.

Importantly, core inflation appears to have bottomed out, and has picked up a little in the last few quarters. The September quarter figures showed a lift in prices for many tradable goods, a sign that retailers were able to pass on last year's sharp fall in the New Zealand dollar, albeit with a long lag.

That said, we expect only a gradual rise in the rate of inflation over the next couple of years. One of the biggest headwinds will be the resurgence of the New Zealand dollar over recent months. Exchange rate movements tend to take the best part of a year to flow through to retail prices, due to factors such as importers' currency hedging. The

latest upturn in the NZ dollar has yet to be reflected in the CPI, and is likely to suppress import price inflation for a while longer.

Figure 13: Inflation forecasts



In contrast, the conditions for a sustained pickup in non-tradables inflation seem to be in place. With strong GDP growth expected to continue through 2017, the economy is now catching up to what we estimate to be its non-inflationary potential. The unemployment rate has fallen below 5%, and more than half of firms report that supply-side factors, rather than demand, are their biggest constraint on growth. Nominal wage growth has yet to show a meaningful pickup, but this tends to be one of the last shoes to drop in an economic upturn.

The housing-related components of the CPI account for a significant part of the inflation outlook. The building industry is the one part of the economy that is clearly running into severe capacity constraints, and prices for newly-built homes have risen 6.3% in the last year. In contrast, rental inflation has been relatively subdued. Rents are on the rise in Auckland, where the shortage of dwellings is most glaring. But they are now falling outright in Canterbury, where the 'scarcity premium' is coming out of rents as the housing stock is steadily restored. Since the nationwide balance still points to a shortage of housing for years to come, we expect the upward pressure on housingrelated costs to continue.

Altogether, we expect a slow return to the 2% midpoint of the inflation target over the next few years, with a lingering risk of dipping below the target range again. As long as this

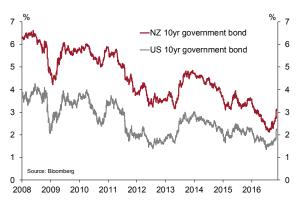
remains a genuine risk, the RBNZ is likely to favour a long stretch of loose monetary policy settings.

As we anticipated, the RBNZ reduced the cash rate again in November to a new low of 1.75%. But with domestic conditions improving, and a diminishing threat of inflation expectations becoming unanchored, the RBNZ has indicated only a small probability that further easing will be required. Instead, the OCR is projected to remain low for a considerable time.

That doesn't mean we can expect a period of stability in market interest rates, however. For one thing, markets tend to favour action over inaction, and with the focus moving away from OCR cuts, traders are instead turning their attention to hikes. The market is currently pricing more than a 50% chance that the OCR will be raised again by the end of next year. We regard this timing as far too early. On our forecasts, inflation will still be barely within the lower edge of the 1-3% target range by that time. Indeed, we expect that the RBNZ's communications over the coming year will emphasise that monetary policy will need to remain accommodative for a long time.

However, we expect that this jawboning of interest rates will be only partly successful. There are other forces pushing interest rates higher that are beyond the scope of the RBNZ. The first is that global interest rates appear to have broken free from their multi-year decline and are rising again. This movement began well before the US election, but has clearly accelerated since then as the market has anticipated a sharp rise in government borrowing and infrastructure spending. New Zealand interest rates have been swept up in this move, despite the lack of any similar change in the domestic outlook.

Figure 14: Long-term interest rates

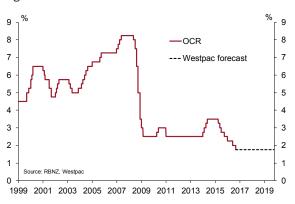


Another factor is that banks' funding costs are evolving independently of the OCR. For several years after the financial crisis, growth in deposits was sufficient to meet banks' funding needs. But in recent months, deposit growth has slowed markedly, at the same time that credit growth has accelerated. In principle, banks can meet this funding shortfall through offshore wholesale markets, but there are limits to how far they can go down this path - partly due to tightening international regulatory requirements, and partly due to cost. If the constraints on funding persist, this will likely manifest as some combination of higher interest rates and tighter lending standards.

Consequently, we anticipate a moderate rise in mortgage rates over the next year, even with the OCR on hold. That will mark a change from the last couple of years, where falling mortgage rates contributed to rapid house price gains. And this will have implications for both monetary and macroprudential policies. Previously, our forecasts incorporated another round of lending restrictions – most likely debt-to-income ratio limits – at some point next year. But we now suspect that higher interest rates will do much of the work in cooling house price growth, removing the need for further lending limits.

There is one other substantial change to our interest rate forecasts. We noted in the previous *Economic Overview* that a slowing economy would warrant further OCR cuts into 2018 and 2019. However, with our economic forecasts now evolving towards stronger growth for longer, we have decided to remove those additional cuts from the forecast. We still anticipate a slower pace of growth towards the end of the decade, as the Canterbury quake rebuild winds down and the construction pulse elsewhere peaks. And without that additional easing, our forecasts suggest that inflation is more likely to linger in the lower half of the inflation target. But that in itself would probably not be enough to spur the RBNZ back into action.

Figure 15: Official Cash Rate



Financial market forecasts (end of quarter)

	CPI inflation	OCR	90-day bill	2 year swap	5 year swap
Dec-16	1.2	1.75	2.10	2.30	2.70
Mar-17	1.3	1.75	2.10	2.40	2.80
Jun-17	1.1	1.75	2.10	2.50	2.90
Sep-17	1.2	1.75	2.10	2.50	3.00
Dec-17	1.1	1.75	2.10	2.50	3.00
Mar-18	1.2	1.75	2.10	2.50	3.00
Jun-18	1.4	1.75	2.10	2.50	3.00
Sep-18	1.7	1.75	2.10	2.50	3.00
Dec-18	2.0	1.75	2.10	2.40	2.90
Mar-19	2.1	1.75	2.10	2.30	2.80

Exchange Rates

Well supported

The New Zealand dollar continues to linger above 70 cents against the US dollar, propped up by the surge in dairy prices and solid momentum in the New Zealand economy. While robust growth will keep the Kiwi well supported in coming months, its allure will begin to fade next year as the US Fed continues with gradual policy tightening. The Kiwi is expected to come under further pressure heading into 2018, as growth in New Zealand begins to slow.

The Kiwi regained its wings earlier in the year, and has lingered above 70 cents against the US dollar since our August Economic Overview. This solid performance has been despite the Reserve Bank reducing the OCR to a new record low of 1.75% in November. Lower rates have been countered by other developments, including the 50% rise in global dairy prices, and strengthening momentum in economic activity more broadly. Local interest rate markets have now taken the chance of a rate cut in 2017 off the table, and instead are itching to price RBNZ rate hikes in.

While we think the possibility of a rate hike in 2017 is slim given low inflation, the outlook for growth is much rosier than it was a few months back. But the same can't be said for other countries, with the global growth backdrop remaining decidedly lacklustre. So with New Zealand's growth and interest rates expected to stand above the crowd for a little longer yet, the NZ dollar will continue to be well supported. Notwithstanding a sustained "risk-off" event, we're expecting the NZD/USD to linger around 70 cents for much of next year, before heading down toward the mid-60 cent level in 2018.

Of course, much depends on how things play out on the US side of the coin. The NZD/USD has been kept at bay over the past few months by a strengthening US dollar, as markets become increasingly convinced about Fed rate hikes over the next year. Firming sentiment reflects a pickup in US growth and rising inflation, while the unexpected US election result, and the potential boost to growth from increased infrastructure spending and tax cuts, have pushed interest rates and the US dollar higher still.

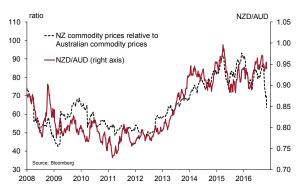
We're expecting the Fed to raise rates in December, followed by two hikes in 2017. Higher US rates, while New Zealand's policy rate is expected to remain on hold, will help take some heat out of the NZD/USD. But there is much uncertainty how things will play out, given little clarity at this stage about President Elect Trump's spending plans. If these are as stimulatory as currently proposed, we may see a faster pace of Fed tightening through 2017 and 2018, inducing more downward pressure on the NZD/USD. Any policies that negatively impact global trade and prospects for Asian economies would also weigh on the NZ dollar.

Closer to home, the NZ dollar has held its ground against its Aussie counterpart, with the NZD/AUD around 94 cents. This has been despite relative commodity prices swinging sharply in Australia's favour over the past three months, as

the rise in dairy prices looks like small change compared to the 250% rise in coking coal prices. Iron ore prices have also risen strongly. Exchange rates markets seem sceptical that the recent gains in hard commodity prices can be sustained. And rightly so in our view, with higher prices expected to choke off demand, and encourage a lift in supply. As such, we expect coal and iron ore prices to fall sharply in 2017, against a more stable outlook for New Zealand's commodity prices.

Turning to relative growth and monetary policy, these don't argue for a significant shift in the NZD/AUD over the next year. Policy rates are expected to be on hold in both countries for some time. But as growth in NZ begins to slow relative to Australia in 2018, we see the NZD/AUD edging lower.

Figure 16: NZD/AUD and relative commodity prices



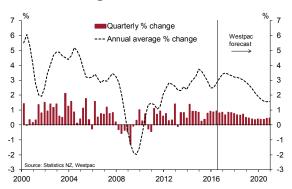
Exchange Rate Forecasts (end of quarter)

	NZD/ USD	NZD/ AUD	NZD/ EUR	NZD/ GBP	NZD/ JPY	TWI
Dec-16	0.72	0.94	0.66	0.58	76.3	77.9
Mar-17	0.72	0.95	0.67	0.59	77.8	78.6
Jun-17	0.71	0.96	0.68	0.58	78.1	78.6
Sep-17	0.70	0.96	0.67	0.57	77.0	78.0
Dec-17	0.68	0.94	0.67	0.56	76.2	76.7
Mar-18	0.66	0.94	0.65	0.55	75.2	75.3
Jun-18	0.65	0.93	0.65	0.54	75.4	74.6
Sep-18	0.64	0.93	0.64	0.54	74.6	73.7
Dec-18	0.64	0.91	0.64	0.53	74.9	73.1
Mar-19	0.64	0.90	0.63	0.52	73.7	72.3

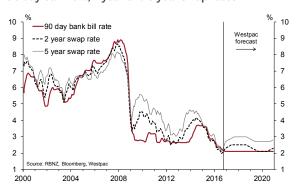
Forecasts and key charts

	Quarterly % change				Annual average % change			
	2016 2017			Calendar years				
	Jun (a)	Sep	Dec	Mar	2015 (a)	2016	2017	2018
GDP (production)	0.9	0.8	0.8	0.7	2.5	3.4	3.2	2.9
Private consumption	1.9	0.4	1.0	0.8	2.3	3.5	3.4	2.7
Government consumption	1.0	0.5	0.5	0.5	2.0	1.9	2.1	2.0
Residential investment	6.0	2.5	2.1	1.6	5.9	15.2	7.1	-0.1
Business Investment	1.7	5.3	-3.5	1.1	1.9	4.2	3.5	4.3
Stocks (% contribution)	-1.1	0.9	0.1	0.1	-0.3	-0.1	0.3	0.0
Exports	4.0	-1.2	0.0	0.0	6.8	2.8	1.9	3.1
Imports	2.6	3.3	-1.6	0.9	3.6	3.8	3.3	2.5
Consumer price index	0.4	0.3	0.2	0.2	0.1	1.2	1.1	2.0
Employment change	2.4	1.4	0.6	0.3	1.4	5.8	2.0	1.1
Unemployment rate	5.0	4.9	4.8	5.0	5.0	4.8	4.5	4.3
Labour cost index (all sectors)	0.4	0.4	0.4	0.4	1.5	1.5	1.6	1.9
Current account balance (% of GDP)	-2.9	-3.1	-2.9	-2.9	-3.4	-2.9	-2.8	-3.2
Terms of trade	-2.1	-0.5	2.3	3.3	-3.2	3.8	2.7	-0.3
House price index	6.2	2.2	1.5	1.6	11.1	14.0	5.0	2.0
90 day bank bill (end of period)	2.28	2.19	2.10	2.10	2.80	2.10	2.10	2.10
5 year swap (end of period)	2.46	2.16	2.70	2.80	3.10	2.70	3.00	2.90
TWI (end of period)	73.6	77.0	77.9	78.6	72.1	77.9	76.7	73.1
NZD/USD (end of period)	0.69	0.72	0.72	0.72	0.67	0.72	0.68	0.64
NZD/AUD (end of period)	0.93	0.95	0.94	0.95	0.93	0.94	0.94	0.91
NZD/EUR (end of period)	0.61	0.65	0.66	0.67	0.61	0.66	0.67	0.64
NZD/GBP (end of period)	0.48	0.55	0.58	0.59	0.44	0.58	0.56	0.53

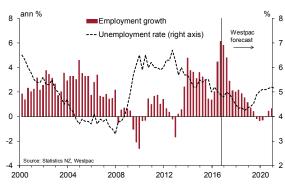
New Zealand GDP growth



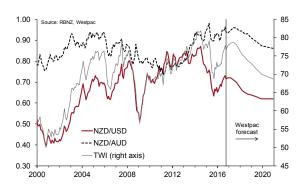
90 day bank bill, 2 year and 5 year swap rates



New Zealand employment and unemployment



NZD/USD, NZD/AUD and TWI



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