February 2018

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Rewriting history

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February 2018 Economic Overview

Note from Dominick

There is a saying that it is tougher to forecast the economy than the weather. Meteorologists can look out the window to see today's weather, whereas economists wait months to receive data on the economy. For our latest *Economic Overview* we had to deal with even worse than that – Stats NZ has rewritten history, revising its estimates of GDP going back years.

This new version of history is not only more accurate, it also makes more sense. Rather than lacklustre growth in 2015 and 2016, GDP growth actually ripped away in those years before slowing in 2017. This revised picture fits better with house price dynamics, and makes our per-capita GDP and productivity growth figures look less alarming. But it also makes today's lack of inflation all the more striking.

"Lowflation" has been a global phenomenon, but there are signs that inflation pressures are finally starting to emerge in the United States. This will cause US interest rates to rise. New Zealand is a different story and we expect inflation here to remain quiescent. Consequently, we see no scope for OCR hikes this year. In fact, we find it easier to imagine scenarios leading to an OCR cut.

With the US Fed hiking and the RBNZ on hold, later this year the US Government might be paying higher interest rates on 10-year bonds than the New Zealand Government. That is something that hasn't happened since 1994, and will surely have consequences for the exchange rate. We continue to expect the Kiwi dollar to weaken relative to the US dollar.

In the last *Economic Overview* we mentioned that New Zealand is likely to step up its efforts to avert climate change by constraining greenhouse gas emissions. That will come at an economic cost, which we have factored into this *Overview* by slightly reducing our longer-term GDP growth forecasts.

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New Zealand Economy

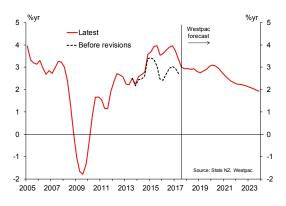
Those were the good old days

Updated estimates of GDP growth have revealed that economic activity in recent years was substantially stronger than initially thought. However, the momentum in activity has been fading. And going forward, some big changes in economic conditions are on the cards.

With the new year upon us and big changes in economic policy on the cards, it's a good time to look at what sort of shape the economy is in. Earlier estimates suggested that the economy had been growing by around 2.5% to 3% per annum in recent years. That was a surprisingly modest pace of growth given the range of factors that were supporting demand over that period, including rapid population growth, low interest rates, as well as spending on the Canterbury rebuild and other construction.

However, more detailed information on economic conditions has revealed that activity was actually substantially stronger than initially thought. Stats NZ has revised its estimates of GDP growth for 2015 to 3.5% and for 2016 to 4.0%. Those are very healthy rates of growth and are much more consistent with the economy's strong fundamentals in recent years.

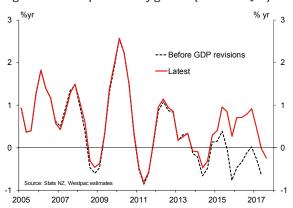
Figure 1: GDP growth including forecasts and revisions



These updated GDP estimates also help to resolve some apparent mysteries. Earlier estimates painted a surprisingly weak picture of household spending, with per capita spending growth appearing to stagnate despite a very strong housing market. However, the updated estimates of household spending are more consistent with both the strength in population growth and house prices in previous years. The updated GDP estimates also imply better labour productivity, and accord much more closely with the solid gains in employment that we've seen.

But while some puzzles have been solved, others remain. Most notable is the lack of upwards pressure on wages and consumer prices at a time when the economy has been expanding at a solid pace.

Figure 2: Labour productivity growth (based on QES)



Even with the economy starting from a stronger position, we're still left with a picture of softening momentum in activity. The revised GDP figures confirmed that growth slowed though 2017 as the housing market slowed, reconstruction in Canterbury wound down, and construction activity in Auckland stalled. In addition, businesses in both the services and goods-producing sectors have reported slowing sales growth and an easing in forward orders, indicating that growth remains slow at present.

Growth is expected to remain slow over 2018, before picking up in 2019. We are also likely to see some big changes in the make-up of the economy, with increases in government spending displacing some private sector activity over time. Overall, the pace of growth is likely to be noticeably slower than in recent years, averaging a little under 3% per annum.

Let's do this

The biggest factor driving changes in the economic outlook over the coming years is the mix of government policy. The new Labour-led Government is planning an additional \$8.4bn of new operating spending over the next four years, the majority of which will be spent on health and education. This planned ramp up in fiscal spending will boost economic activity from mid-2018, and will be reinforced by the related lift in household incomes and spending.

However, the impact of Government policy on the economy is not as straightforward as "higher spending, higher growth." The Government is also planning to introduce a range of regulatory changes over the coming years, targeting areas such as the housing and labour markets.

These policies are actually likely to dampen economic activity, offsetting some of the boost in fiscal spending. In the near term, this is because changes in the regulatory environment have seen business confidence take a sizeable knock, and this nervousness is likely to dampen investment and hiring decisions for a time. Longer term, planned changes in housing market policy (discussed below) and a tightening in migration settings are likely to be a significant drag on household spending. The boost to GDP growth from increased fiscal spending is also expected to crowd out some private sector consumption and investment over time.¹

An additional factor that will eventually impact economic activity is the Government's climate change strategy, which involves targeting zero net carbon emissions by 2050. To achieve this, they will most likely look at an expanded version of the existing Emissions Trading Scheme (ETS), including bringing agriculture and other currently excluded industries into the framework. The economy is expected to adapt by shifting away from high emissions industries and into low emissions industries. However, there will still be an overall economic cost. Consistent with this, we've revised down our estimates of the economy's longer term (or potential) rate of GDP growth by 0.1 percentage points to 2% per annum.

A key question surrounding the fiscal outlook is whether the Government will achieve its aim of reducing net government debt to 20% of GDP by 2022. The Government estimates that its spending plans will require an additional \$7bn of borrowing over the coming years. However, this relatively moderate increase in borrowing is contingent on what looks to be quite optimistic Treasury forecasts for GDP growth. We expect that GDP growth will actually be more moderate, and this will tend to weigh on tax revenue. On top of this, we expect that the Government's policy objectives will end up being more costly than expected. Consistent with this, we have assumed that the Government will increase its spending allowance by \$1bn more than is currently budgeted.

The above conditions could prove to be a challenge for the Government's debt targets. But there are some offsetting factors. Tax revenue has actually been running ahead of the Government's forecasts in the current fiscal year. In addition, the Government's borrowing requirements relate to its capital spending plans. The previous Government struggled to lift the level of capital spending due to capacity constraints, and such constraints are expected to persist. As a result, we doubt that the budgeted ramp up in infrastructure spending will occur as quickly as expected, and the resulting spending shortfall is likely to limit the run up in debt.

On balance, the Government should remain on track to meet its debt target.

Shake it up

The household sector is in for a big shake up over the coming years, and one of the main reasons for this is changing conditions in the housing market.

The past few months have actually seen some renewed strength in house prices and sales as pre-election

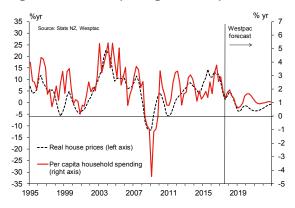
nervousness has faded and mortgage rates have pushed down. We expect that this pick-up will be sustained for a bit longer, and have revised up our near-term house price forecasts accordingly.

Nevertheless, the housing market remains softer than it was this time last year. And going forward, we expect an extended period of subdued house price inflation. The Government is planning a suite of policy changes over the coming years aimed at cooling the housing market. This includes restrictions on foreign buyers, an extension of the 'bright line' test for capital gains, and the ring-fencing of losses on investment properties. There's also the possibility of a broad-based capital gains tax coming back on the agenda in the run-up to the next election.

We expect that the combination of these policies will see nationwide house prices fall by a total of 2% over the coming four years. That's a slightly more modest decline than we expected in the wake of last year's election, in part reflecting the Reserve Bank's decision to loosen loan-to-value restrictions on mortgage lending earlier than expected (we're assuming that there is a further loosening to come later this year). This change in our forecasts also reflects some doubt about how ardently the Government will pursue some parts of its policy agenda. Enthusiasm for policies that could dampen growth may be waning. For instance, there are suggestions that restrictions on foreign buyers of residential property and the potential tightening of visa requirements could be less stringent than initially planned.

This still leaves us with a subdued outlook for house prices. And with New Zealanders holding a large proportion of their wealth in either investment or owner-occupied housing, we expect to see related weakness in household spending over the next few years.

Figure 3: Household spending and house prices

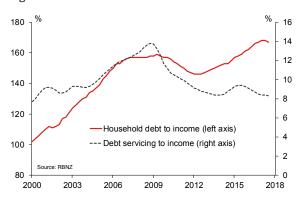


The high level of household debt is a key issue that we've highlighted extensively, and a perennial bugbear for the RBNZ. Household debt has risen 35% since 2012 and is now at levels equivalent to 167% of household disposable income. This raises concerns about both the sustainability of GDP growth and the economy's longer-term financial stability. But while debt levels remain elevated, the slowdown in the housing market over the past year has provided a brake on debt accumulation. And with the housing market set to slow

¹Our previous *Economic Updαte* provided a detailed discussion on how this crowding out might occur.

further over the next few years, we could see debt levels remaining stable - or potentially improving - going forward. This would have important implications for the Reserve Bank's choice of policy settings, potentially allowing for a further loosening of the LVR lending restrictions. The RBNZ may also be open to lowering the OCR if stability concerns start to recede.

Figure 4: Household debt



Over the coming year, household spending growth will also be dampened by the slowdown in net migration that is already in train. While annual net migration remains elevated at just under 70,000, it has been gradually trending down since mid-2017 as arrivals have flattened off and departures have risen. With growth in New Zealand easing off as conditions abroad continue to improve, these trends are likely to continue for some time. Combined with signalled changes in migration policy, this will see population growth slowing from over 2% currently to below 1% by around 2021. This signals a huge reduction in the economy's rate of potential GDP growth, and will remove an 'easy' source of demand growth that businesses have been enjoying.

Employment rose by a solid 3.7% over the past year, with continued gains in areas like professional services and construction. This saw the unemployment rate dropping to a nine-year low of 4.5% at the end of 2017.

However, while the labour market has been resilient thus far, it tends to be a laggard in the economic cycle. With GDP growth having slowed over the past year, and a further easing expected over the coming years, we're likely to see a related softening in demand for workers. This will result in a modest lift in the unemployment rate to 4.7% over the next few years.

But it's not just the demand for workers that is expected to ease. Over the coming years, we're also likely to see some of the recent strong increases in labour force participation reverse. One reason for this is the change to Working for Families payments that will increase effective marginal tax rates for many workers. The continuing creep higher in the age profile of New Zealand's workforce will also tend to pull down participation over time.

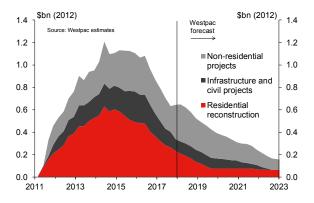
Construction sector hitting the wall

Construction was a key driver of GDP and employment growth in recent years. Equally, stalling construction activity over the past year was a key factor behind the economy's slowdown over 2017. The construction sector is experiencing growing pains, with difficulties sourcing skilled labour and credit. These factors will provide a brake on how quickly building activity can ramp up to meet demand. These constraints also mean the impact of the Government's KiwiBuild program on the overall level of building will be limited in the short run.

While overall construction activity is expected to remain elevated for some time, the make-up of activity is changing. Reconstruction work in Canterbury has slowed more sharply than expected over the past year, and will continue winding down in the years ahead, resulting in a drag on GDP.

Balanced against this is increasing home building activity in several other regions, including a long awaited increase in Auckland. Over the past year, there were nearly 11,000 new homes consented in our largest city. That's the highest level in 11 years. And if the pace seen in recent months can be sustained, the next few years will see Auckland finally start to eat into its significant shortage of homes (albeit at a gradual pace). We expect building in Auckland will remain strong for several years. We're also forecasting a lift in home building in a number of other parts of the country, including Wellington and Otago.

Figure 5: Canterbury earthquake rebuild, quarterly expenditure



Exports resilient

In the early part of 2018, prices for most of our key agricultural exports have been fairly solid, tourism has continued to boom, and New Zealand's terms of trade has risen to its highest level on record. This is providing a substantial boost to national income that should continue for some time yet.

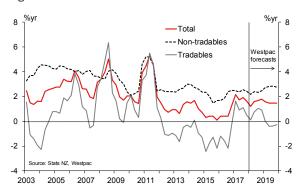
Inflation and Interest Rates

A ways to go

We expect the Reserve Bank to delay interest rate hikes until late 2019. Imported inflation remains largely absent, and we think that a near-term slowdown in economic growth will delay the build-up of domestic inflation pressures. Indeed, we see a greater risk of an OCR cut this year if aspects of our economic forecasts don't pan out, or if the RBNZ's new mandate points it in that direction.

While inflation in New Zealand is no longer at rock-bottom levels, it continues to languish in the lower half of the Reserve Bank's target range. Annual inflation was weaker than expected in the December 2017 quarter, falling from 1.9% to 1.6%. Measures of core inflation haven't fared any better - food and fuel prices, the usual suspects when it comes to volatility in inflation, actually recorded strong gains over the last year.

Figure 6: Inflation forecasts



The decline in inflation last year was led by import-heavy categories such as homewares and electronics. Part of the reason behind this is that the New Zealand dollar was rising strongly up until early 2017. Given the usual lag times, it's likely that lower import costs had their greatest impact on retail prices towards the end of last year.

However, the exchange rate doesn't fully account for the weakness of tradables inflation. As we note in the Global Economy section, there simply hasn't been much overseas inflation to import – even as the global economy has strengthened, inflation has remained muted outside of volatile items such as fuel. The more recent concerns about a re-emergence of inflation in the US are worth watching, as its economy approaches full capacity. But so far this does not seem to be a widespread development among our trading partners.

Subdued inflation in New Zealand is not just a product of the global environment. Non-tradables inflation has shown no upward trend in recent years, despite a run of strong economic growth in that time. More significantly, it has been stalled at a relatively low level of around 2.5%, compared to consistent gains of 3-4% a year during the 2000s.

Different details, same outcome

We expect annual inflation to remain in the lower half of the 1-3% target range this year, and potentially beyond. That said, we expect some differences in the drivers of inflation compared to last year. As we note in the Exchange Rates section, we are expecting a substantial decline in the New Zealand dollar this year, which will push up import prices. In contrast, we don't expect food prices to repeat last year's gains, as that was a one-off related to weather. Nor do we expect fuel prices to rise further, as we expect world oil prices to ease over the coming year.

For the Reserve Bank to get inflation back to the 2% midpoint of its target range on a sustained basis, a lift in the pace of non-tradables inflation is crucial. On that front, we expect progress to be slow. One reason is that some of the new Labour-led Government's policies (a year of free tertiary education and more subsidies for doctors' visits) will directly knock about 0.2% off annual inflation this year.

The indirect effects of government policies could be significant as well. As detailed in the New Zealand Economy section, we expect that efforts to cool the housing market will lead to slower growth in household spending, and uncertainties around government policy could result in a hiatus in business investment. Together, these would lead to slower GDP growth and impede the process of returning the economy to full capacity.

The conundrum of capacity

The biggest barrier to a pick-up in non-tradables inflation is that GDP seems unlikely to outstrip the economy's noninflationary capacity any time soon. That raises a crucial question: what is 'full capacity' for the economy? Strong GDP growth in recent years did not result in a pickup in inflation, so we can infer that the economy is not currently running above potential by any significant margin.

Another lens on this issue – and one that will be increasingly significant under the new Government – is the labour market. The unemployment rate has fallen gradually, and by the end of 2017 had reached a nine-year low of 4.5%. Employment growth has outstripped even the rapid growth in the working-age population, and firms report increasing difficulty in finding workers. Yet wage pressures, as measured by the Labour Cost Index, have remained stubbornly low in recent years.

This puzzle can be partly resolved if we adjust for expectations of inflation. Real wage growth has actually been comparable with what we saw in the mid-2000s, the last time that the unemployment rate fell below 5%. The difference is that inflation – both actual and expected – was relatively high at that time, persistently testing the upper end of the RBNZ's target range. In contrast, employees have needed less compensation for inflation in recent years. Indeed, the 'lowflation' era has proven to be a minor windfall for workers at times.

Figure 7: Unemployment and wage growth



Still, this isn't an entirely satisfactory story. Actual and expected inflation have lifted more recently, yet there has been no corresponding rise in wage growth even as the labour market has tightened. This may be a sign that there is still some slack left in the labour market - or it could reflect the tendency of wage growth to lag the broader economic cycle.

For the record, our best estimate of a non-inflationary unemployment rate is the current level of 4.5%. Crucially, if GDP growth slows this year as we're anticipating, unemployment will struggle to go below that level in the near term. Consequently, we think that the pick-up in domestic inflation will remain gradual.

Policy uncertainty remains

We continue to expect the OCR to remain on hold until late 2019, with rate hikes proceeding only gradually after that. Other forecasters and market pricing are gradually moving towards our view, having previously touted OCR hikes this year.

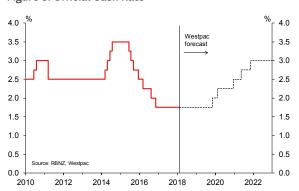
An on-hold OCR forecast does not necessarily mean that the environment for monetary policy is benign. There are risks to our economic forecasts in both directions, and indeed if there is any movement in the OCR this year, we see a greater chance of a cut than a hike.

We expect the new Government's policy agenda to weigh on household spending and business investment this year. If that doesn't eventuate, the RBNZ could be encouraged to bring forward the timing of rate hikes. On the other hand, if the domestic economy pans out broadly as expected, and this is not accompanied by the sharp fall in the New Zealand dollar that we are forecasting, there is a risk that inflation could drop below the target range again. The RBNZ has said that it would be ready to cut the OCR in this situation.

The possibility of an OCR cut this year is amplified by the Government's review of the monetary policy framework. The appointment of Adrian Orr as RBNZ Governor has cleared up some of the uncertainty, but it remains to be seen what kind of Policy Targets Agreement he will sign up to – bearing in mind that the Finance Minister has said that he would only appoint a Governor who was open to the changes that the Government is proposing.

Those changes include adding a goal to 'maximise' employment alongside the existing price stability mandate. The Government has indicated that this will not be a numerical target, leaving it open as to how the RBNZ will interpret it (or will be expected to interpret it). The absence of a pick-up in wage pressures could be seen as grounds to 'go for growth' and test the bounds of the economy's noninflationary potential. That could well mean a lower OCR in the near term, although in the longer run it would mean higher inflation and higher nominal interest rates.

Figure 8: Official Cash Rate



Financial market forecasts (end of quarter)

	CPI inflation	OCR	90-day bill	2 year swap	5 year swap
Mar-18	1.2	1.75	1.90	2.10	2.70
Jun-18	1.6	1.75	1.90	2.10	2.75
Sep-18	1.7	1.75	1.90	2.20	2.85
Dec-18	1.8	1.75	1.90	2.30	3.00
Mar-19	1.6	1.75	1.90	2.40	3.10
Jun-19	1.5	1.75	1.90	2.55	3.20
Sep-19	1.5	1.75	2.05	2.70	3.30
Dec-19	1.5	2.00	2.20	2.80	3.35
Mar-20	1.5	2.25	2.45	2.90	3.40
Jun-20	1.5	2.25	2.45	2.95	3.45

Global Economy

Firing on most cylinders

Recent volatility in financial markets has renewed debates about the fragile nature of the global upturn. But the trigger for the latest moves appears to have been fears about the re-emergence of inflation in the US, a consequence of a stronger economy. We have upgraded our forecasts for world growth as a whole, but we still expect growth to slow in China and to remain subdued in Australia.

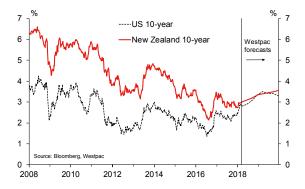
When you least expect it

Global financial markets started the year with a sense of calm. Low perceived volatility and still-low interest rates encouraged investors to pile into higher-risk investments, extending the strong run-up in share prices seen over 2017. But that calm was shattered in a matter of days in February, as the major share indices plunged by around 10% and US long-term interest rates spiked higher.

The apparent trigger for the downward lurch in share markets was a concern that the benign inflation story may be coming to an end in the US. The US labour market has been steadily tightening for years, with the unemployment rate falling to a 17-year low of 4.1% last year. The employment report for January suggested that the tighter labour market is now being accompanied by a pickup in wage growth.

On top of this, the US government has recently signed off on a \$1.5tn tax cut package and a \$300bn boost to defence spending. The extent of the fiscal stimulus isn't quite as large as what was put in place during the depths of the GFC, but it is controversially large at a time when the economy is already running close to full capacity. The result has been renewed concerns about the emergence of inflation, and the possibility that the Federal Reserve could hike interest rates by more than the market had factored in.

Figure 9: Government bond yields



Notably, the rise in long-term interest rates in the US has not been repeated to the same extent elsewhere, nor has the US dollar benefited from rising yields by as much as we would have expected. It may be that investors are demanding a higher risk premium for holding US dollar

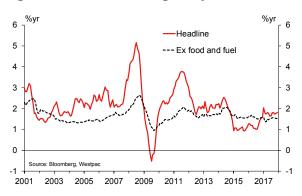
assets, due to either inflation fears or the expectation of much higher government bond issuance in the coming years - an inversion of the traditional view of US assets as a safe haven

Global economy on the mend

A modest but widespread acceleration in global economic activity has been evident since around mid-2016. Global growth was stronger than we expected in 2017. The 3.8% expansion was the strongest year since 2011. We have also upgraded our forecasts for most of the major economies over the next couple of years.

Monetary policy around the world generally remains supportive for growth. The US Federal Reserve has been gradually raising interest rates from near-zero levels since late 2015. We expect the Fed to hike three more times this year and twice next year, as well as slowly unwinding quantitative easing. Only a handful of countries such as the UK and Canada have so far joined the US in raising interest rates, reflecting their own specific conditions. The European Central Bank continues to add stimulus through bond purchases, though it is expected to start phasing out these purchases later this year.

Figure 10: Global inflation, weighted by trade with NZ



Financial markets are now debating the possible emergence of widespread inflation, but we are less concerned. The slow pace of recovery in the last nine years means that there is still a sizeable amount of spare capacity in the global economy, even if the gap is narrowing. Moreover, the evidence for a pickup in inflation is weak outside of the

impact of commodity prices such as oil. Measures of core inflation have been stable for some time.

The strengthening world economy has been a boon for commodity prices, but supply factors have played a role too. Oil prices recently rose towards US\$70/barrel, as OPEC countries finally managed to cut their production by enough to make a meaningful dent in global output. However, we don't believe this situation can be sustained for long, as US fracking operations are expanding rapidly. We expect that they will eventually drive prices back down towards the marginal cost of production (around US\$50/ barrel) over the next couple of years.

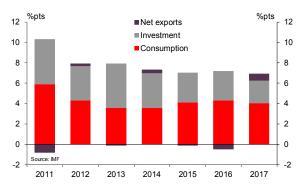
The mix matters

While the picture for the global economy as a whole is looking more promising, the outlook is more mixed when we consider New Zealand's biggest trading partners. We have upgraded our forecasts for growth in China, but we still expect it to be substantially slower than in recent years. And we have actually lowered our growth forecast for Australia for the coming year.

China's economy exceeded our expectations last year, with GDP growth picking up slightly to 6.9%. But there is evidence that the pace of growth was already slowing in late 2017 as the Chinese government stepped up its efforts to rebalance the economy. The latest push has been a focus on the quality of bank balance sheets, on both the lending and funding sides. Housing lending has been selectively tightened, and there has been a crackdown on the types of corporate funding structures that have been popular in recent years.

These reforms will ultimately lead to slower but more sustainable economic growth, with the greatest impact likely to be felt in manufacturing, infrastructure and construction. Growth in household spending has been relatively robust to date, reflecting the emergence of the Chinese middle class. However, consumer demand is unlikely to be immune to the reforms if there is an impact on employment. Consequently, we expect some slowing in demand for the 'soft' commodities that New Zealand exports to China, though they will fare better than the 'hard' commodities provided by Australia.

Figure 11: Contributions to Chinese GDP growth



In contrast to most of the major economies, the Australian economy was weaker than we expected last year, with the pace of growth slowing to an estimated 2.3%. We have also marked down our Australian growth forecasts for this year, partly reflecting the weaker starting point.

We expect consumer spending growth to remain constrained by cooling house prices and slow wage growth. Employment in Australia rose strongly over 2017, but a broader range of indicators suggests that there is still a significant amount of slack left in the labour market, keeping the pressure off wage growth and inflation. Building consents point to a dwindling pipeline for housing construction, particularly the high-rise apartments that attracted overseas buyers in past years. The wind-down in mining sector investment remains a drag on growth, although a rise in non-mining investment is providing a counterbalance.

Economic forecasts (calendar years)

Real GDP % yr	2014	2015	2016	2017f	2018f	2019f
New Zealand	3.6	3.5	4.0	2.9	2.8	3.0
Australia	2.6	2.5	2.6	2.3	2.5	2.5
China	7.3	6.9	6.7	6.9	6.3	6.1
United States	2.6	2.9	1.5	2.3	3.0	2.5
Japan	0.3	1.1	1.0	1.5	1.3	1.0
East Asia ex China	4.2	3.8	3.9	4.5	4.3	4.3
India	7.5	8.0	7.1	6.7	7.2	7.2
Euro zone	1.3	2.0	1.8	2.4	2.1	1.7
United Kingdom	3.1	2.2	1.8	1.7	1.6	1.6
NZ trading partners	4.0	3.8	3.5	4.0	3.8	3.7
World	3.6	3.4	3.2	3.9	3.8	3.7

Forecasts finalised 14 February 2018

Agricultural Outlook

Sunny skies but clouds on the horizon

Prices for New Zealand's key agricultural commodity exports have remained firm in recent months, with robust global demand providing a supportive backdrop. Looking ahead, we expect key commodity prices to come under pressure, as growth in China slows, and global supply increases in some markets. Despite relatively buoyant prices, confidence in the rural sector is weak with nervousness about the impact of impending regulatory changes a key concern.

Most of New Zealand's key rural exports have started 2018 on the front foot. The horticulture sector is benefitting from strong global demand for specialist varieties of kiwifruit and apples, international beef prices have eased from their recent highs but remain at historically favourable levels on the back of robust consumer demand, and lamb prices are still elevated as solid demand coincides with tight supplies in key exporting countries.

Dairy prices have also been improving since the start of the year, although this has partly been due to concerns that poor weather may curtail New Zealand production. Higher prices have prompted us to lift our milk price forecast to \$6.50 this season. However, we still expect prices to moderate in 2018 as growth in China slows, global production increases (particularly in Europe) and New Zealand weather improves.

Solid farm gate prices, however, have done little to bolster confidence in the rural sector. Confidence is lingering well below what we would expect given the current level of commodity prices. This may reflect adverse weather conditions and concerns in the dairy sector about mycoplasma bovis, but we suspect the plunge in confidence has more to do with the change of Government.

The new Government's policies include:

- commitment to a legally binding carbon emissions target

- no new taxpayer funding for irrigation
- support for less intensive land use (such as forestry)
- no new mines on conservation land, and
- tighter restrictions on foreign ownership of land.

The details around some of these policies are still to be confirmed, but evidently, farmers are fearful that they will increase their cost of doing business. This may mean farmers are reluctant to undertake significant investment on farm while uncertainty around how government policies will be implemented persists.

Weak confidence in the sector is also affecting the rural property market, most noticeably via soft sales volumes. To date, there has been little downward pressure on prices with the combination of low interest rates and relatively healthy farm gate prices meaning sellers aren't being rushed into accepting lower prices. However, this combination won't last forever. And the increasing focus on the environmental costs of farming is likely to see some land prices come under pressure. In particular, the price of land used for dairying (which is likely to face the most significant cost increases as new environmental regulations are introduced) is expected to fall. In contrast, prices for less carbon intensive uses of land such as horticulture and forestry could get a relative boost.

Commodity price monitor

Sector	Trend	Current level ²	Next 6 months
Forestry	Slower construction growth in China expected to weigh on demand for New Zealand logs.	High	*
Wool	Low prices are making coarse wool a cost competitive option relative to synthetics, but prices may struggle to improve much against a backdrop of expected slower growth in China.	Average	>
Dairy	Increased production expected locally as weather improves. Combined with increasing global supply, this is expected to weigh on prices.	Average	*
Lamb	Tight supplies in Australia and New Zealand continue to underpin prices. Although demand in traditional markets such as the UK is likely to be soft, firm demand for lower value cuts in China looks set to continue.	High	*
Beef	Increased production in key global exporting countries balanced against solid consumer demand, particularly in the US. Some benefit expected from revised CPTPP Agreement that is set to lower export tariffs to Japan.	High	*
Horticulture	Confidence in the sector expected to lead to increased production volumes. However international demand for specialist varieties likely to remain firm.	High	*

 $^{^{\}rm 2}$ NZD prices adjusted for inflation, deviation from 10 year average.

Exchange Rates

Unusual behaviour

The US dollar has surprised us by depreciating sharply just when US interest rates were hitting their stride. We are not entirely convinced by the explanations for this bout of US dollar weakness, and expect the Greenback to strengthen over the course of this year. This should see the NZD/USD fall, especially if export commodity prices fall and global equity markets remain volatile.

At the time we wrote the November Economic Overview. the NZD/USD exchange rate was falling and had reached 68 cents. We expected that it would continue declining, mainly on the basis that the US was expected to lift official interest rates 50 basis points while the Reserve Bank of New Zealand was expected to stay its hand. We forecast a low-point of 63 cents by the end of 2018.

Currency movements are always uncertain, but what actually happened over the past few months really was unusual. Over a single month, spanning mid-December to mid-January, the NZD/USD exchange rate defied our forecasts by shooting up to above 73 cents. Only a small portion of that appreciation was to do with New Zealand (a slight improvement in sentiment around New Zealand politics). Mainly, New Zealand was caught up in a sudden and surprising bout of weakness specific to the US dollar. The US Trade Weighted Index fell 5% over the course of six weeks in which US interest rates were rising rapidly. The most plausible explanation for these seemingly incongruous market moves is a loss of confidence in US economic management, including an emerging fear of inflation and fears of large deficits following a tax cut package.

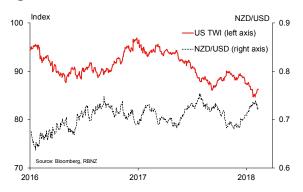
However, we are not entirely convinced by that explanation. We prefer to view this bout of US dollar weakness partially as a market overreaction that will iron itself out in time. As US interest rates rise, we expect the US dollar to appreciate again.

The case for the NZD/USD exchange rate falling in 2018 remains compelling. New Zealand's traditional yield advantage is set to almost disappear - we forecast that the US 10-year bond rate will be roughly equal to the New Zealand equivalent by the end of 2018, following successive interest rate hikes from the US Federal Reserve. New Zealand export commodity prices are expected to weaken this year. And the recent bout of turmoil on US equity markets may presage a period of greater risk aversion in global financial markets, which tends to be bad for the NZ dollar. We continue to expect that the NZD/USD exchange rate will fall to 63 cents, but we have pushed out the timing to the first quarter of 2019, instead of the end of this year. Our forecast would put the NZD/USD a little below its long-run inflation-adjusted average of 67 cents.

Meanwhile, the NZD/AUD exchange rate seems relatively at home in the low-90s. There is not a compelling reason to expect a large shift in this cross, as both central banks are on hold, both countries face the risk of a mild economic slowdown in China, and our models suggest that the current level of the cross is close to fair value.

We expect the NZ dollar to lose a little ground against the euro and yen, as the New Zealand economy will be viewed as a relative underperformer. However the UK economy is also expected to underperform, so our forecast of the NZD/ GBP exchange rate is more stable.

Figure 12: The US dollar versus the NZ dollar



Exchange Rate Forecasts (end of quarter)

	NZD/ USD	NZD/ AUD	NZD/ EUR	NZD/ GBP	NZD/ JPY	TWI
Mar-18	0.71	0.91	0.59	0.52	79.5	73.5
Jun-18	0.69	0.91	0.59	0.52	79.4	72.6
Sep-18	0.67	0.91	0.58	0.52	78.4	71.3
Dec-18	0.65	0.90	0.57	0.51	76.1	69.8
Mar-19	0.63	0.90	0.55	0.50	73.7	68.3
Jun-19	0.64	0.90	0.55	0.51	74.9	69.0
Sep-19	0.65	0.90	0.55	0.52	76.7	69.8
Dec-19	0.67	0.91	0.56	0.53	79.7	71.5
Mar-20	0.68	0.90	0.56	0.54	81.3	71.9
Jun-20	0.69	0.90	0.56	0.54	82.9	72.4

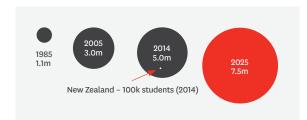
Special Topic

A closer look at the international education industry

New Zealand's international education industry is currently in good health and will benefit from an expected increase in demand for high quality education globally. However, increasing competition from abroad and restrictions on migration to New Zealand may hurt the industry in coming years.

Providing an education to students from other countries is big business globally. Over five million students currently study outside of their countries of origin, more than double the number that did so in 2000. An estimated 7.5 million students are likely to be studying abroad by 2025.

Figure 13: Global international student numbers



Source: Ministry of Education, OECD, ICEF Monitor

English speaking countries, mainly the US and the UK, and to a lesser extent Australia and Canada, dominate the provision of international education. Although attracting only 2% of international students globally, New Zealand competes head-on with these countries.

The dominance of these English speaking countries is, however, coming under threat. As the number of students looking to study abroad increases, other countries are ramping up their education offering. These include non-English speaking countries able to provide a high quality education in English (often at lower cost than those countries listed above). They also include countries, like China and Japan, from where most international students have historically originated, but who are now becoming large providers in their own right.

In response, education providers in New Zealand are leveraging off our country's reputation as a safe destination, offering a world class education with relatively low tuition costs. Quality of life aspects and a relatively high standard of living are also being aggressively promoted. In the future, education providers are likely to benefit from the performance of the NZ dollar, which we expect to weaken over the next 5 years. This will reduce the costs of living in New Zealand from an international student's perspective.

Education providers in New Zealand are also continuing to market the total learning experience they are able to offer to international students. Pastoral care is, and will continue to be, a key differentiator. Providing education packages that are more tailored to the needs of individual students and businesses is set to become more commonplace. Education providers are set to leverage off the expertise of other providers and employers, within New Zealand and abroad, through joint ventures, alliances and accreditations. This may create opportunities for providing offshore education to students residing abroad, which is one of the international education industry's biggest growth areas.

Migration policy

Another big challenge facing New Zealand's education providers relates to the Government's migration policy. The Labour Party campaigned on reducing the number of international students on low level courses, as well as clamping down on their ability to work, both during study and when studies are completed. This was in response to unethical practices in the past, where some people had taken advantage of student visa rules to gain permanent entry into New Zealand. However, while restrictions on the ability to work may limit the scope for such practices, they could also reduce the attractiveness of New Zealand as an education destination.

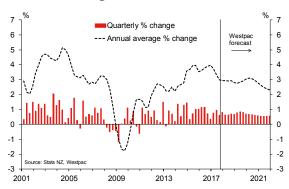
The Government is still considering its options, especially on how to deal with work rights, and it looks as if action is some way off. The key issue seems to be the cost of these policies to education providers. In the run-up to September's election, the Labour Party had estimated a revenue loss of about \$250m per year - a significant sum if one considers that tuition fees paid by international students generate about \$1bn in revenue each year.

While the revenue impact of these policies is expected to be broad based, hardest hit are likely to be those education providers that provide short-duration vocational training. Private training establishments, who account for just over a half of all international students in New Zealand, will feel the impact on their financial bottom lines more acutely, and some are likely to go out of business. Institutes of technology and polytechnics are also likely to be affected, although given the range of the courses they are able to offer, the financial impact should be much smaller. Meanwhile, universities may actually see a lift in international student numbers, especially if entry into New Zealand requires enrolment in higher quality courses.

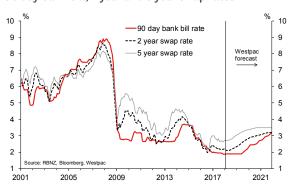
Forecasts and key charts

	Quarterly % change				Annual average % change			
	2017 2018			Calendar years				
	Sep (a)	Dec	Mar	Jun	2016 (a)	2017	2018	2019
GDP (production)	0.6	0.8	0.6	0.6	4.0	2.9	2.8	3.0
Private consumption	0.8	1.0	0.8	0.7	5.0	4.1	3.3	2.5
Government consumption	2.5	0.7	0.7	0.8	1.8	4.7	4.2	4.0
Residential investment	3.3	0.0	0.3	0.5	11.8	0.7	2.7	2.9
Business investment	0.3	4.8	-3.1	0.7	4.1	4.6	1.3	3.0
Stocks (% contribution)	-0.9	0.6	0.1	0.1	0.0	-0.3	0.1	0.3
Exports	0.8	2.0	-0.5	0.2	1.6	3.2	3.4	3.5
Imports	2.1	5.4	-1.8	0.8	3.4	7.0	4.6	3.8
Consumer price index	0.5	0.1	0.6	0.4	1.3	1.6	1.8	1.5
Employment change	2.2	0.5	0.4	0.4	5.8	3.7	1.6	1.2
Unemployment rate	4.6	4.5	4.4	4.4	5.3	4.5	4.5	4.7
Labour cost index (all sectors)	0.6	0.4	0.5	0.6	1.6	1.8	2.2	2.0
Current account balance (% of GDP)	-2.6	-2.6	-2.1	-2.8	-2.5	-2.6	-2.8	-3.1
Terms of trade	0.8	1.9	0.0	-1.1	6.7	8.2	-1.5	-0.7
House price index	1.0	1.7	2.0	0.5	13.9	4.6	0.0	0.2
90 day bank bill (end of period)	1.83	1.79	1.90	1.90	2.00	1.79	1.90	2.20
5 year swap (end of period)	2.72	2.66	2.70	2.75	2.65	2.66	3.00	3.35
TWI (end of period)	77.1	73.8	73.5	72.6	77.6	73.8	69.8	71.5
NZD/USD (end of period)	0.73	0.70	0.71	0.69	0.71	0.70	0.65	0.67
NZD/AUD (end of period)	0.93	0.91	0.91	0.91	0.95	0.91	0.90	0.91
NZD/EUR (end of period)	0.62	0.59	0.59	0.59	0.66	0.59	0.57	0.56
NZD/GBP (end of period)	0.56	0.52	0.52	0.52	0.57	0.52	0.51	0.53

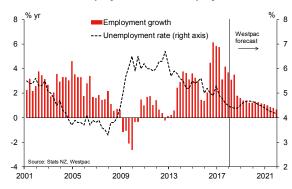
New Zealand GDP growth



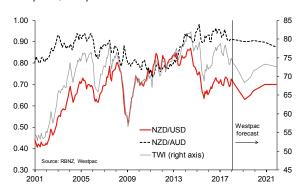
90 day bank bill, 2 year and 5 year swap rates



New Zealand employment and unemployment



NZD/USD, NZD/AUD and TWI



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