November 2017

Economic Overview

A new chapter

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Note from Dominick

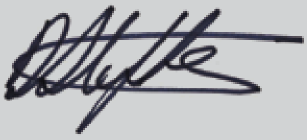
The election of the new Government marks the start of a new chapter for New Zealand politics, and possibly for the economy. We have made significant changes to our forecasts in this *Economic Overview*.

Much of this *Overview* is devoted to our assessment of what proposed government policies will do to the economy. We have revised down our GDP forecast for 2018, but upgraded our GDP forecasts for 2019 and 2020.

That's a bit different to the Reserve Bank's assessment and some of the chatter around financial markets, which is that the new Government's policies will boost GDP, inflation and the OCR. We agree, but only up to a point. The Government's plan to increase spending will certainly boost the economy, although crowding out of private sector activity must also be considered. Meanwhile, the Government's various plans to cool the housing market and reduce net migration will slow the economy next year.

After considering all angles, we remain comfortable forecasting no hike in the OCR until late-2019. Of course, how the RBNZ behaves will depend critically on the choice of Governor and the policy framework under which he or she operates, as discussed in the *Inflation and Interest Rates* section.

This Government's commitment to a net zero carbon economy by 2050 could be one of its most significant legacies. This quarter our *Special Topic* explains how a beefed up Emissions Trading Scheme might work, and how it might affect sectors currently excluded from the scheme.



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New Zealand Economy

Change the story

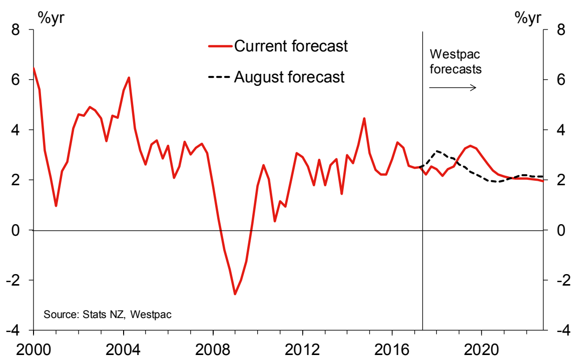
New Zealand's economic growth is slowing as some of the key drivers from recent years dissipate. The outlook has changed significantly, partly because of the change of government. We discuss the likely economic impact of a range of proposed policies, concluding that the change of government will tend to slow the economy next year, but boost it over 2019 and 2020.

Edits and revisions

This quarter we have made large changes to our economic forecasts, mainly reflecting the impact of the change of government. The Government's plan to borrow more and spend more will stimulate the economy over time, but law changes designed to slow the housing market and net migration will have the opposite effect. The change of government is not the only reason that our forecasts have changed – a number of areas were proving weaker than expected even before the election. All things considered, we have downgraded our GDP forecast for 2018, but upgraded our GDP growth forecasts for 2019 and 2020.

The New Zealand economy has continued to expand this year, but the pace of growth has slowed. Some of this slowdown can be pinned on forces of nature, particularly wet weather hampering agricultural production. But even outside of the primary sector, growth has been more subdued this year. And what growth the economy is experiencing has been mainly accounted for by population growth. We expect the economy to have grown by 2.4% over the course of 2017, but in per capita terms this would amount to growth of just 0.3%.

Figure 1: GDP growth forecasts



In the August *Economic Overview*, we noted that there were a number of clouds on the horizon for economic growth, and predicted a slowing rate of GDP growth over the remainder of the decade. Recent data has reinforced our sense that underlying economic conditions are changing.

Changes in the air

The first change is that net immigration has passed its peak and is now falling faster than previously expected. Much of this is due to a lift in departures of non-New Zealand citizens, which have risen by more than 30% in the past year. This is an echo of the sharp rise in arrivals, many of them on temporary visas, over the past few years. New arrivals have also declined, with monthly inflows down 10% from their peak. With global economic conditions improving, we expect that both New Zealanders and foreigners will be increasingly encouraged to seek their fortunes overseas, and combined with the ongoing exit of temporary migrants, this will see net migration fall sharply.

The second change is the cooling in the housing market. House prices in Auckland and Christchurch have fallen slightly over the past year, while the rate of increase has slowed in the rest of the country. The rise in mortgage rates from their lows since late 2016 has been the main contributor to the slowdown in house prices, with the Reserve Bank's loan-to-value ratio (LVR) restrictions and other forms of credit tightening by banks playing supporting roles. While Auckland prices have perked up recently, and could continue to pick up for a few more months, we are of the view that house price inflation will be lower over the next few years than over the past few.

In New Zealand, house price inflation tends to correlate closely with growth in consumer spending. There are early signs that this relationship has continued to hold as the housing market has cooled. Electronic card spending has been softer in recent months, especially for durable household goods, which people often purchase when moving into a new house.

The final change is that the construction sector is no longer the driver of growth that it had been in past years. Indeed, building activity fell over the first half of this year. In previous years, homebuilding rose rapidly, but from very low levels. But more recently, property developers have had trouble accessing finance and the building industry has run into capacity constraints. Meanwhile, quake-related building work in the South Island is well past its peak. The need for more homes, along with the pipeline of planned commercial and infrastructure projects, suggests that building activity can remain strong for several years to come. However, we now expect only a modest rate of growth from today's high levels.

First draft: Initial thoughts on the impact of the new Government

The new Government has announced a broad swathe of policies that are going to affect the economic outlook. The following discussion represents our best efforts to quantify the effects on the economy given our understanding of what the policies will be and based on the international literature on fiscal impacts. We'll continue to review these assessments as more policy details come to light.

The first impact the new Government will have is on sentiment. Businesses seem nervous, and business confidence is dropping. We have allowed for a temporary period of slower business investment as businesses hold off until they understand the new regulatory environment better.

The Government plans to cancel next year's scheduled tax cuts, which would have boosted GDP in 2018 by around 0.4 percentage points. While this will be partly offset by increased transfers such as Working For Families, a new winter energy payment, and a boost to student allowances, the net impact on our 2018 GDP forecast is still negative.

From June 2018 onwards, the new Government plans to spend more than the previous National-led Government had planned, only partly financed by extra tax revenue. The balance will be financed by borrowing around $7bn more over four years than the previous Government planned. In other words, the economy will experience a classic borrow-and-spend fiscal stimulus.

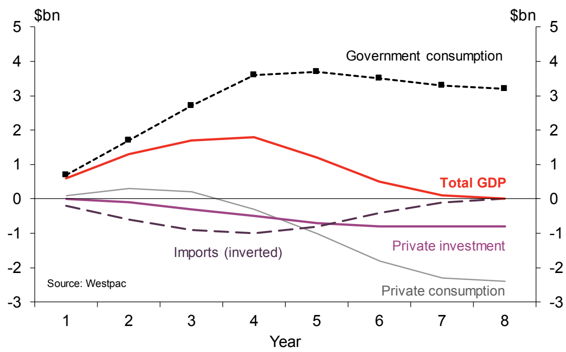
In the 2018/19 fiscal year there will be around $1bn of extra spending that will directly boost GDP, principally on education and health. This will rise to $2bn in 2019/20 and by a further $1bn each year after that. This is a big change – the government consumption line of the expenditure GDP accounts will rise by about 4% per annum instead of 2%.

Calculating the impact of this extra government consumption on GDP – known as the fiscal multiplier – is not simple. Some of the government spending will go on imports, making no contribution to local GDP. There will be second round effects, for example when a newly hired teacher spends their salary at local shops. But there will also be crowding out effects, where government spending displaces private sector spending. Direct examples of crowding out include extra public healthcare provision leading to less spending on private healthcare, government employment creating labour shortages for firms, and government building driving up construction costs. Crowding out can also happen indirectly via fiscal stimulus driving up interest rates and the exchange rate. Finally, today's government debt must be repaid with tomorrow's taxes, and tax discourages private sector activity.

Figure 2 is a stylised representation of how we estimate government stimulus will impact various sectors of the economy. Each line shows how a sector would evolve in response to an increase in government spending, compared to the counterfactual. We assume that government consumption rises by an extra $1bn per annum for four years, and then returns to the previously-planned growth path.

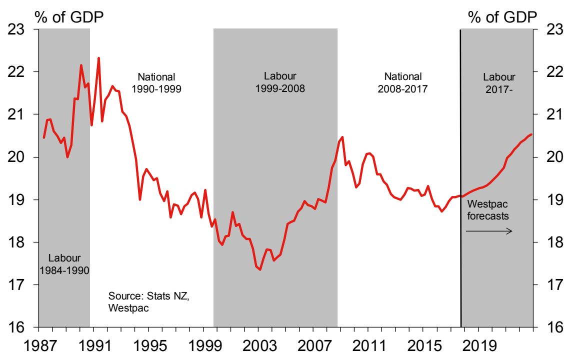
In the first few years, second-round effects will dominate and private consumption will rise alongside government consumption, creating a marked boost to GDP. But an IMF study suggested that these impacts will be modest and short-lived in New Zealand's case. Our openness to trade will mean more government spending on imports, while our flexible labour market, floating exchange rate and independent monetary policy will cause the economy to adjust rapidly and crowding out effects to happen sooner. The stage of the business cycle also matters. Fiscal stimulus has its biggest impact during recessions, when there is little crowding out, and its smallest impact when the economy is operating at full capacity. New Zealand is somewhere between those two extremes.

Figure 2: Stylised cumulative impact of fiscal boost



Both the international and New Zealand literature generally agrees that government borrow-and-spend programmes have zero impact on GDP after about five years, when crowding out becomes complete. Our forecasts are consistent with this – the Government's borrow-and-spend plans will not necessarily make the economy any larger in the long run. Instead we expect government will occupy a larger share of the economy, and private consumption and investment a smaller share. This does not detract from the fact that government spending can improve welfare and productivity growth if administered wisely.

Figure 3: Government consumption share of GDP

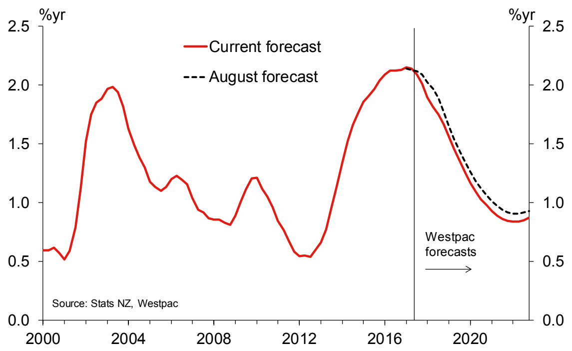


We should note that our views on the crowding out of fiscal policy are not based on debt sustainability concerns. In some countries government borrowing may alarm ratings agencies, which could drive up interest rates for everybody. New Zealand does not face this concern – the new Government's plan will leave it with very low debt levels by international standards.

Other government policies will directly weigh on the parts of the economy that are already cooling: migration, house prices and homebuilding.

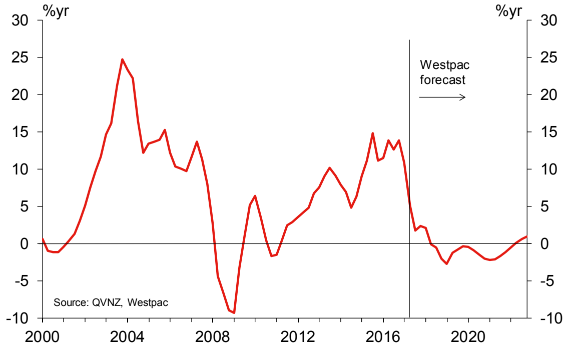
The Government intends to tighten visa eligibility for students and low-skilled workers, which it estimates will reduce immigrant arrivals by 20,000 to 30,000 people per year. However, the impact is uncertain – this is a rule change, not an immigration target. In the current environment, in which migration is falling anyway, the rule changes may be less binding. We have reduced our forecast for arrivals of foreign migrants into New Zealand, but not by as much as Labour's estimate. Still, the combined effect of these rule changes and the natural forces already driving net migration lower will see net migration drop from over 70,000 now to 10,000 in 2021. This will see the rate of population growth slow from 2.1% currently to 0.8% – a huge reduction in the rate of potential GDP growth and a key reason that we expect lower GDP growth over time.

Figure 4: Population growth



The Government is planning a number of changes aimed at house prices. The 'bright line' test for taxing capital gains on investment properties will be extended from a two-year minimum holding period to five years; negative gearing (the ability to use losses on rental properties to offset taxable income from elsewhere) will be removed, although probably not until 2019; non-residents will be barred from buying existing homes; and lower net migration will reduce the rate of growth in demand for housing.

Figure 5: House price inflation



Our assessment is that each of these policies on its own would have only a small impact on house prices. But together, they could add up to something more significant. We have revised down our house price forecasts to incorporate a 2% decline next year (our previous forecast was a 2% increase). We are forecasting a 5% decline in house prices over the coming four years, mainly because we expect interest rates to rise, but partly because we expect markets to factor in the possibility of a capital gains tax being introduced in the future. Lower house prices will have a large effect on consumer spending and therefore GDP growth, partially offsetting the impact on GDP of the coming fiscal stimulus.

One mitigating factor against a deeper fall in house prices is that the Reserve Bank may loosen its LVR restrictions. We suspect that the RBNZ will first want some confirmation that the government's policies are restraining the market, and that the risk of a resurgence in house prices has passed. But if our forecasts come to pass, we would expect the RBNZ to begin easing the LVR restrictions by the middle of next year.

The proposed KiwiBuild scheme will involve the Government financing a $2bn investment fund tasked with building 10,000 affordable houses per annum. The fund will contract with private developers and construction firms to build affordable houses. We are assuming that this will make little difference to the dollar value of residential construction activity in New Zealand. KiwiBuild will be one more bidder in a market with constrained resources. It may outbid private sector developers for land and the services of construction firms, but it will not necessarily add much to the total of construction activity. KiwiBuild will, however, alter the composition of houses built in New Zealand, with a skew towards more small dwellings and fewer large ones. In turn, this could make small houses relatively cheaper, and large houses relatively more expensive. Skewing the industry towards building small houses will also mean a greater number of dwellings built for a given level of expenditure on residential construction. KiwiBuild could help during economic downturns by easing funding constraints for developers and underwriting a base level of construction activity, which would help retain skills in the industry.

The Government plans to lift the minimum wage by around 6% per annum over coming years, which would leave New Zealand with the highest minimum wage relative to average income in the OECD. The main impact will be to improve the lot of New Zealand's lowest-paid workers at the expense of business profits. But some businesses will switch to automation and others will simply be unable to afford the wage bill. Last year the Ministry of Business Innovation and Employment (MBIE) estimated that a 5% lift in the minimum wage would reduce employment by around 3,500 jobs, which would add around 0.1 percentage point to the unemployment rate. The unemployment effect of minimum wages is a contentious issue in economics, but the consensus of empirical work is that there is some impact. It is small when the minimum wage is low, but gets bigger the higher the minimum wage is relative to market-determined wages. Our final unemployment forecast is a mix of the minimum wage effect and the economic cycle – we expect unemployment to rise next year, mainly due to the sluggish economy, but to fall from late-2019 onwards as the fiscal stimulus kicks in.

Inflation and Interest Rates

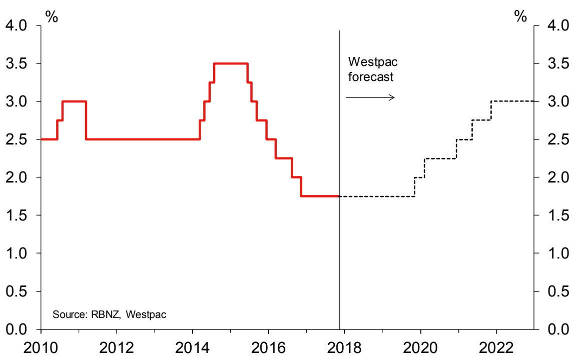
Competing forces

Our view remains that the Reserve Bank will delay hiking the Official Cash Rate until late 2019. The new Government's policies will be inflationary over the long term, but inflation is likely to remain subdued over the next couple of years. The review of the RBNZ's framework and, perhaps more importantly, the choice of the next Governor present some uncertainty around the inflation and OCR outlook.

The Reserve Bank has continued to signal that interest rates will remain low for an extended period. However, there was a slightly more hawkish tilt to the latest Monetary Policy Statement, on the view that the new Government's policies will be inflationary. We think that assessment will ultimately be correct, and we've slightly accelerated our forecasts for OCR hikes in the early part of next decade.

But the new Government's policies will have both positive and negative influences on inflation, and how they will play out over time is not straightforward. We find that the effects, both direct and indirect, will actually be disinflationary on balance over 2018. Fiscal stimulus will add to growth and inflation pressures in the following years, but it will take some time to make up for the weaker than expected starting point for the economy. Consequently, we expect that the RBNZ's stance will turn more dovish again next year.

Figure 6: Official Cash Rate



We can divide the Government's new policies into three strands: specified policies that will have a direct impact on the Consumer Price Index (CPI); specified policies that will affect inflation through broader economic conditions; and policies yet to be specified but that are in line with the Government's intentions.

The last of these three groups can be dealt with fairly quickly. The Government has signalled its intentions in areas such as pay equity agreements, collective wage bargaining, and reducing net carbon emissions (as detailed in the *Special Topic* section). All of these will add to the costs of doing business and will add to inflation over time. However, the lack of details at this stage means that their impact will inevitably come in the later years of our forecasts.

Policies with direct effects: The most significant direct impact is the Government's plan to phase in three years of free tertiary education for those who haven't studied previously, with the first year being free from next year. We estimate that this change will knock 0.2% off the CPI in 2018, with a smaller impact in subsequent years as tertiary education's weight in the CPI shrinks.

The change to tertiary education will outweigh the two positives for inflation in 2018. The Government has approved a 10c per litre petrol tax for the Auckland region from next year, to contribute towards investment in public transport. Given its weight in the CPI, we estimate that this would add 0.06% to inflation next year. There will also be a second-round effect as businesses pass on the increased cost of transport; we've assumed that this would lift the impact to 0.1%.

However, the regional fuel tax will partly replace the Interim Transport Levy, which the Auckland Council added to property rates in 2015 and was due to expire next June (we assume the levy would have been renewed in the absence of the regional petrol tax). Removing this levy will reduce the CPI by around 0.05%, halving the net impact on inflation.

The Government plans to lift the minimum wage to $20 an hour by 2021. Next year's increase will be 4.8%, followed by average increases of 6.6% for the following three years – almost double the rate of increase of recent years. We expect these increases to add 0.2-0.3% to the Labour Cost Index each year, with the impact rising over time as the share of jobs that are at or near the minimum wage grows. The impact on the CPI will be about a third of this, based on labour's share of income.

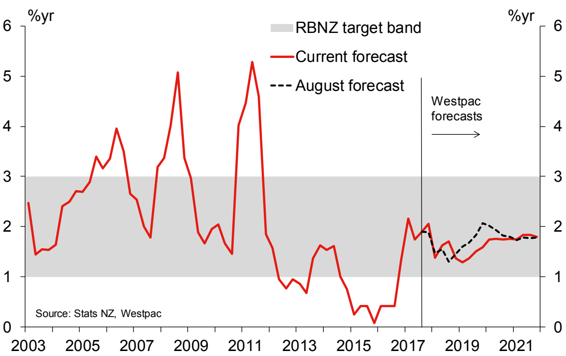
Macroeconomic effects: Labour's pre-election fiscal plan was more stimulatory than the previous Government's projections, with an additional $7bn borrowing requirement over the next four years. As detailed in the *New Zealand Economy* section, we expect this to provide a substantial boost to GDP growth over 2019 in particular. However, the impact over 2018 is actually less supportive for growth: the income tax cuts scheduled for next year have been cancelled, and the increase in fiscal spending will take some time to ramp up.

Meanwhile, the Government's polices to restrain housing demand will have knock-on effects for domestic demand over next year, which in turn means less pressure on inflation than otherwise. There will also be some direct effects on the CPI. House prices are not included in the index, but there are two items that tend to move in line with house sale prices: new home construction (4.9% of the CPI) and real estate services (0.9% of the CPI).

Finally, we expect the tightening of visa requirements to have a mild negative impact on inflation. Migrants have mixed effects on inflation pressures, as they add to both demand and supply within the economy. However, our judgement is that falling migration will have a small negative impact on balance, particularly in terms of the reduced pressure on housing supply.

The combined effects of all of these policies, along with the changes in the underlying economic outlook, leave us with an inflation forecast that remains below the 2% midpoint of the Reserve Bank's target range over the next two years. Tradables inflation will remain elevated over 2018, due to the lagged impact of the lower New Zealand dollar and the recent rise in world oil prices. However, we expect non-tradables inflation to pick up only gradually, given the slowdown in economic growth in 2017 and 2018. And for next year in particular, administered prices such as tertiary fees and local body rates will be a drag non-tradables inflation.

Figure 7: Inflation forecasts



Changing of the guard

Of course, the question of whether the new Government's actions are inflationary depends on the extent to which the central bank tolerates these inflation pressures. The potential changes to the monetary policy framework create a risk to our inflation and interest rate forecasts over the longer term.

The Government has initiated a review of the RBNZ, with the intention of adding a mandate to maximise employment as well as maintaining price stability. The Government also favours moving from a single decision-maker to a committee structure, including external members. In addition, the Finance Minister will need to approve a new RBNZ Governor before March next year.

The Government has specified that it will not set a numerical target for 'maximum employment', or direct the RBNZ how to act when the two goals appear to conflict. Such a specification, along the lines of the dual mandates of the US Federal Reserve and the Reserve Bank of Australia, might prove to be fairly benign.

However, we suspect that the wording of the RBNZ's mandate will matter less than the choice of Governor. The Finance Minister can only accept or reject candidates that are recommended by the RBNZ's Board, but he has signalled that he intends to appoint someone who will follow the spirit of any changes to the RBNZ's mandate.

The biggest challenge with a 'maximum employment' target is that it's not symmetric. We doubt it would have prompted the RBNZ to act any differently in recent years, when both inflation and unemployment argued for keeping interest rates low. But the real acid test would come when the economy is running hot and unemployment is below its long-run sustainable rate (which the RBNZ puts at 4-5%). Keeping inflation on target would argue for higher interest rates, which would cause a rise in unemployment, putting the two goals in conflict. If the employment mandate caused the RBNZ to become quicker to cut interest rates and slower to raise them, the consequence would be higher inflation over time.

Figure 8: Labour market indicators

We expect the Official Cash Rate to remain unchanged until late 2019, in contrast to market expectations of rate hikes from late 2018 or early 2019. Indeed, we think if there were any change to the OCR next year, it would more likely be a cut than a hike. However, we think it most likely that the RBNZ will hold the line and look through both the inflationary and disinflationary forces that emerge over the next year.

Financial market forecasts (end of quarter)

	CPI inflation	OCR	90-day bill	2 year swap	5 year swap
Dec-17	2.1	1.75	1.95	2.10	2.60
Mar-18	1.4	1.75	1.95	2.10	2.70
Jun-18	1.6	1.75	1.95	2.20	2.80
Sep-18	1.7	1.75	1.95	2.30	2.95
Dec-18	1.4	1.75	1.95	2.40	3.10
Mar-19	1.3	1.75	1.95	2.50	3.20
Jun-19	1.4	1.75	1.95	2.60	3.30
Sep-19	1.5	1.75	2.10	2.70	3.35
Dec-19	1.6	2.00	2.20	2.80	3.40
Mar-20	1.7	2.25	2.45	2.90	3.45

Global Economy

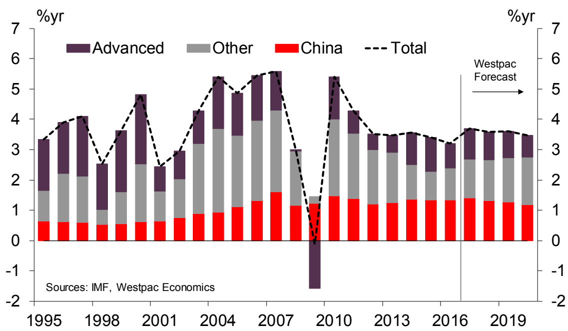
The mix matters

There's been a widespread strengthening in economic activity and we expect that global growth will remain firm through 2018 and 2019. However, changes in the mix of growth, including a likely slowdown in China, signal headwinds for Australasian commodity exporters. At the same time, global inflation looks likely to remain subdued for some time yet, limiting the scope for policy tightening.

Global economic output is on course to expand by 3.7% this year. That would be the fastest pace of global growth that we've seen since 2011. This pick-up in growth reflects a widespread firming in economic conditions, including gains in manufacturing and trade, as well as increases in business investment, employment and consumer spending.

We expect that global economic activity will continue to expand at a fairly brisk pace over the next few years, underpinned by accommodative monetary and fiscal policy. However, conditions are likely to be uneven across regions. In advanced economies, the recent lift in momentum is expected to be sustained. At the same time, a planned rebalancing of economic activity means that growth in China is set to shift down a gear, signalling headwinds for many commodity exporting economies, including those in Australasia.

Figure 9: Contributions to world growth



Advanced economy growth has firmed...

Since our last *Economic Overview*, conditions in major developed economies have continued to strengthen. In the US, we've seen ongoing jobs growth, increases in household spending, and a firming in business sector conditions. Momentum has also lifted in the European Union and Japan, with accommodative financial conditions supporting stronger private demand and investment spending.

Growth in most developed economies is expected to continue apace over the next few years. The notable exception is the UK, where heightened uncertainty and economic adjustments associated with Brexit will dampen activity for some time to come.

...but inflation remains absent...

With economic conditions continuing to strengthen, several major central banks have tightened policy in recent months, including the US Federal Reserve, Bank of England and Bank of Canada. We expect some further tightening in policy over the coming year. In particular, the Fed is on track to hike the Funds Rate again in December, and we expect two more hikes over 2018.

Even given these expected increases, official interest rates are likely to remain at relatively low levels compared to history. That's because global inflation remains stubbornly low. Several factors have contributed to this, including lingering spare capacity in many regions, increased competitive pressures in the retail sector, and changes in technology (such as the increasing prevalence of online trading). On top of those factors, wage growth has been muted in many regions. These factors have left central banks facing an uphill battle to generate a sustained lift in inflation back to target levels.

...with financial risks simmering away

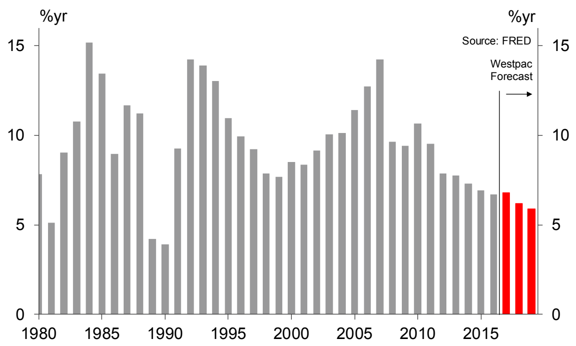
The current extended period of very stimulatory monetary policy raises concern the about longer-term risks to global financial stability. Continued low interest rates have encouraged increased investment in risky assets. In addition, house prices have risen strongly in some regions, often on the back of rising household debt. If financial conditions unexpectedly tighten, we could see volatility in markets and asset prices that results in disruptions to real activity.

The dragon changes course...

In contrast to the momentum that we're seeing in advanced economies, Chinese GDP growth is set to take a step down. The credit-driven growth that underpinned much of GDP growth in recent years has resulted in a build-up of corporate debt and associated financial risks. Additionally, there is ongoing concern about the build-up of risk in the non-bank financial sector. In response to these concerns, President Xi is stepping up efforts to rebalance the Chinese economy, with the aim of putting the economy on a more sustainable growth path. A key part of this will be a refocusing of investment spending. Public investment will continue, but will be directed towards meeting long-term development objectives rather than cyclical momentum. Similarly, private investment will be encouraged, as long as it does not add to concerns about financial stability.

This focus on the quality, rather than quantity, of spending means that GDP growth in China is set to slow from 6.8% in 2017 to 6.2% in 2018, then 5.9% in 2019. While this reorientation of Chinese activity will dampen growth in the near term, over time the resulting changes should support increased consumption spending.

Figure 10: Chinese GDP growth



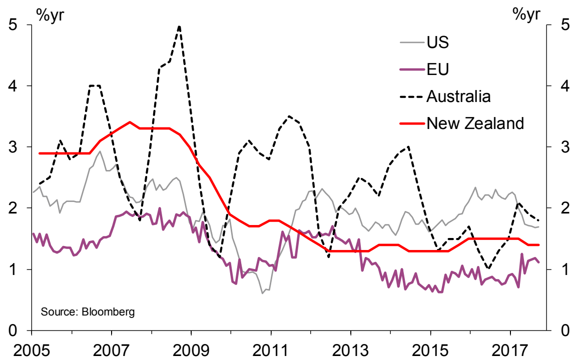
...with other economies caught in the downdraft...

The effects of slowing growth in China will be felt much more widely. In particular, the resulting softening in demand will be a drag on export growth in other economies, especially those in the Asia-Pacific region.

China is also a key market for industrial commodities, and the coming slowdown in its investment spending will be a significant drag on export earnings in commodity exporting nations. This will be especially important for Australia, adding to the other headwinds the economy is facing including a slowdown in residential investment and sluggish growth in household incomes. Activity in Australia is still being supported by the more general strengthening in global demand, low borrowing rates, and the relatively low AUD. Nevertheless, Australian GDP growth is expected to slow to below trend rates of around 2.5% over 2018 and 2019.

In contrast, for countries that are importers of commodities, the softening in prices due to slowing Chinese demand could actually be a boon, providing a boost to households' purchasing power. In G3 economies, this will also reinforce the existing softness in inflation, reinforcing the case for official interest rates remaining low. In turn, this will help to support demand over the coming years.

Figure 11: Core inflation in selected countries



...though for New Zealand it is a mixed bag

New Zealand is exposed to the changing mix of global activity through a number of channels. As discussed in the Agricultural Outlook section, the softer demand picture in China will add to downward pressure on the prices for some of our key commodity exports, particularly forestry and dairy. Slower growth in Australia will also be a drag on our manufactured and services exports.

However, it's not all bad news. New Zealand is also an importer of commodities. Softness in the prices of commodities like oil will help to support households' purchasing power, as well as reinforcing the case for continued low interest rates. New Zealand is also benefiting from income growth in many other economies, which is boosting demand for services such as tourism and accommodation. Finally, the softer outlook for economic activity in Australia will help to sustain the recent trend of relatively few Kiwis leaving for Australia.

Economic forecasts (calendar years)

Real GDP % yr	2014	2015	2016	2017f	2018f	2019f
New Zealand	3.4	2.5	3.0	2.4	2.4	3.2
Australia	2.8	2.4	2.5	2.5	3.0	2.5
China	7.3	6.9	6.7	6.8	6.2	5.9
United States	2.6	2.9	1.5	2.2	2.1	2.0
Japan	0.3	1.1	1.0	1.3	1.1	0.9
East Asia ex China	4.2	3.8	3.9	4.1	4.1	4.2
India	7.5	8.0	7.1	6.8	7.2	7.3
Euro zone	1.3	2.0	1.8	2.2	1.8	1.7
United Kingdom	3.1	2.2	1.8	1.6	1.6	1.5
NZ trading partners	**4.0**	**3.7**	**3.4**	**3.6**	**3.5**	**3.3**
World	**3.6**	**3.4**	**3.2**	**3.7**	**3.6**	**3.6**

Forecasts finalised 17 November 2017

Agricultural Outlook

Turning the page

New Zealand's export commodity prices have been firm over the past year, but are expected to soften over 2018. This includes a continued moderation in dairy prices, which has prompted us to revise down our forecast milk price to $6.20/KgMs. Meat and forestry prices are also expected to ease back over the next year. Despite this, returns to New Zealand farmers will be supported by a lower exchange rate through 2018.

The weather has been a wildcard for many farmers across the world. Domestically, our farmers have been awash with wet weather, stunting pasture growth. This has affected farmers across all of our major commodities. Notably, production and harvesting has been slower than expected, temporarily boosting prices in meat and forestry markets.

A raft of developments have suggested that the dairy market may be facing some headwinds. A review of our key dairy product prices has led to a downgrade of our 2017/18 season farmgate milk price forecast from $6.50/KgMs to $6.20/KgMs. We have also published our forecast milk price for the 2018/19 season, at $6.50/KgMs.

The recent softness in dairy auction prices comes at a time when production levels have fallen and reflects weakening demand from Asia. Weaker demand from Asia is expected to continue, led by slower growth in China (see the *Global Economy* section). This is likely to result in lower global dairy prices in the first half of 2018, supporting our milk price downgrade for this season.

In their recent Global Dairy Update, Fonterra downgraded their expected milk collections to 1,540 million KgMs. This is an annual growth rate of 1%, lower than the 3.2% originally forecast. Milk supply has been a product of wet weather hampering pasture growth compared to previous seasons. In the months ahead, we expect dairy farmers will face challenges to boost production, but we expect milk collections to be above the new forecast. Furthermore, the consistent uptrend in EU production continues to firm, which may also prove contentious for prices in 2018.

In addition, New Zealand log prices are set to soften next year. We note that forestry has generated consistent price gains rooted in the Chinese construction boom (China takes approximately 75% of our log exports). However, we expect a slowdown in China's industrial sector next year, which will slow construction activity. New Zealand logs are used in both residential and non-residential projects in China, so this will affect prices next year.

Meat prices are also set to ease in 2018 as supply comes back on-stream. Prices have been rising due to strong demand from the EU and UK largely as a product of competing bids for low supply. However, signals from EU buyers suggest willingness to buy has flattened. Additionally, as weather conditions improve, we expect New Zealand slaughter numbers will rise.

Overall, the suite of New Zealand commodity prices will turn the page in 2018. Although the road may seem bumpy ahead, we anticipate that factors such as a lower exchange rate will support our prices and keep a floor under NZD returns – see the *Exchange Rates* section.

Farmgate milk price forecasts

	2017/18		2018/19
	Westpac	Fonterra	Westpac
Milk Price	$6.20	$6.75	$6.50

Commodity price monitor

Sector	Trend	Current level[1]	Next 6 months
Forestry	Weaker industrial sector growth in China, due to economic reforms, to crimp demand for logs via softer construction intentions.	High	↘
Wool	Rising oil prices currently increasing the cost of synthetics. Wool demand for finer grades firming, but will be temporary due to slower growth in China.	Average	→
Dairy	WMP prices weakening despite softer supply, suggesting weakness in demand. Chinese economic growth slowdown to affect prices in 2018.	Below Average	↘
Lamb	High prices due to chilled trade and weak slaughter numbers to persist for now. But prices to ease as supply rises. Global demand to remain firm.	High	↘
Beef	Low supply currently supporting prices. But as US production ramps up, prices will drop. NZ beef attracting premium prices in US, but is expected to dissipate.	Above Average	↘
Horticulture	Producing consistent gains over the year, with Kiwifruit prices showing strength in key export markets.	Above Average	↗

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

Exchange Rates

Neophobia (fear of new things)

The exchange rate tumbled as the Government changed, but sentiment could change again. Over 2018, we expect the NZD to continue falling against the USD, as the Fed lifts interest rates and the RBNZ sits on its hands. It is a different story against the AUD, with both the RBA and RBNZ on hold, and with the pace of growth here and in Australia set to ease. We see the cross rate holding steady over 2018.

Between August and November of this year the NZD/USD exchange rate fell more than 7%. Some of this was due to the strengthening of the US dollar. But analysis by our Strategy Team suggests that the majority of the decline in NZD was due to the election and subsequent change of Government. Presumably markets are unsure of how a Labour-led Government will manage the economy. Given that this has been a sentiment-driven change in the exchange rate, it is worth bearing in mind that sentiment could easily shift again – and the exchange rate could shift with it.

Markets have become quite sensitive to Government policy announcements. When the review of the RBNZ was announced and did not include any radical surprises, the NZD rose almost a cent. When the Minister of Finance indicated he wanted to appoint a Reserve Bank Governor who would focus on employment, the NZD fell half a cent.

The other key driver of foreign exchange markets recently has been a consistently strong run of economic data from the United States. As the data has strengthened, financial market expectations have shifted towards earlier and sharper interest rate hikes in the US. Markets have now shifted in line with our long-held view that the Fed will hike as early as December. As US interest rate expectations have risen, the US dollar has strengthened against a wide range of currencies.

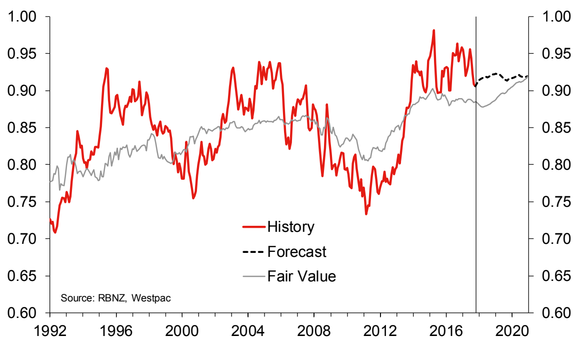
We expect both of these trends – a strong US dollar and a weak New Zealand dollar – to continue over 2018. We anticipate two more Fed hikes in 2018, and for the Federal Reserve to reduce its stock of assets in a reversal of quantitative easing. Meanwhile, as mentioned in the *Inflation and Interest Rates* section, we expect markets and the RBNZ to be surprised by low GDP growth and a weak housing market next year, meaning the RBNZ will leave the OCR on hold all year. This will naturally produce a downward trend in the NZD/USD, which on our forecasts will average just 63 cents in the final quarter of 2018 (currently 68 cents).

From late-2019 we expect to see some recovery in the exchange rate, as New Zealand economic growth picks up in response to fiscal stimulus and the RBNZ starts to lift interest rates.

Against the other major currencies we expect the NZD to fall over 2018, but by less than against the USD. Economic momentum is strong in Europe and Japan, which should see the NZD fall against both the euro and the yen. Although the UK economic outlook is less positive, the Bank of England has already lifted interest rates, creating conditions for a fall in the NZD/GBP exchange rate.

It is a different story for the NZD/AUD cross rate, where there is no compelling reason to expect a change over 2018. Australia's economic outlook is similar to New Zealand's, with both countries expecting the pace of GDP growth to ease. We expect both countries to leave official interest rates unchanged over the whole of 2018. Australia probably faces a poorer export price outlook, but New Zealand faces a weaker domestic housing market outlook. Given the fairly similar outlooks for both countries, and the fact that the NZD/AUD is currently close to long-run fair value, we are ambivalent on the direction of change in NZD/AUD going forward.

Figure 12: NZD/AUD model-based forecasts



Exchange Rate Forecasts (end of quarter)

	NZD/ USD	NZD/ AUD	NZD/ EUR	NZD/ GBP	NZD/ JPY	TWI
Dec-17	0.68	0.89	0.59	0.52	77.5	72.6
Mar-18	0.67	0.89	0.58	0.51	76.4	71.8
Jun-18	0.66	0.89	0.58	0.51	75.9	71.2
Sep-18	0.64	0.89	0.57	0.51	74.5	69.9
Dec-18	0.63	0.90	0.56	0.50	73.1	69.2
Mar-19	0.63	0.91	0.57	0.50	73.7	69.6
Jun-19	0.63	0.93	0.57	0.50	74.3	70.0
Sep-19	0.63	0.93	0.57	0.50	75.0	70.1
Dec-19	0.64	0.91	0.58	0.51	76.2	70.3
Mar-20	0.64	0.90	0.58	0.51	76.8	70.3

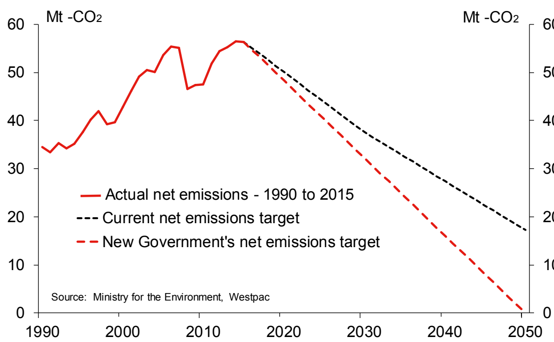
Special Topic

The new Government's climate change policies

The new Government is going to set a goal of net zero carbon emissions by 2050. To achieve this goal it will establish an independent Climate Commission, and will probably beef up the Emissions Trading Scheme, including bringing agriculture and other currently excluded industries into the scheme. Over time this will alter the structure of the economy via the death of some firms, the birth of new firms, and changes at existing firms.

New Zealand's commitment to reducing greenhouse gas emissions (GHGs) is not new. Under the previous Government, New Zealand committed to reducing net average GHG emissions to 5% below the 1990 level by 2020, and to 30% below 2005 levels by 2030. The new Government has a far more ambitious plan – zero net emissions by 2050. This would mean that every tonne of carbon emitted in New Zealand will need to be offset by forest growth or by paying for genuine emissions reductions overseas.

Figure 13: Net GHG emission targets



Note: Historical estimates are gross emissions net of removals from land use, land use change and forestry. Targets may also include purchases of international carbon credits.

The New Zealand Emissions Trading System (NZ ETS) has long been the primary mechanism for achieving these targets. Government issues and allocates a limited number of permits to emit (referred to as New Zealand Units – NZUs). Firms participating in the NZ ETS must acquire NZUs in proportion to their emissions – either by receiving a free allocation, or by buying them on the market. Sellers on the market might in theory be firms that have reduced their emissions and no longer need their initial allocation. But in New Zealand at present, sellers are more likely to be forestry firms, which receive NZUs from government in proportion to the carbon their forests sequester.

The principle is user pays – firms pay the full cost to society of their activities, including externalities. Costs are passed on down supply chains, ultimately ending up as a change in consumer prices and consumption patterns. The end result should be structural change towards a lower carbon economy, involving the death of some high-emitting firms, the birth of new firms that would otherwise be uneconomic (think solar panels), and efficiency measures at yet other firms.

The new Government intends to establish an independent Climate Change Commission based on one that is already operating in the UK. The Commission will be tasked with setting five-yearly interim emissions targets based on feasibility. It may also recommend regulatory interventions to help reduce emissions. Part of the plan will presumably be a "sinking lid" on the number of NZUs issued each year, until we reach zero in 2050. Depending on factors such as the rate at which carbon mitigation technology develops, this will probably push the price of NZUs higher. Currently, an NZU trades for around $18. The Labour Party's election manifesto referenced a carbon price of $50.

The Climate Commission will likely recommend that all emissions are covered by the ETS. This would include agriculture, which is responsible for 50% of New Zealand's emissions. Leaving agriculture out while simultaneously attempting to achieve a zero carbon goal would be inefficient – there may be situations where the private profit on a farm is less than the cost to society of the carbon emissions.

The coalition agreement between Labour and NZ First states that, at first, agriculture will receive a free allocation of NZUs equivalent to 95% of emissions. So the impact on farmers' bottom lines will be small in the short run. But farmers that reduce their carbon emissions would be able to sell their surplus NZUs, so carbon reduction incentives would still be present.

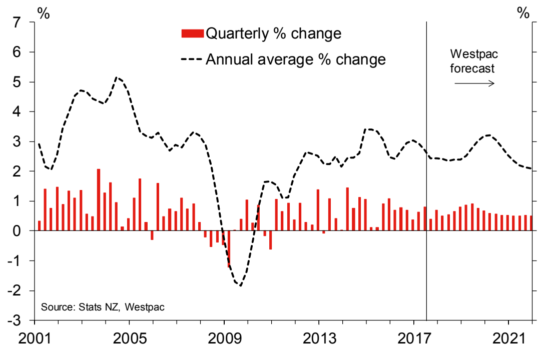
Over time, agriculture will presumably be allocated fewer free units and the price of purchasing NZUs to cover any emissions shortfall will rise. Farmers might employ a range of techniques to reduce their carbon bill, in the same fashion that they currently seek to minimise their electricity bills. This might involve new technologies. But the most obvious carbon mitigation "technique" will be land use change. By 2050, New Zealand will probably have more land planted in forestry and less in dairy than it would have had without a climate change commitment.

The Commission could also focus its attention on whether international permits should be part of a revamped ETS. They were in a previous ETS but were halted amid concerns that they did not reflect genuine cuts in emissions abroad. However, the new government seems open to the possibility of accessing international carbon markets, although this is likely to be managed, focusing only on mature and reputable markets to provide a cost effective way of meeting climate change commitments.

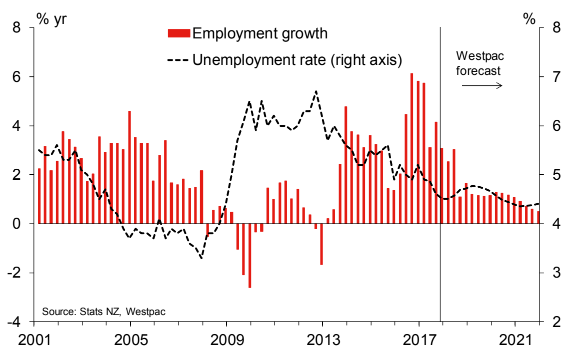
Forecasts and key charts

	Quarterly % change				Annual average % change			
	2017			2018	Calendar years			
	Jun (a)	Sep	Dec	Mar	2016 (a)	2017	2018	2019
GDP (production)	0.8	0.4	0.7	0.5	3.0	2.4	2.4	3.2
Private consumption	0.9	1.0	0.7	0.5	4.3	4.1	2.6	2.3
Government consumption	1.1	0.7	0.7	0.7	2.2	3.8	3.2	4.0
Residential investment	-1.0	1.5	0.0	0.3	11.1	0.4	1.7	2.9
Business Investment	-0.4	1.3	1.0	0.1	3.2	4.4	1.6	2.0
Stocks (% contribution)	-0.9	-0.4	0.6	0.1	0.0	-0.4	0.2	0.2
Exports	5.2	-1.8	-0.9	0.2	1.6	0.8	1.1	4.6
Imports	0.6	-1.0	1.1	0.4	3.4	4.0	1.6	3.2
Consumer price index	0.0	0.5	0.6	0.3	1.3	2.1	1.4	1.6
Employment change	-0.1	2.2	-0.2	0.6	5.8	3.1	1.6	1.1
Unemployment rate	4.8	4.6	4.5	4.5	5.3	4.5	4.7	4.7
Labour cost index (all sectors)	0.4	0.6	0.5	0.5	1.6	2.0	2.2	2.1
Current account balance (% of GDP)	-2.8	-2.4	-2.3	-1.9	-2.5	-2.3	-2.5	-1.8
Terms of trade	1.6	1.5	0.0	-0.5	6.7	7.1	-1.7	2.3
House price index	0.7	-0.1	1.0	0.5	13.9	2.4	-2.0	-0.3
90 day bank bill (end of period)	1.85	1.83	1.95	1.95	2.00	1.95	1.95	2.20
5 year swap (end of period)	2.79	2.72	2.60	2.70	2.65	2.60	3.10	3.40
TWI (end of period)	76.5	77.1	72.6	71.8	77.6	72.6	69.2	70.3
NZD/USD (end of period)	0.70	0.73	0.68	0.67	0.71	0.68	0.63	0.64
NZD/AUD (end of period)	0.94	0.93	0.89	0.89	0.95	0.89	0.90	0.91
NZD/EUR (end of period)	0.64	0.62	0.59	0.58	0.66	0.59	0.56	0.58
NZD/GBP (end of period)	0.55	0.56	0.52	0.51	0.57	0.52	0.50	0.51

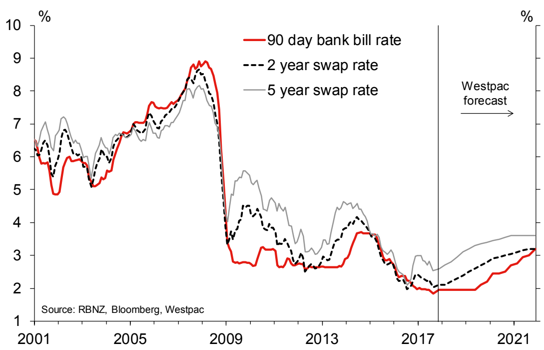
New Zealand GDP growth



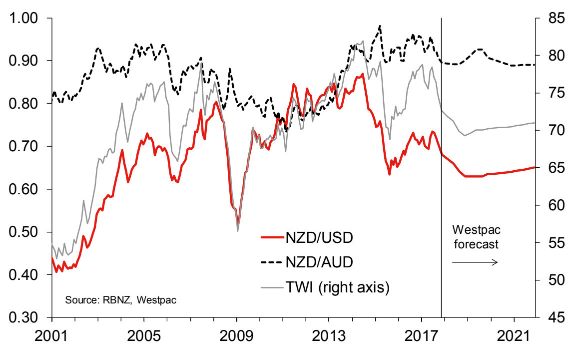
New Zealand employment and unemployment



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



NZD/USD, NZD/AUD and TWI



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