RESEARCH
Rural Wrap

5 June 2018

Monitoring Risks From M. Bovis

- Government, industry, plan to eradicate Mycoplasma Bovis
- 152,000 cows to be culled; circa 1.5% of NZ total
- Production will be affected
- Likely higher costs, loss of efficiency, elevated uncertainty, add to downside risks
- RBNZ now noting the associated economic risk

The economic risks associated with cow-disease Mycoplasma bovis are rising. The disease was first detected in NZ in July last year, with further subsequent findings. Over recent months more farms have come under scrutiny.

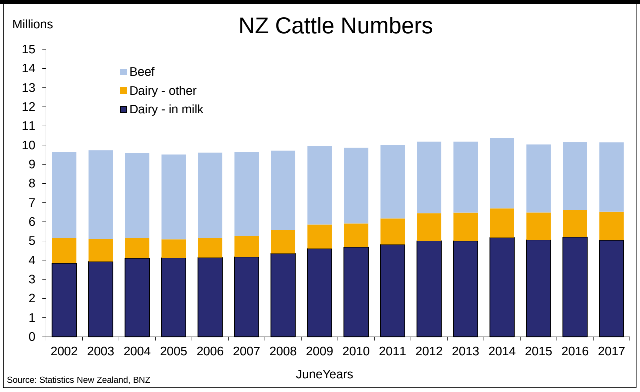
For infected cows, Mycoplasma bovis can cause untreatable mastitis, severe pneumonia, ear infections, abortions, and swollen joints and lameness. It presents no human food safety risks and is prevalent in many countries. The latter two points are important as it means international trade channels remain open for NZ product.

The Government, in consultation with industry bodies, recently announced plans to try and eradicate the disease over time. The plan estimates 126,000 cattle will need to be culled. This is in addition to the 26,000 cull already in progress, taking the expected total cattle to be culled to 152,000. The Government estimates that 192 properties will be depopulated in the process. It will be highly disruptive and distressing for the individual farm operations and people involved.

The expected 152,000 cull represents a significant step up from the cull already underway and the 60,000 cattle previously under scrutiny, although it is still a relatively small share (1.5%) of NZ's total cattle (3.6m beef and 6.5m dairy). It will have a direct impact on production.

The planned total cull is a bigger share of the usual annual cattle cull, at around 3.5% of 4.3m, or the recent annual cow cull at close to 15% of 1m. So some upward pressure on the meat production profile can be expected ahead, although the actual total cull of all cattle over coming years will also be heavily influenced by other factors like the weather and pricing. The additional cull influence on beef prices is expected to be mild given a drawn out time frame and New Zealand production has limited influence on world markets. Some offset to more beef production may come via more ewe lamb retention if some farmers pivot toward sheep.

NZ Cattle Profile



Milk production will also be directly affected by the cull. Assuming most of the planned cull will be dairy cattle rather than beef, the currently projected cull represents as much as 3% of the dairy herd. The initial impact on annual national milk production might be less than this as most of the planned cull is expected to be spread over the first two years and some of these cows would likely have been culled anyway. On the other side, the impact on milk production could conceivably be bigger than the percentage drop in the number of cows. This is because the majority of cull cows are likely to be in the South Island where Mycoplasma bovis detections are most prevalent and where milk production per cow is higher, on average. That said, this influence on the change in national milk production would be very small.

In any case, much more important, and more uncertain, is the possibility that the number of cattle infected and culled turns out to be different than the Government currently anticipates. Afterall, testing for Mycoplasma bovis is not straight forward.

Of course, there are many other factors shaping NZ's milk production outlook. The prospect of constrained NZ production will offer some support to prices. But it works both ways. Firm opening milk price forecasts around $7 for the 2018/19 season from dairy processors will encourage more supply from those willing and able. At this point, we expect milk production in 2018/19 to be marginally higher than the season just ended. As ever, the weather will have a big influence on the final outcome (the current forecast looks benign).

So, from an initial production point of view, the net result of Mycoplasma bovis along with the policy and farmer response to it is likely to be more meat, but less milk than would have otherwise been the case.

But there is much more to it than the initial impact on production from culling cows. We are wary of downside risks as other consequences are taken into account.

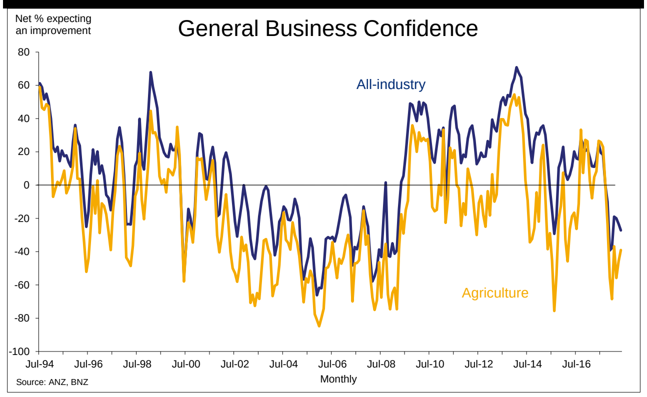
Costs are increasing. Farmer confidence is low (not only because of the disease). Elevated uncertainty and risk threaten to curb investment.

Moreover, restricted cattle movement, either as a result of enforcement by authorities or by farmer choice or farmer fear, will reduce efficiency across the dairy and beef sectors. This will have consequences even for those that don't have infected stock with follow on effect to related industries. Restricted movement of stock threatens to alter current farm practices that may lead to a reduction in stocking rates, on net, across the industry. This is something to watch for as it would negatively affect future production over and above any cow culling. Animal welfare and grazing costs are likely to lift. All up, productivity will be lower than it would be absent the disease. In the least, it all adds up to a lot of disruption and angst.

The Government estimates the full cost of eradication at $886m over 10 years, including farmer compensation, with the Government meeting 68% of this and industry bodies, DairyNZ and Beef+Lamb NZ, meeting the remainder. Most of the eradication work is expected to be done over the first two years. Government analysis saw the eradication option as superior to long term management (that had a projected cost of $1.2b) or doing nothing (with an estimated cost of $1.3b in lost production over 10 years with ongoing productivity losses).

Farmers have been all too aware of the disease and the massive disruption and anxiety it is causing those with infected cows and flow on effects to others. It is causing considerable angst across the dairy and beef sectors. We have previously noted that the disease was one reason behind very low farmer confidence along with unease regards government policy and building cost pressures. Farmer confidence is low despite generally strong primary product prices. Low confidence is a headwind to overall economic activity.

Not Happy



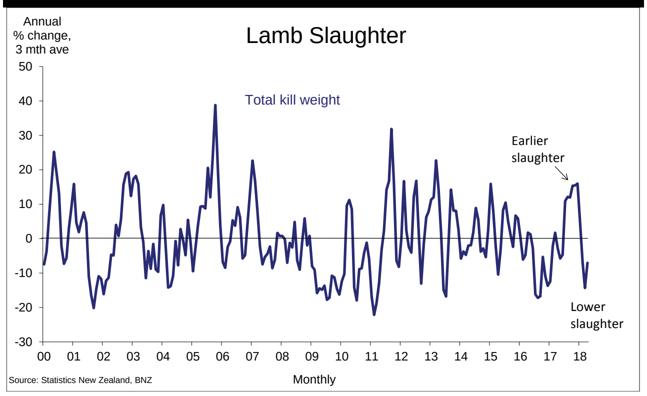
From a Reserve Bank perspective, it is interesting that Mycoplasma bovis and any associated economic risks stemming from it did not get any mention in the 10 May Monetary Policy Statement (MPS). But the Bank did identify the risk in its Financial Stability Report (FSR) on 30 May. This suggests a possible change in the Bank's stance and, if so, reinforces the idea that it will not be lifting the OCR anytime soon. Alternatively, it could just reflect the difference in focus of the two reports – the FSR looking at financial stability risks while the MPS is focused on monetary policy. The Bank may still not see any Monetary Policy implications from the disease.

Meanwhile, financial markets have been largely unfazed by news surrounding Mycoplasma bovis. We just wonder if the market is too sanguine given the risks circulating. It is certainly worth keeping a close eye on developments.

Much uncertainty remains. Indeed, if, for example, it is found that the disease is more widespread than the Government anticipates the plan to eradicate would be re-evaluated. Results from spring tests will help inform that decision.

So we see the Mycoplasma bovis situation generating downside risk to GDP growth over the coming years. But we wouldn't necessarily look for the effect on the national aggregates too soon given 1) it is currently the dairy off season; 2) there will be some near term boost to meat production; and 3), the difficulty that Statistics NZ may have in picking up the supply side disruption and elevated cost impost via the agency's typical short term output based indicators. But over time, considering all the potential influences, the disease risk to growth is downward.

Weather Influences

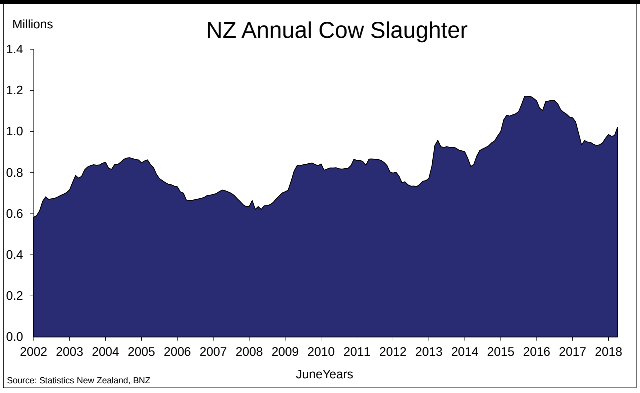


More immediately, we think combined meat and dairy processing will be a material drag on GDP when its Q1 outcome is released in a couple of weeks. March quarter growth is shaping up to be weak. The soft primary processing is much more to do with the influence of the season's variable weather than anything else. A very hot and dry November and December provoked a large and early lamb slaughter, which was followed by New Year rain generating a corresponding processing lull compared to normal patterns in Q1.

Meat processing in Q2 appears to be bouncing back as lambs return and the dairy cow cull ramps up. Cow slaughter has picked up, but not obviously out of line with recent years. The cow cull in the 12 months to April 2018 was just over 1m head and may well push a bit higher over the coming year or so despite a strong forecast milk price. This will be worth watching for any hints of stocking rate reduction over and above authority-planned culling.

One thing is for sure, there is a long way to go in the battle against Mycoplasma bovis. It will no doubt be one of the most widely discussed topics at this year's National Fieldays at Mystery Creek next week.

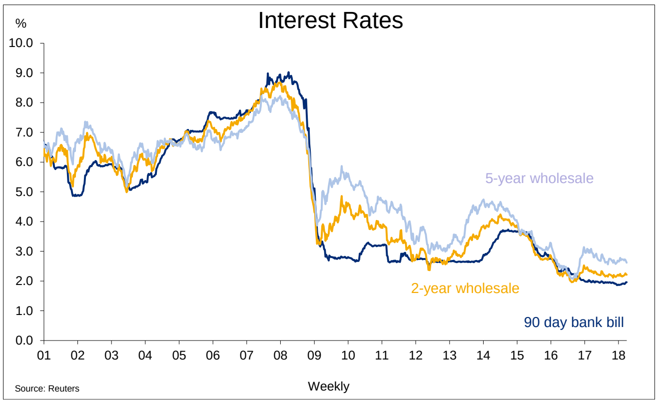
Keep An Eye On The Cow Slaughter



doug_steel@bnz.co.nz

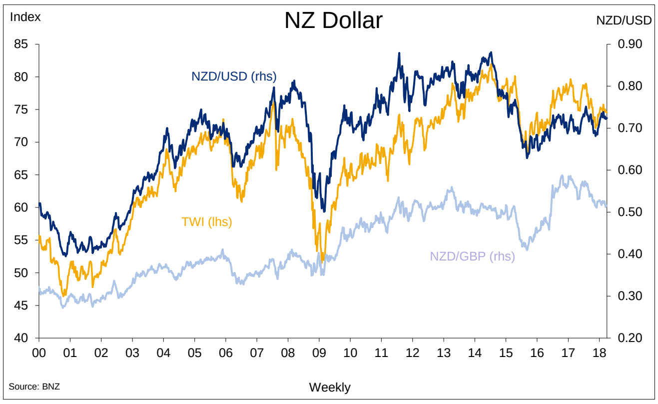
Key Macro Drivers for Commodity Producers

Interest Rates



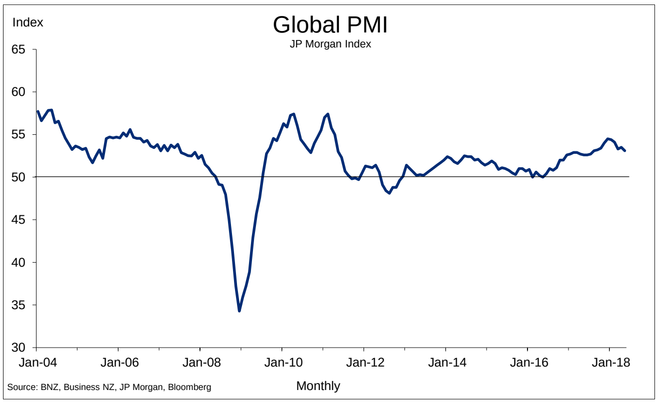
The OCR looks like it is not going to change for some time. Indeed, at its May Monetary Policy Statement, the Reserve Bank said the OCR 'will remain at 1.75% for some time to come'. While the Bank stated that 'the direction of our next move is equally balanced, up or down', we think the chance of a move in either direction this year is very low (barring a major economic shock). This outlook for the OCR will provide an anchor for floating and short-term fixed interest rates ahead. We don't see the OCR moving higher until around the middle of next year. Longer term rates are less influenced by short-term monetary policy factors and more influenced by policy over the next full cycle, along with global forces. We see some upward pressure on longer term fixed rates as global rates are expected to push higher, led by the US.

Foreign Exchange



We expect New Zealand's trade-weighted exchange rate (TWI) to continue to drift lower, as macroeconomic factors keep losing their relative edge. This is despite us seeing the US dollar continuing to moderate as the Federal Reserve's monetary lead on the world wanes, and America's prospective twin (fiscal and current account) deficits weigh. So for NZD/USD, it looks like a period of consolidation ahead. We expect the slippage in the NZ dollar to play out more against the likes of JPY, GBP, and EUR. In comparison, NZD/USD, NZD/AUD and NZD/CNY look relatively steadier, from present levels. Meanwhile, global risks are ever present with the potential to cause a bigger, or more rapid, fall in the NZD than we currently anticipate.

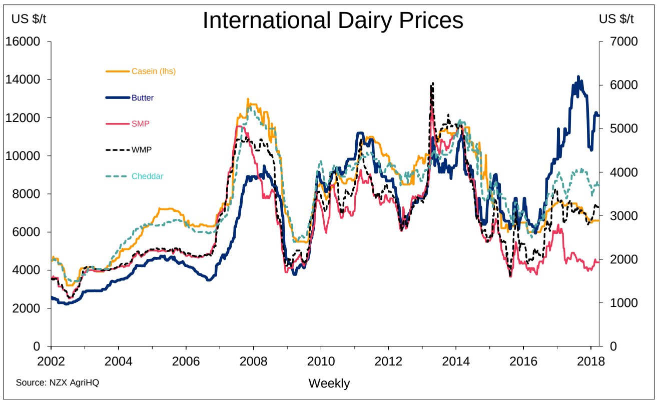
Global Growth



After a concerted push during 2017, global economic growth is close to its fastest pace since 2011. Having said this, there have been signs of fraying of late, especially in emerging-market economies, and broader global activity indicators (like the PMI) suggest the peak rate of expansion is behind us. International financial markets have been choppy in 2018 to date. Meanwhile, trade tensions between the US and China continue to cast a shadow over the global outlook. Based on Consensus expectations, New Zealand's trading-partner GDP growth is on track for 3.8% in calendar 2018 and 3.5% in 2019. This compares to 2017's 3.9% (and the historical average of 3.7%). So still a favourable world economic environment ahead for primary product prices, but perhaps not quite as supportive as in the recent past.

Key Commodities

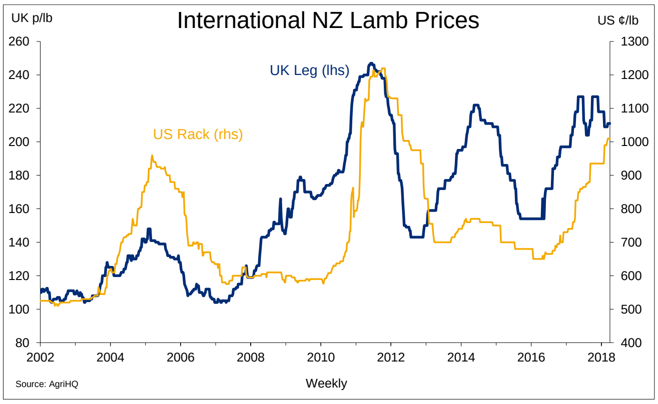
Dairy



Global dairy prices have wriggled higher in 2018, as NZ milk production was restricted by adverse weather, EU production disappointed, and demand strengthened. Higher oil prices have helped support dairy prices through various channels. It has all led to a general improvement in milk price forecasts. Fonterra lifted its 2017/18 milk price forecast to $6.75 (from $6.55) while announcing a first forecast for 2018/19 at $7.00. At this early stage, we forecast $6.60 for 2018/19 on the thinking that global prices drift lower in the year ahead. If global prices do not ease, it is likely the 2018/19 milk price ends up higher than our current forecast.

	Current	Month ago	Year ago	Next 12 months
Whole milk powder (US $/t)	3250	3300	3300	↓

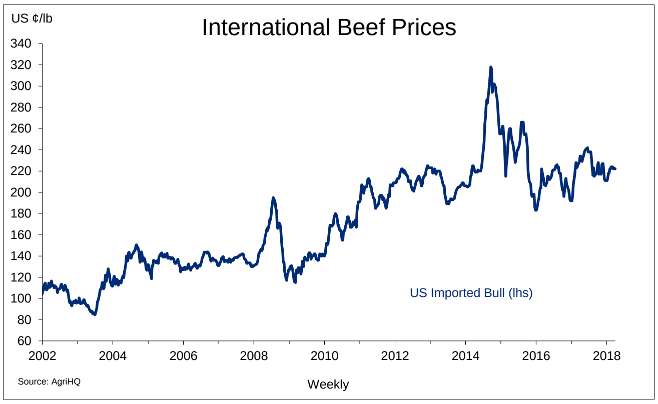
Lamb



Lamb prices look fundamentally strong and are expected to stay that way into next season. NZ supply looks set to remain tight, while firm demand is anticipated. Ongoing growth in China, and rising oil prices, are lamb demand positive. Some slowing in EU economic growth is something to watch following a period of strong expansion, but a forecast lower NZD against both the EUR and GBP would provide price support. Brexit negotiations remain a wildcard. Overall, based on current indicators, next season's average prices are likely to push above what is shaping up to be an already lofty average for the current season.

	Current	Month ago	Year ago	Next 12 months
Lamb leg (UK p/lb)	215	215	227	→

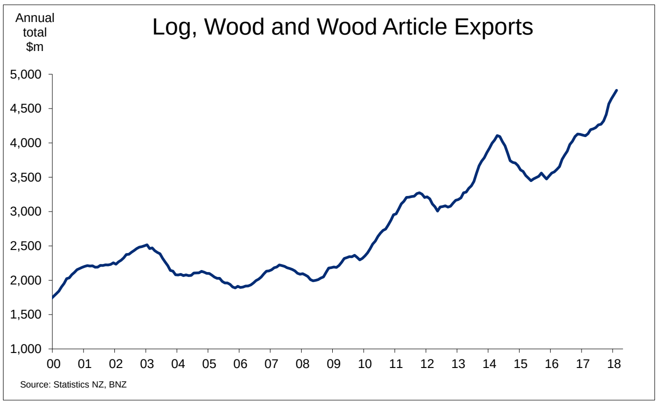
Beef



US beef prices are at healthy levels but have been oscillating around a mild downtrend over recent months. Demand has been firm, underpinned by economic strength. However, supply has been rising with risks of acceleration if dry conditions continue to spread in some areas. We see some downside risks to international beef prices as supply increases from the US as well as from Brazil and Australia. Extra supply from NZ on account of Mycoplasma bovis is not expected to put material downward pressure on prices. Demand from the US and China is expected to remain firm. Current indicators suggest average prices for next season are likely to be back a few percent from the current season.

	Current	Month ago	Year ago	Next 12 months
Imported bull (US ¢/lb)	216	216	241	↓

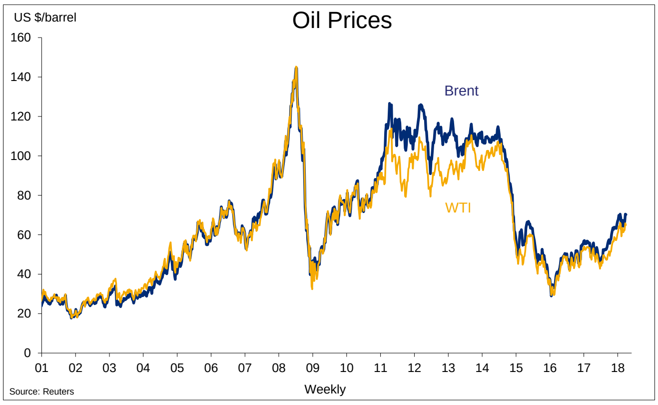
Forestry



The annual value of log, wood, and wood article exports is closing in on $5 billion, less than two years after passing the $4 billion mark, as a run of strong growth continues. Export values are up 16% on a year ago, driven by more volume and ably assisted by buoyant pricing. The key to the export strength remains China, where indicators remain firmly positive, although other markets are mixed. Domestically, a levelling off in the number of house building consents late last year has given way to another surge higher over recent months. It's positive for near term demand, at least. Overall, the forestry sector is thriving. The AgriHQ Log Price Index is at a record high and about 5% higher than a year ago.

	Current	Month ago	Year ago	Next 12 months
S1/S2 log price (NZ $/t)	134	133	123	→

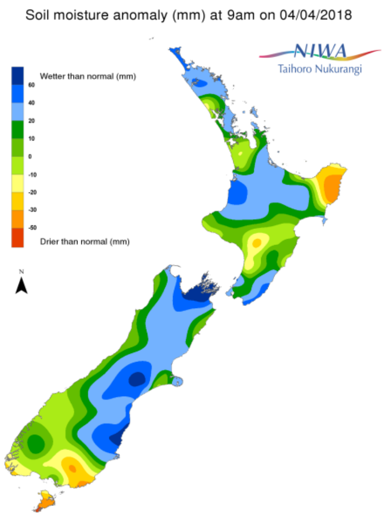
Oil



Brent crude oil prices tested $US80/bbl in May, a sizeable advance from the mid-US$60s three months earlier. President Trump's withdrawal from the Iranian nuclear deal was one of a few catalysts driving prices higher. More recently OPEC and Russian discussions on relaxing supply caps has seen oil prices pull back into the mid-US$70s. Higher offshore oil prices have translated into higher domestic fuel prices with petrol up around 20c/litre, or 10%, over the past three months. Looking ahead, a proposed fuel tax increase of around 10c to 14c per litre, in addition to Auckland's 11.5c per litre regional fuel tax, will lift fuel costs independent of crude oil or currency movements.

	Current	Month ago	Year ago	Next 12 months
Brent Crude (US $/b)	77	75	50	→

Weather



Climate models suggest neutral conditions are the most likely outcome through winter. So no La Nina or El Nino to fret about, near term at least. The Southern Oscillation Index is close to zero. However, El Nino conditions are slightly favoured by climate models heading into Spring, so that is worth keeping an eye on to see if it develops into something troublesome. For now, nothing alarming jumps out of NIWA forecasts for winter. Forecast temperatures are more likely to be near average or above in the north and west of the North Island, near average or below in the east of the South Island, and near average elsewhere. Forecast rainfall totals are more likely to be near normal or above in the north and east of the North Island and east of the South Island, normal or below in the west of both islands, and near normal in the north of the South Island. Soil moistures are more likely to be either near or above normal in all areas.

Quarterly Forecasts

Forecasts as at 5 June 2018

Key Economic Forecasts

Quarterly % change unless otherwise specified — Forecasts (shaded)

	Dec-16	Mar-17	Jun-17	Sep-17	Dec-17	Mar-18	Jun-18	Sep-18	Dec-18	Mar-19
GDP (production s.a.)	0.4	0.7	0.9	0.6	0.6	0.5	0.8	1.1	0.9	0.6
Retail trade (real s.a.)	1.4	1.5	1.8	0.3	1.4	0.1	0.5	1.3	1.3	0.7
Current account (ytd, % GDP)	-2.2	-2.6	-2.6	-2.5	-2.7	-2.8	-3.1	-3.5	-3.6	-3.5
CPI (q/q)	0.4	1.0	0.0	0.5	0.1	0.5	0.7	0.9	0.3	0.8
Employment	0.9	1.1	-0.1	2.2	0.4	0.6	0.5	0.5	0.6	0.6
Unemployment rate %	5.3	4.9	4.8	4.6	4.5	4.4	4.4	4.4	4.3	4.2
Avg hourly earnings (ann %)	1.1	1.1	1.2	2.0	3.1	4.0	4.0	3.8	3.7	3.4
Trading partner GDP (ann %)	3.6	3.6	3.7	4.1	3.9	3.9	3.9	3.7	3.8	3.8
CPI (y/y)	1.3	2.2	1.7	1.9	1.6	1.1	1.8	2.2	2.4	2.7
GDP (production s.a., y/y))	3.5	3.0	2.8	2.7	2.9	2.7	2.6	3.1	3.4	3.5

Interest Rates

Historical data - qtr average Forecast data - end quarter	Cash	Government Stock 90 Day Bank Bills	5 Year	10 Year	Swaps 2 Year	5 Year	10 Year	US Rates Libor 3 month	US 10 yr	Spread NZ-US Ten year
2017 Mar	1.75	2.00	2.70	3.25	2.35	3.00	3.50	1.15	2.50	0.80
Jun	1.75	1.95	2.45	2.95	2.25	2.80	3.25	1.25	2.20	0.75
Sep	1.75	1.95	2.45	2.95	2.20	2.70	3.20	1.30	2.20	0.75
Dec	1.75	1.90	2.35	2.90	2.20	2.65	3.15	1.60	2.40	0.40
2018 Mar	1.75	1.90	2.40	2.95	2.20	2.70	3.20	2.20	2.85	0.10
Forecasts										
Jun	1.75	2.00	2.50	2.90	2.25	2.75	3.20	2.25	3.00	-0.10
Sep	1.75	2.00	2.65	3.15	2.25	2.90	3.45	2.45	3.25	-0.10
Dec	1.75	2.00	2.75	3.20	2.40	3.00	3.50	2.55	3.25	-0.05
2019 Mar	1.75	2.10	2.85	3.25	2.55	3.10	3.55	2.65	3.25	0.00
Jun	2.00	2.35	3.15	3.55	2.85	3.10	3.55	2.75	3.50	0.05
Sep	2.25	2.60	3.35	3.70	3.10	3.10	3.55	2.75	3.50	0.20
Dec	2.50	2.85	3.50	3.80	3.35	3.40	3.85	2.75	3.50	0.30
2020 Mar	2.75	3.10	3.60	3.85	3.50	3.40	3.85	2.75	3.50	0.35
Jun	3.00	3.25	3.70	3.85	3.50	3.40	3.85	2.75	3.50	0.40

Exchange Rates (End Period)

	USD Forecasts					NZD Forecasts					
	NZD/USD	AUD/USD	EUR/USD	GBP/USD	USD/JPY	NZD/USD	NZD/AUD	NZD/EUR	NZD/GBP	NZD/JPY	TWI-17
Current	0.70	0.77	1.17	1.33	110	0.70	0.92	0.60	0.53	77.4	73.9
Jun-18	0.71	0.75	1.20	1.38	111	0.71	0.93	0.59	0.51	78.3	73.3
Sep-18	0.71	0.77	1.23	1.42	110	0.71	0.92	0.58	0.50	78.1	72.9
Dec-18	0.70	0.75	1.25	1.45	108	0.70	0.93	0.56	0.48	75.6	71.8
Mar-19	0.70	0.75	1.26	1.50	106	0.70	0.93	0.56	0.47	74.2	71.6
Jun-19	0.71	0.76	1.27	1.52	104	0.71	0.94	0.56	0.47	73.8	72.4
Sep-19	0.71	0.75	1.28	1.53	102	0.71	0.95	0.56	0.46	72.4	72.4
Dec-19	0.70	0.75	1.30	1.55	100	0.70	0.93	0.54	0.45	70.0	71.2
Mar-20	0.70	0.75	1.32	1.55	99	0.70	0.93	0.53	0.45	69.3	71.1
Jun-20	0.69	0.74	1.34	1.57	98	0.69	0.93	0.52	0.44	67.6	70.2
Sep-20	0.69	0.74	1.36	1.60	98	0.69	0.93	0.51	0.43	67.6	70.0
						TWI Weights					
						14.0%	20.7%	10.3%	4.8%	6.8%	

Source for all tables: Statistics NZ, Bloomberg, Reuters, RBNZ, BNZ

Forecasts

Forecasts
as at 5 June 2018

	March Years					December Years				
	Actuals		Forecasts			Actuals		Forecasts		
	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
GDP - annual average % change										
Private Consumption	3.9	5.4	4.0	3.3	2.2	5.0	4.5	3.5	2.5	1.4
Government Consumption	2.5	2.0	4.9	2.9	2.2	1.7	4.7	3.3	2.5	1.9
Total Investment	4.7	5.6	4.0	4.5	3.9	6.4	3.3	5.1	4.0	3.6
Stocks - ppts cont'n to growth	-0.3	-0.1	-0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
GNE	3.5	4.8	3.5	3.2	2.6	4.7	4.0	3.1	2.9	2.1
Exports	5.6	0.7	3.9	1.4	4.2	1.6	2.5	1.3	4.1	4.5
Imports	2.1	5.1	6.4	4.2	3.6	3.4	6.6	4.5	3.9	3.0
Real Expenditure GDP	4.4	3.6	3.1	2.5	2.8	4.1	3.0	2.4	2.9	2.4
GDP (production)	**3.6**	**3.7**	**2.8**	**3.1**	**2.8**	**4.0**	**2.9**	**2.9**	**3.1**	**2.4**
GDP - annual % change (q/q)	*4.0*	*3.0*	*2.7*	*3.5*	*2.5*	*3.5*	*2.9*	*3.4*	*2.6*	*2.4*
Output Gap (ann avg, % dev)	1.0	1.3	1.0	1.3	1.3	1.3	1.0	1.2	1.3	1.2
Household Savings (% disp. income)	-1.3	-2.8	-2.5	-3.6	-3.4					
Nominal Expenditure GDP - $bn	254.7	270.3	287.0	298.4	312.0	266.0	283.5	295.2	308.5	322.7
Prices and Employment - annual % change										
CPI	0.4	2.2	1.1	2.7	2.0	1.3	1.6	2.4	2.1	2.0
Employment	2.0	5.7	3.1	2.2	1.6	5.8	3.7	2.2	1.9	1.2
Unemployment Rate %	5.2	4.9	4.4	4.2	4.3	5.3	4.5	4.3	4.3	4.5
Wages - ahote	2.5	1.1	4.0	3.4	3.3	1.1	3.1	3.7	3.4	3.0
Productivity (ann av %)	1.5	-1.9	-0.8	0.6	0.9	-0.8	-1.3	0.2	0.9	1.1
Unit Labour Costs (ann av %)	1.3	3.8	3.8	3.2	2.5	2.7	4.0	3.8	2.4	2.3
External Balance										
Current Account - $bn	-7.0	-7.2	-8.2	-10.3	-9.8	-6.0	-7.7	-10.6	-10.2	-9.4
Current Account - % of GDP	-2.8	-2.6	-2.8	-3.5	-3.1	-2.2	-2.7	-3.6	-3.3	-2.9
Government Accounts - June Yr, % of GDP										
OBEGAL (core operating balance)	0.7	1.5	1.0	0.9	1.6					
Net Core Crown Debt (excl NZS Fund Assets)	24.0	21.7	20.8	20.7	19.7					
Bond Programme - $bn	7.0	8.0	8.0	8.0	9.0					
Bond Programme - % of GDP	2.7	3.0	2.8	2.7	2.9					
Financial Variables (1)										
NZD/USD	0.67	0.70	0.73	0.70	0.70	0.70	0.70	0.70	0.70	0.68
USD/JPY	113	113	106	106	99	116	113	108	100	97
EUR/USD	1.11	1.07	1.23	1.26	1.32	1.05	1.18	1.25	1.30	1.38
NZD/AUD	0.90	0.92	0.94	0.93	0.93	0.96	0.91	0.93	0.93	0.93
NZD/GBP	0.47	0.57	0.52	0.47	0.45	0.56	0.52	0.48	0.45	0.43
NZD/EUR	0.61	0.66	0.59	0.56	0.53	0.67	0.59	0.56	0.54	0.49
NZD/YEN	76.2	79.1	77.0	74.2	69.3	81.6	78.7	75.6	70.0	66.0
TWI	72.2	76.5	74.8	71.6	71.1	78.1	73.6	71.8	71.2	69.2
Overnight Cash Rate (end qtr)	2.25	1.75	1.75	1.75	2.75	1.75	1.75	1.75	2.50	3.00
90-day Bank Bill Rate	2.41	1.98	1.93	2.08	3.08	2.02	1.88	2.00	2.83	3.17
5-year Govt Bond	2.40	2.70	2.35	2.85	3.60	2.75	2.30	2.75	3.50	3.65
10-year Govt Bond	2.90	3.25	2.95	3.25	3.85	3.30	2.80	3.20	3.80	3.95
2-year Swap	2.30	2.30	2.25	2.55	3.50	2.40	2.20	2.40	3.35	3.50
5-year Swap	2.60	3.00	2.70	3.10	3.85	3.00	2.65	3.00	3.75	3.90
US 10-year Bonds	1.90	2.50	2.85	3.25	3.50	2.50	2.40	3.25	3.50	3.50
NZ-US 10-year Spread	1.00	0.75	0.10	0.00	0.35	0.80	0.40	-0.05	0.30	0.45

(1) *Average for the last month in the quarter*

Source for all tables: Statistics NZ, EcoWin, Bloomberg, Reuters, RBNZ, NZ Treasury, BNZ

Contact Details

BNZ Partners

Colin Mansbridge
Head of Agribusiness
+64 3 343 5723

Richard Bowman
Head of Partners Network
+64 3 353 2121

Business Markets

Blair Willson
Interest Rate Solutions
+64 6 350 1670

Mat Ryan
Interest Rate Solutions
+64 9 976 5938

Phil Townsend
Interest Rate Solutions
+64 3 353 2219

Economic Research

Stephen Toplis
Head of Research
+64 4 474 6905

Craig Ebert
Senior Economist
+64 4 474 6799

Doug Steel
Senior Economist
+64 4 474 6923

Jason Wong
Senior Markets Strategist
+64 4 924 7652

Nick Smyth
Interest Rates Strategist
+64 4 924 7653

Main Offices

Wellington
Level 4, Spark Central
42-52 Willis Street
Private Bag 39806
Wellington Mail Centre
Lower Hutt 5045
New Zealand
Toll Free: 0800 283 269

Auckland
80 Queen Street
Private Bag 92208
Auckland 1142
New Zealand
Toll Free: 0800 283 269

Christchurch
111 Cashel Street
Christchurch 8011
New Zealand
Toll Free: 0800 854 854

National Australia Bank

Dean Pearson
Senior Economist
Industry & Commodities
+61 3 8634 2331