

29 November 2017

Drying Out

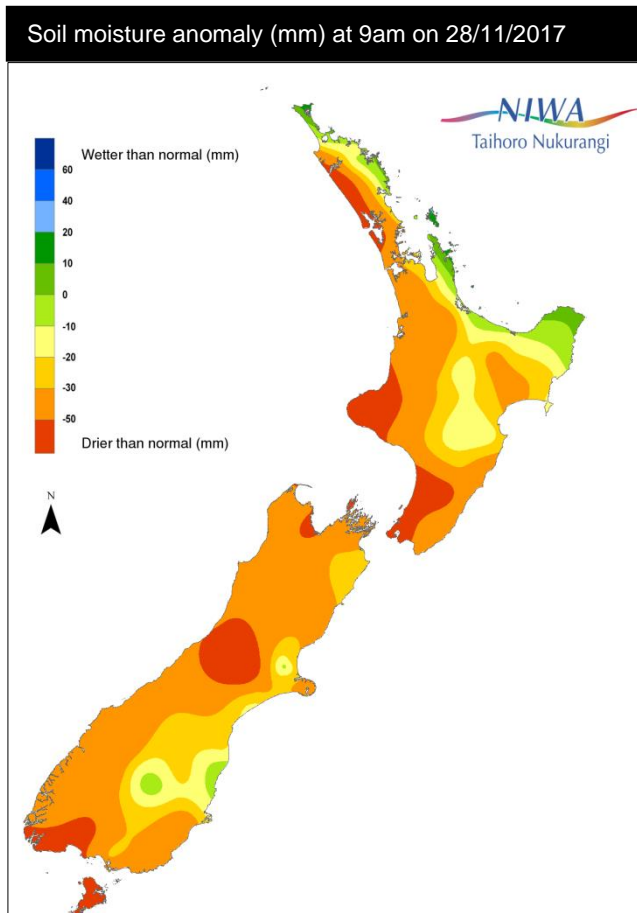
- **NZ soils drying out rapidly**
- **An economic risk worth monitoring**
- **As 2008 NZ recession attests**

The risk of drought in New Zealand is rising. That might seem like a strange thing to say when right through winter and early spring there was far too much rain. Back then grass growth was restricted by saturated soils. But conditions have been changing over recent weeks. It has been drying out – rapidly. It has got to the point now that many parts of the country have bigger soil moisture deficits compared to what is normal for this time of year according to NIWA. This is most pronounced in western areas – understandable as weather indicators get close to La Nina thresholds.

But La Nina or not, it is already getting dry and that raises concern. Dry conditions are a risk to pastoral agriculture, hydroelectric power generation, and the wider economy. Grass growth has already slowed. It is of particular concern that conditions are getting dry so early in the season, even before summer has started. Some gentle widespread rain is required, not the recent localized thunderstorms and very heavy rain that has caused flash flooding in some parts of the country.

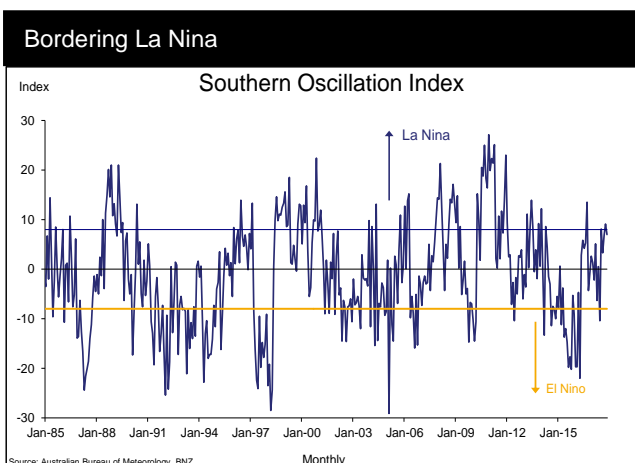
At this point, we have not adjusted our economic forecasts on account of the spreading dry. But it is a risk worth highlighting, especially with near term weather forecasts showing little rain on the horizon. If dry conditions persist for too long, we would expect GDP to be lower than currently expected.

This could involve milk production falling short of our current expectation of around 1% growth on the previous



season. October's production was 2.9% higher than a year ago, but now drier conditions are putting a question mark over the rest of the season. Moreover, dry conditions tend to bring added costs such as for supplementary feed. Some consolation is that if NZ milk production were to stall or fall from here, it would offer some support to dairy product prices. But it would hardly be the best way to achieve this. Our forecast for Fonterra's 2017/18 milk price currently sits unchanged at \$6.30.

In any case, there was no sign of any NZ milk supply concern at the latest GDT auction when prices fell for the fourth consecutive auction, to be down a cumulative circa 10% since September. Or if there was it was swamped by other factors. Regardless, it is something to watch for over the coming weeks and months especially if the general lack of rain in NZ continues. We have already seen



a mild bid tone return to the NZX wholemilk powder futures market despite the latest softer GDT result.

Lamb markets are also showing signs that it is getting dry with reports of some pullback in store lamb pricing and more new season lambs being sent for processing as feed conditions tighten. If dry conditions extend, we would expect these moves to intensify.

Weather indicators are approaching La Nina thresholds. NIWA have indicated that if La Nina conditions do develop, it is likely to be a weak one and short-lived. Interestingly, in isolation, a weak La Nina weather pattern often brings some optimism. This is because NZ agriculture, as a whole, often performs well during weak La Nina conditions as the typically more than usual rain in Eastern areas lifts grass growth and agriculture production in that region by more than the drier than usual conditions dent production in Western areas.

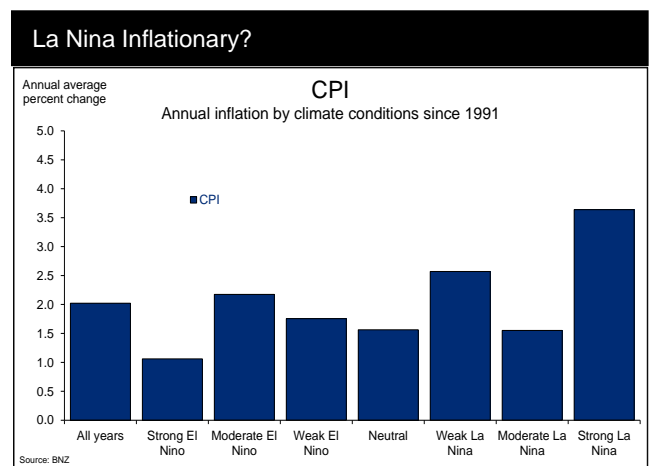
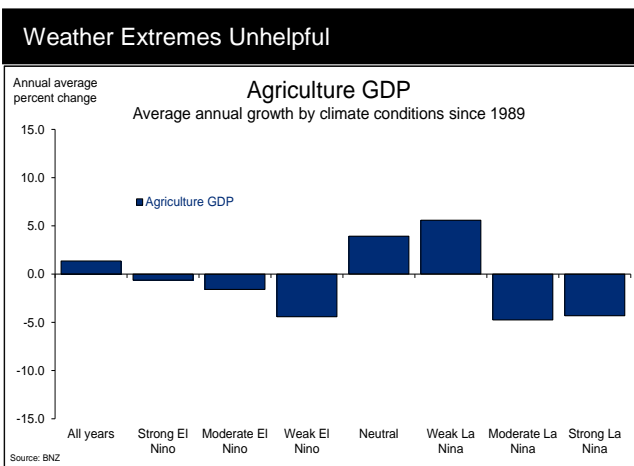
But every La Nina is different and some can hurt. Indeed, recall the 2008 La Nina that caused a drought in the Waikato, NZ milk production to fall 3.5% in that season, and helped tip NZ into recession ahead of the Global Financial Crisis.

That episode alone suggests it is worth keeping an eye on the skies this time around, to monitor the risks, even if longer term forecasts into Christmas and January contain good chances of rainfall being at least normal for large chunks of the country.

Likewise, we wouldn't draw very firm conclusions from the fact that the CPI has tended to be a bit higher (and the NZ TWI a bit lower), on average, during previous La Nina events than during other climatic phases. While interesting, we wouldn't over sell these results as a great guide to what will necessarily occur under any given weather pattern. For a start, as noted above, every weather event is different and the averages can hide a lot of the variation that can occur even between events of a similar nature. Also, each weather pattern type has only occurred a few times over the 25 years+ period we have analysed so the sample size is inherently small meaning the results are not as robust as they would be if the sample size was larger. And – perhaps most importantly – there are many other factors changing at the same time as the weather, and various lags to consider, so it would be quite wrong to strongly conclude that the weather has caused all the observed variation. But the correlations are interesting nonetheless.

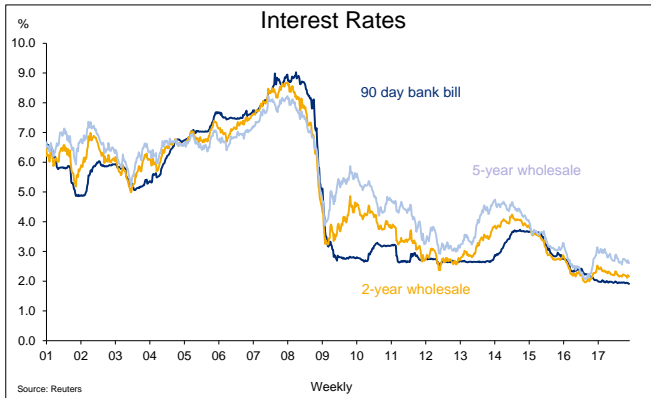
From a central bank perspective, we'd note that if dry conditions continue long enough they may ultimately provoke the RBNZ to tone down its own GDP forecasts for the first half of 2018. Importantly, if dry conditions become severe enough they could start to have some influence on RBNZ decisions on what to do, or not do, with its official cash rate. It could see prospective interest rate hikes delayed.

doug_steel@bnz.co.nz



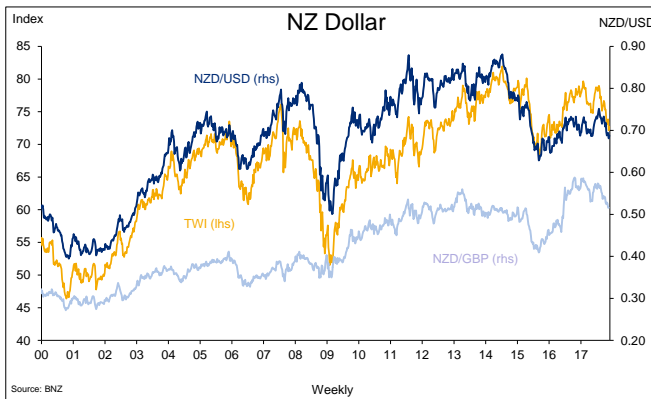
Key Macro Drivers for Commodity Producers

Interest Rates



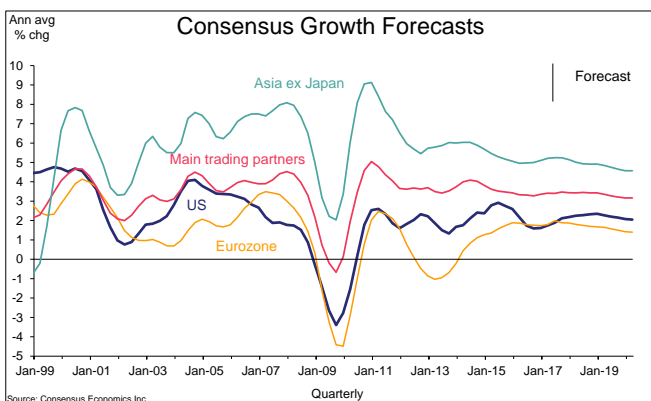
Floating and short term fixed interest rates remain in a holding pattern. This stems from the Reserve Bank keeping its Official Cash Rate at 1.75% right through 2017 as well as issuing guidance that it intends to hold the OCR steady until well into 2019. In the RBNZ’s language ‘monetary policy will remain accommodative for a considerable period’. There are many moving parts on the wider economic policy front and a new RBNZ Governor will be appointed over coming months. So forecast precision remains challenging. As OCR increases come into view, we expect short term fixed rates to start drifting higher as we move through 2018. Offshore, despite economic growth accelerating, inflation has remained moderate keeping a lid on longer term interest rates – both global and domestic. We expect longer term rates to move higher in 2018.

Foreign Exchange



The NZD has pushed lower over recent months. There has been some fundamental basis for the weakness with some wobbles in global risk appetite, weaker international dairy prices, a narrowing in the gap between NZ and US short term interest rates (as the Fed is expected to hike interest rates again in December), and the uncertainty raised by the change in NZ government. But we feel a lot of this news is now priced in by the market. Meanwhile, the EUR has been rising on the back of EU economic strength and GBP has been wriggling higher after previous weakness. It is all offering support to domestic prices of primary products. Our currency forecasts are unchanged with NZD/USD seen around the 0.70 mark through 2018. At present, there seems more downside risk than upside risk to our NZD forecasts against the European currencies.

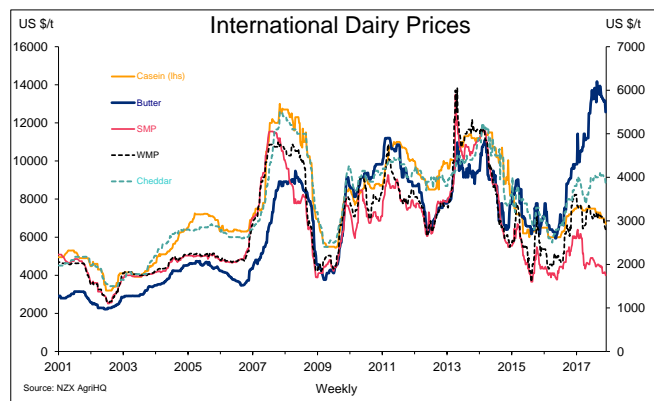
Global Growth



A broad-based economic upturn continues across the globe driven mainly by the advanced economies, but also with a robust pace of expansion in the big emerging markets occurring. The US and Eurozone have been growing at above-trend speed, pressuring their unemployment rates lower. China’s latest indicators point to solid growth, albeit with a modest slowing trend. Global growth is expected to accelerate a little further in 2018, notwithstanding ever present risks from the likes of various pockets of geopolitical tensions. The global growth backdrop is supportive of demand and prices for NZ primary product prices. Indeed, prices across NZ’s major primary product categories are currently well above their respective 5 year averages.

Key Commodities

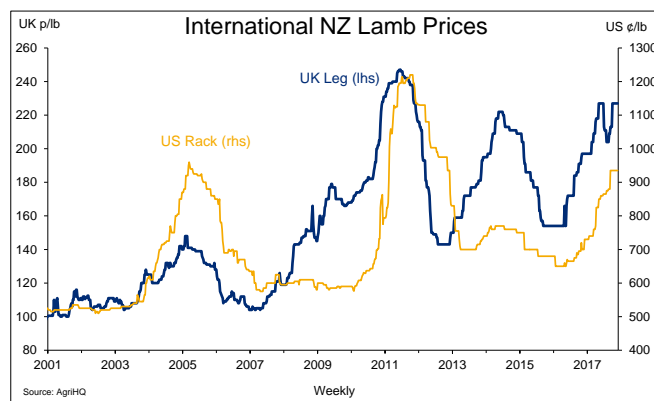
Dairy



Global dairy prices have fallen around 10% since September, amid more global milk supply and potential changes to the EU intervention scheme. Current dairy product pricing presents clear downside risk to Fonterra's milk price forecast of \$6.75. Indeed, we even wonder if our current forecast of \$6.30 may ultimately prove a bit too high once the season is all done. It depends on where global prices track from here, with NZ's current dry weather potentially important, as well as the trajectory of the NZD that has been offering some support with its somewhat lower track over recent months.

	Current	Month ago	Year ago	Next 12 months
Whole milk powder (US \$/t)	2800	3050	3500	→

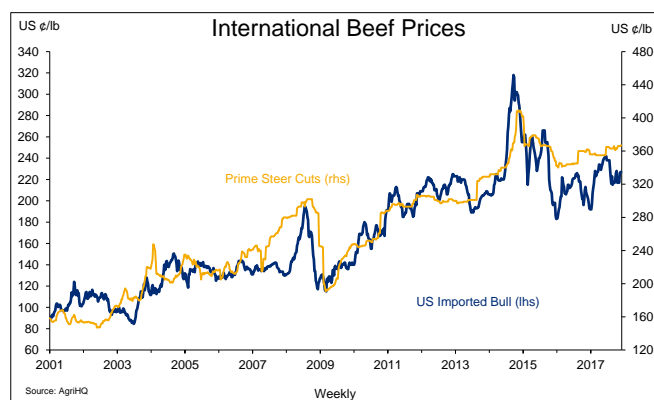
Lamb



Lamb markets have been strong. International lamb prices have maintained their strength over recent months. Prices remain well above historical averages as NZ (and Australian) supply remains relatively tight. Brexit negotiations remain a focus offshore. A lower NZD against the EUR and GBP over recent months is offering local price support. Overall market conditions suggest 2017/18 season average prices will be firmly above the equivalent for 2016/17. Spreading dry conditions in NZ is a threat worth monitoring, with the risk of a near term surge in supply.

	Current	Month ago	Year ago	Next 12 months
Lamb leg (UK p/lb)	227	227	197	↓

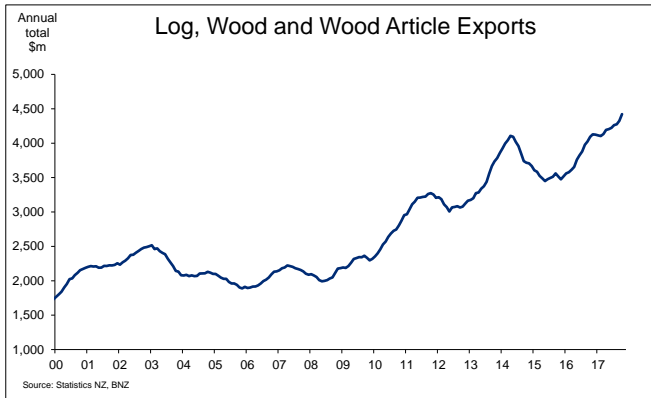
Beef



US beef prices have wriggled around a solid level over recent months. Generally tight supply has supported firm pricing, as has robust demand. Prices are still expected to drift lower in 2018 as supply increases, but firming demand indicators bear watching. NZ export beef prices still face a headwind from Japan's tariff increase to 50% (from 38%) on frozen NZ beef through to the end of March 2018. But demand has been strong from elsewhere, including from the US and China, and a lower NZD/USD is helping local pricing. We anticipated NZ pricing in 2017/18 to be around similar levels to 2016/17's strong levels, on average, for the season.

	Current	Month ago	Year ago	Next 12 months
Imported bull (US \$/lb)	227	218	204	↓

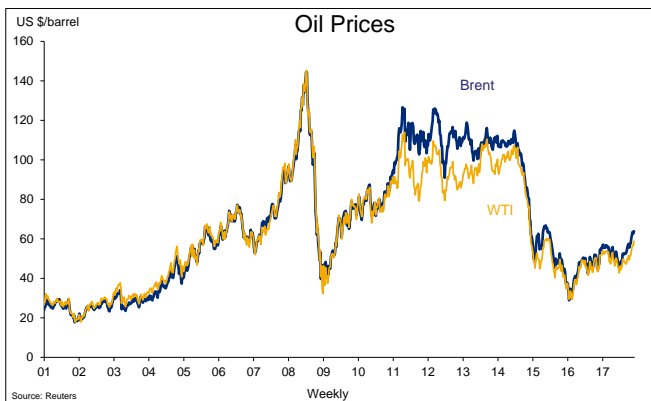
Forestry



Market signals remain very supportive with buoyant domestic and export pricing. The latter has been supported over recent months by a pullback in the value of the NZD. But export markets have been firm for a while, underpinned by solid demand. Export values in the three months to October were up around 16% on the corresponding period a year ago, with prices around 9% higher and volumes up 7%. Meanwhile, another push higher in building consents bodes well for the domestic market ahead.

	Current	Month ago	Year ago	Next 12 months
\$1/\$2 log price (NZ \$/t)	128	127	115	➔

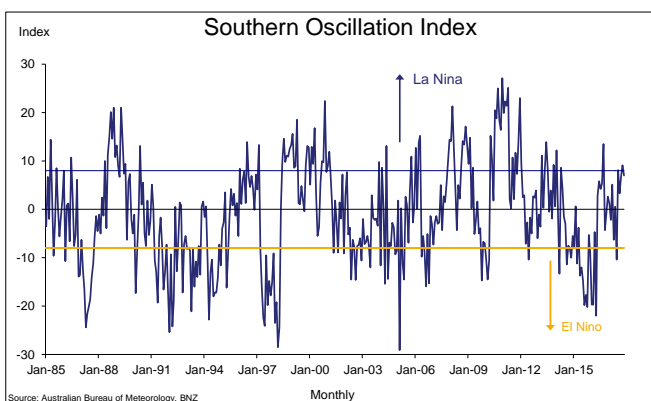
Oil



Crude oil prices have strengthened significantly since mid-2017. Brent crude has lifted from around \$US45/bbl then to well over \$US60/bbl in November. OPEC cuts and geopolitical risks in Iraq have been key drivers, supported by firm global economic growth. OPEC's late November meeting where it is likely to decide what to do after March 2018, when the current cut-agreement expires, will be important for setting the market tone ahead. Domestic fuel costs have lifted with offshore cost increases amplified by the NZD generally losing ground over recent months.

	Current	Month ago	Year ago	Next 12 months
West Texas Intermediate (US \$/b)	59	54	45	⬆

Weather



It is not that unusual to write a Rural Wrap that highlights a risk of it getting dry in many parts of the country, but it is quite unusual to do so within two months of writing in the previous issue that the weather had been awkward because of too much rain! It just goes to show how quickly conditions have changed. There is rain in the forecast over the coming months, but not much near term. The spreading dry conditions from the West, as often occurs with La Nina, is a clear threat to this season's pastoral sector via potentially higher costs and reduced production. At this point, climate indicators are only borderline La Nina. But La Nina or not, it is getting dry and that is of concern.

Quarterly Forecasts

Forecasts as at 29 November 2017

Key Economic Forecasts

Quarterly % change unless otherwise specified

	Jun-16	Sep-16	Dec-16	Mar-17	Jun-17	Forecasts				
						Sep-17	Dec-17	Mar-18	Jun-18	Sep-18
GDP (production s.a.)	0.8	0.7	0.4	0.6	0.8	0.7	0.5	0.4	0.9	1.1
Retail trade (real s.a.)	2.1	1.0	0.9	1.6	1.8	0.2	0.5	0.7	0.7	1.3
Current account (ytd, % GDP)	-2.7	-2.8	-2.5	-2.9	-2.8	-2.6	-2.4	-2.3	-2.6	-2.9
CPI (q/q)	0.4	0.3	0.4	1.0	0.0	0.5	0.6	0.5	0.1	0.6
Employment	2.5	1.2	0.8	1.2	-0.1	2.2	0.4	0.6	0.5	0.5
Unemployment rate %	5.0	4.9	5.3	4.9	4.8	4.6	4.5	4.4	4.4	4.3
Avg hourly earnings (ann %)	2.1	1.6	1.1	1.1	1.2	2.0	2.7	2.8	2.6	2.4
Trading partner GDP (ann %)	3.4	3.2	3.5	3.5	3.6	4.0	3.7	3.7	3.6	3.6
CPI (y/y)	0.4	0.4	1.3	2.2	1.7	1.9	2.1	1.5	1.6	1.8
GDP (production s.a., y/y)	3.5	3.3	2.6	2.5	2.5	2.5	2.6	2.5	2.5	3.0

Interest Rates

Historical data - qtr average

Forecast data - end quarter

	Cash	Government Stock			Swaps			US Rates		Spread
		90 Day	5 Year	10 Year	2 Year	5 Year	10 Year	Libor	US 10 yr	NZ-US
		Bank Bills						3 month	Ten year	
2016 Sep	2.10	2.30	1.95	2.25	2.05	2.15	2.50	0.80	1.55	0.70
Dec	1.85	2.10	2.45	2.95	2.25	2.65	3.10	0.90	2.10	0.80
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
Forecasts										
Dec	1.75	1.95	2.75	3.20	2.20	3.00	3.50	1.45	2.60	0.60
2018 Mar	1.75	1.95	2.80	3.25	2.30	3.05	3.55	1.55	2.75	0.50
Jun	1.75	2.05	2.80	3.25	2.40	3.05	3.55	1.70	2.75	0.50
Sep	2.00	2.30	3.15	3.60	2.60	3.40	3.90	1.95	3.00	0.60
Dec	2.25	2.55	3.25	3.70	2.85	3.50	4.00	2.20	3.00	0.70
2019 Mar	2.50	2.80	3.25	3.70	3.10	3.50	4.00	2.30	3.00	0.70
Jun	2.75	3.05	3.30	3.75	3.20	3.50	4.00	2.30	3.00	0.75
Sep	3.00	3.20	3.35	3.80	3.30	3.50	4.00	2.30	3.00	0.80
Dec	3.00	3.20	3.40	3.85	3.30	3.55	4.05	2.30	3.00	0.85

Exchange Rates (End Period)

USD Forecasts

	NZD/USD	AUD/USD	EUR/USD	GBP/USD	USD/JPY
Current	0.69	0.76	1.18	1.33	111
Dec-17	0.70	0.75	1.17	1.33	116
Mar-18	0.69	0.74	1.18	1.30	118
Jun-18	0.69	0.73	1.20	1.31	118
Sep-18	0.70	0.73	1.22	1.28	118
Dec-18	0.70	0.73	1.20	1.26	120
Mar-19	0.71	0.74	1.20	1.25	120
Jun-19	0.72	0.75	1.18	1.24	120
Sep-19	0.73	0.76	1.18	1.25	118
Dec-19	0.73	0.76	1.17	1.24	117
Mar-20	0.73	0.76	1.19	1.26	116

NZD Forecasts

	NZD/USD	NZD/AUD	NZD/EUR	NZD/GBP	NZD/JPY	TWI-17
Current	0.69	0.91	0.58	0.52	76.9	73.0
Dec-17	0.70	0.93	0.60	0.53	81.2	75.3
Mar-18	0.69	0.93	0.59	0.53	81.4	74.5
Jun-18	0.69	0.95	0.58	0.53	81.4	74.5
Sep-18	0.70	0.95	0.57	0.54	82.0	74.9
Dec-18	0.70	0.96	0.58	0.56	84.0	75.7
Mar-19	0.71	0.96	0.59	0.57	85.2	76.5
Jun-19	0.72	0.96	0.61	0.58	86.4	77.5
Sep-19	0.73	0.95	0.61	0.58	85.6	77.4
Dec-19	0.73	0.95	0.62	0.59	84.8	77.4
Mar-20	0.73	0.96	0.61	0.58	84.7	77.5

TWI Weights

14.0% 20.7% 11.3% 4.6% 6.4%

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

Forecasts

Forecasts as at 29 November 2017	March Years					December Years				
	Actuals		Forecasts			Actuals		Forecasts		
	2016	2017	2018	2019	2020	2015	2016	2017	2018	2019
GDP - annual average % change										
Private Consumption	2.8	4.8	3.4	3.3	2.3	2.9	4.3	4.0	3.1	2.7
Government Consumption	2.6	2.4	3.2	2.6	2.2	2.6	2.2	3.5	2.4	2.5
Total Investment	2.5	5.6	1.9	3.9	3.0	2.1	5.5	2.7	3.3	3.5
Stocks - ppts cont'n to growth	-0.2	-0.3	0.0	0.2	0.0	-0.3	0.0	0.0	0.1	0.0
GNE	2.5	4.3	3.1	3.5	2.4	2.3	4.1	3.6	3.2	2.9
Exports	5.6	0.7	2.5	2.8	4.3	6.9	1.6	1.1	2.7	4.2
Imports	2.0	5.1	4.4	4.0	3.6	3.7	3.4	5.1	3.9	3.9
Real Expenditure GDP	3.5	3.0	2.5	3.1	2.6	3.2	3.5	2.4	2.8	2.9
GDP (production)	2.4	2.9	2.5	3.1	2.6	2.5	3.0	2.5	2.9	2.9
<i>GDP - annual % change (q/q)</i>	2.8	2.5	2.5	3.5	2.2	2.2	2.6	2.6	3.4	2.3
Output Gap (ann avg, % dev)										
	0.8	0.9	0.8	1.3	1.2	0.8	0.9	0.8	1.1	1.3
Household Savings (gross, % disp. income)										
	2.1	0.7	1.4	1.5	1.7					
Nominal Expenditure GDP - \$bn										
	250.7	264.7	277.1	288.6	301.1	247.6	260.7	274.7	285.4	298.0
Prices and Employment - annual % change										
CPI	0.4	2.2	1.5	1.9	2.0	0.1	1.3	2.1	1.7	2.1
Employment	2.0	5.7	3.2	2.0	1.6	1.4	5.8	3.7	2.1	1.8
Unemployment Rate %	5.2	4.9	4.4	4.5	4.6	5.0	5.3	4.5	4.4	4.6
Wages - ahote	2.5	1.1	2.8	2.8	2.7	2.5	1.1	2.7	2.6	2.8
Productivity (ann av %)	0.3	-2.6	-1.3	0.6	0.8	0.1	-1.7	-1.8	-0.1	1.0
Unit Labour Costs (ann av %)	2.5	4.7	4.0	2.6	2.3	2.6	3.6	4.3	3.2	2.1
External Balance										
Current Account - \$bn	-7.3	-7.7	-6.3	-8.9	-9.7	-8.0	-6.6	-6.6	-8.8	-9.5
Current Account - % of GDP	-2.9	-2.9	-2.3	-3.1	-3.2	-3.2	-2.5	-2.4	-3.1	-3.2
Government Accounts - June Yr, % of GDP										
OBEHAL (core operating balance)	0.7	1.5	1.0	0.9	1.6					
Net Core Crown Debt (excl NZS Fund Assets)	24.5	22.2	22.7	22.9	22.2					
Bond Programme - \$bn	7.0	8.0	8.0	9.0	10.0					
Bond Programme - % of GDP	2.8	3.0	2.9	3.1	3.3					
Financial Variables ⁽¹⁾										
NZD/USD	0.67	0.70	0.69	0.71	0.73	0.68	0.70	0.70	0.70	0.73
USD/JPY	113	113	118	120	116	122	116	116	120	117
EUR/USD	1.11	1.07	1.18	1.20	1.19	1.09	1.05	1.17	1.20	1.17
NZD/AUD	0.90	0.92	0.93	0.96	0.96	0.93	0.96	0.93	0.96	0.95
NZD/GBP	0.47	0.57	0.53	0.57	0.58	0.45	0.56	0.53	0.56	0.59
NZD/EUR	0.61	0.66	0.59	0.59	0.61	0.62	0.67	0.60	0.58	0.62
NZD/YEN	76.2	79.1	81.4	85.2	84.7	82.1	81.6	81.2	84.0	84.8
TWI	72.2	76.5	74.5	76.5	77.5	73.4	78.1	75.3	75.7	77.4
Overnight Cash Rate (end qtr)	2.25	1.75	1.75	2.50	3.00	2.50	1.75	1.75	2.25	3.00
90-day Bank Bill Rate	2.41	1.98	1.95	2.78	3.12	2.78	2.02	1.95	2.53	3.20
5-year Govt Bond	2.40	2.70	2.80	3.25	3.45	2.95	2.75	2.75	3.25	3.40
10-year Govt Bond	2.90	3.25	3.25	3.70	3.90	3.45	3.30	3.20	3.70	3.85
2-year Swap	2.30	2.30	2.30	3.10	3.20	2.80	2.40	2.20	2.85	3.30
5-year Swap	2.60	3.00	3.05	3.50	3.70	3.15	3.00	3.00	3.50	3.65
US 10-year Bonds	1.90	2.50	2.75	3.00	3.00	2.25	2.50	2.60	3.00	3.00
NZ-US 10-year Spread	1.00	0.75	0.50	0.70	0.90	1.20	0.80	0.60	0.70	0.85

⁽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

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

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