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## **Economic Outlook**

The New Zealand economy appears to be re-gathering some decent momentum, after a slow first half of 2015. Impetus from immigration, construction, tourism and services are outweighing drags from the commodity export sector, especially dairy. Indeed, we've just strengthened our GDP forecasts. This mainly revolves around a bigger cycle in net immigration, however, feeding population growth. The biggest change from this is that we now see much less of a slowdown in consumer expenditure over the forecast period, and reinforced construction growth. We've also taken on board the sharp rebound in the domestic growth indicators over recent months. All up, we now forecast real GDP growth of 2.4% for calendar 2016 (previously 1.9%) and 2.4% for 2017 (previously 2.0%). From here we feel we can better manage the risks - downside with respect to global impacts but with the potential for local factors to drive abovetrend economic expansion. Nonetheless, inflation pressures are limited for now, with headline CPI inflation, in particular, being suppressed on a number of fronts.

## Interest Rate Outlook and Strategy

In its December Monetary Policy Statement the RBNZ surprised many, by emphasising the flexibility it has in its inflation targeting mandate. This was backed up by the Bank inferring a steady outlook for its Official Cash Rate. Domestic growth indicators have since shored up this tack. On the other hand, the Bank is now facing a period of CPI inflation materially lower than it projected. The global backdrop has also turned a bit shaky. These are factors that could yet convince the RBNZ to ease further. For the meantime, we expect it to hold at 2.50%. But we'll be taking cues from RBNZ statements, starting with next week's one. For longer NZ rates much will hinge off US Fed policy, global inflation, and risk.

## **Currency Outlook**

NZD has retreated a long way from its level of around 88 US cents in mid-2014. But we believe it has a little further to go down this year, targeting 60 cents by June. This is assuming the US dollar continues to rebound, and the Fed keeps tightening. New Zealand's exchange rates against other trading partner currencies have been much slower in reducing, however. We still envisage a downward drift in NZD/AUD over the coming year or two, but set against a long-term (PPP) valuation that we've nudged up to 0.9000. NZD/EUR and NZD/JPY are more problematic calls as these crosses will be heavily influenced by the extent and timing of quantitative easing in Europe and Japan respectively. We also note that NZD/CNY might struggle to go much lower, as China's policy officials are making moves to manage CNY lower via its moving peg system, as its economy slows.

## New Zealand at a Glance

### Overview

The New Zealand economy appears to be re-gathering some decent momentum, after a slow first half of 2015. Impetus from immigration, construction, tourism and services are outweighing drags from the commodity export sector, especially dairy. However, inflation pressures are limited for now, with headline CPI inflation, in particular, being suppressed on a number of fronts. We expect NZD to abate a little more this year and for the OCR to remain at 2.50%. However, there are downside risks around both – especially with global growth slowing and financial markets rumbling some discontent.

#### International

Trading-partner economic growth continues to slow to sub-par rates. In the year to September export-weighted growth was 3.3%. This was below the long-term average of 3.7%. Consensus forecasts infer 3.3% for calendar 2016 and 3.4% for 2017. To be sure, these are suboptimal, not distressed, like what occurred in 2008/09 (and 1998/99 and the early 1990s before that). However, risks of further slowing in the world economy need to be monitored carefully, especially with China's expansion being managed downward. The US central bank's (stuttering?) attempts to folk off its mega-stimulus might also be something the global economy and financial markets find difficult to cope with, regretfully.

#### Growth

Given the world backdrop it might seem odd for us to be strengthening our GDP forecasts. But that's just what we've done. This mainly revolves around a bigger cycle in net immigration, feeding population growth. The biggest change from this is that we now see much less of a slowdown in consumer expenditure over the forecast period, and reinforced construction growth. We've also taken on board the sharp rebound in the domestic growth indicators over recent months. All up, we now forecast real GDP growth of 2.4% for calendar 2016 (previously 1.9%) and 2.4% for 2017 (previously 2.0%). From here we feel we can better manage the risks – downside with respect to global impacts but with the potential for local factors to drive above-trend economic expansion.

## Labour Market

Because the changes we've made to our GDP forecasts are largely population based, they have tended to wash out with respect to impacts on the unemployment rate. We still see this edging up slightly, to a 6.4% peak later this year, from its recent 6.0% level. From this, we expect wage inflation to be steady rather than strong. Record high net immigration will certainly be a challenge to absorb into the local labour market. However, there is increasing chance that this can occur (and then some?) given signs, from recent business surveys, that firms are right back in the hunt for staff.

	December Years								
Key Indicators	Act 2013	<b>ual</b> 2014	2015	<b>casts</b> 2017	2018				
GDP production (an avg %)	2.4	3.7	2.4	2.4	2.5	2.4			
Consumers Price Index (ann %)	1.6	0.8	0.1	1.1	2.2	1.6			
Unemployment Rate (end qtr %)	6.1	5.7	6.1	6.3	6.2	6.0			
Current Account (% of GDP)	-3.2	-3.1	-3.2	-3.6	-3.5	-3.6			
Fiscal Balance (% GDP June Yr)	-2.0	-1.2	0.2	-0.2	0.3	0.7			
NZD/USD (Dec mth avg)	0.82	0.78	0.67	0.61	0.65	0.69			
Overnight Cash Rate (Dec mth end %)	2.50	3.50	2.59	2.50	3.25	4.25			
10 Year Govt Bond (Dec mth avg %)	4.80	3.90	3.40	3.80	4.10	4.30			





#### Unemployment Rate



### Inflation

Following its fall to just 0.1% last year, we now expect annual CPI inflation to be 0.3% in Q1 of 2016, 0.5% in Q2 and 0.7% in Q3. Plunging commodity prices are the biggest protagonist. With this, the Reserve Bank will have to wonder what might happen to inflation expectations. Then there is the issue of whether currency pass-through to local prices remains as elusive as it has seemed to date. Meanwhile, domestic inflation is being strongly contained by: improved price discovery; the impact of technology; and global spare capacity. Nonetheless, key measures of core NZ inflation appear to be holding up well within the scope of 1.0 to 3.0% - in prices and wages. This will be reinforced if economic growth turns out to be as robust as our upgraded forecasts portray.

### **External Accounts**

The nation's current account deficit is looking a lot less threatening than it was just six months ago. We now expect it to peak at less than 4% of GDP, as soon as this year. This should enable New Zealand's net international liability position to consolidate its recent improvement. To be sure, dairy prices remain weak, and rural (export) production looks set to fall this season. However, prices for most non-dairy commodity exporters are holding up, while the broadly lower exchange rate is aiding export revenue more generally. Tourism, meanwhile, is far exceeding positive expectations. On the imports side, there is pressure from the lower currency. However, commodity price weakness, notably in oil, is a fillip for the current account. The rating agencies can rest assured.

### **Fiscal Policy**

The Government's books moved into slight surplus for the year ended June 2015. The core operating balance (OBEGAL) was 0.2% of GDP, the first positive to be recorded since 2008. Maintaining that surplus will be problematic, however. While tax revenue has been surprisingly robust over recent months, it's more broadly under pressure from low inflation, poor dairy revenue, and weakening returns on funds under management. Accordingly, the government signalled, in its Half Yearly Economic and Fiscal Update of early December, that it will employ more flexibility in achieving surpluses, while putting more emphasis on stabilising core crown debt as a percentage of GDP.

### **Interest Rates**

In its December Monetary Policy Statement the RBNZ surprised many, by emphasising the flexibility it has in its inflation targeting mandate. This was backed up by the Bank inferring a steady outlook for its Official Cash Rate. Domestic growth indicators have since shored up this tack. On the other hand, the Bank is now facing a period of CPI inflation materially lower than December's MPS set out. The global backdrop has also turned a bit shaky. These are factors that could yet convince the RBNZ to ease further. For the meantime, we expect it to hold at 2.50%. But we'll be taking cues from RBNZ statements, starting with next week's one. For longer NZ rates much will hinge off US Fed policy, global inflation, and risk.









NZ Cash Rate



### **Exchange** Rate

NZD has retreated a long way from its level of around 88 US cents back in mid-2014. But we believe it has a little further to go down this year, targeting 60 cents by June. This is assuming the US dollar continues to rebound, and the Fed keeps tightening. New Zealand's exchange rates against other trading partner currencies have been much slower in reducing, however. We still envisage a downward drift in NZD/AUD over the coming year or two, but set against a long-term (PPP) valuation that we've nudged up to 0.9000. NZD/EUR and NZD/JPY are more problematic calls as these crosses will be heavily influenced by the extent and timing of quantitative easing in Europe and Japan respectively. We also note that NZD/CNY might struggle to go much lower, as China's policy officials are making moves to manage CNY lower via its moving peg system, as its economy slows.



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# China's Economy at a Glance

- China's latest national accounts data showed a slowing trend for China's economy in the December quarter with gross domestic product rising by 6.8% yoy. The services sector - the main engine for growth over 2015 – also slowed in the December quarter.
- China's industrial production growth weakened in December – down to 5.9% yoy (from 6.2% in November). Nevertheless, the December result was equal to the average growth rate between July and November, suggesting industrial production growth may have stabilised.
- After improving over the previous two months, fixed asset investment softened in December. Growth in manufacturing has shown some improvement recently but investment in real estate is contracting.
- China's retail sales growth was slightly lower in December, rising by 11.1% yoy
- China's trade surplus improved in December, with both imports and exports strengthening in month-onmonth terms. There are tentative signs that exports may be stabilising but given the volatility of, and other issues with, the data it is still too early to be sure.
- New credit expanded rapidly in December totalling RMB 1.8 trillion (compared with RMB 1.0 trillion in November) – an increase of 7.1% yoy. However, for the year as whole, new credit was down, but with a shift towards traditional bank financing and away from the shadow banking sector.

#### **Gross Domestic Product**

China's economy in the December quarter – with gross domestic product rising by 6.8% yoy – down from 6.9% in the September quarter, And a touch below market expectations.

The quarter-on-quarter growth rate also softened, from 1.8% in September to 1.6% in December.



China's services sector was the main engine for growth over 2015. However, service sector output rose by 8.1% yoy in Q4, a notable deceleration from the previous quarter (8.6% yoy). This may reflect some unwinding of finance sector growth, which was a major contributor to growth earlier in the year. Real growth in the industrial sector was slower, at 6.0%.

With the very weak March quarter (1.3% qoq) to drop out of the annual growth rate next quarter, the annual growth rate could well rise in early 2016. However, the trend is for a slowing economy and we expect this to continue.

#### Services Have Been The Key Contributor To Growth In



#### Industrial production

China's industrial production growth weakened in December – down to 5.9% yoy (from 6.2% in November). This represents a partial unwinding of the improvement seen in November. Nevertheless, the December result was equal to the average growth rate between July and November, suggesting industrial production growth may have stabilised.



Key heavy industrial sectors saw weaker production in December. Crude steel fell by 11.3% yoy, cement by 5.2% yoy and motor vehicles by 6.5% yoy, while electricity production was down by 3.7% yoy.

China's two major industrial surveys remained in negative territory in December. The official NBS PMI edged higher – to 49.7 – while the Caixin Markit PMI moved down to 48.2 points giving up some of its recent gains.



#### Investment

After improving over the previous two months, fixed asset investment softened in December. Investment grew by 8.2% yoy in December, down from 10.2% yoy in November. It remains above its September low, but this is still a low rate of growth by China's standards. For the year as a whole, growth in 2015 was 10%, well down from 15.7% in 2014.

Growth in manufacturing has shown some improvement recently with growth of 7.6% yoy (on a three month moving average basis) up from 6.3% in September.

However, investment in real estate is contracting. Growth in December (3mma) was -3.3% (from -3.6% previously). Combined, manufacturing and real estate accounted for around 56% of total fixed asset investment in 2015.

Residential property prices continue to show some improvement. China Index Academy data showed a 4.2% yoy increase in the national average in December. The gains remain concentrated in China's tier 1 cities where prices rose by 15% yoy, although tier 2 prices were unchanged from a year ago, for the first time since August 2014. Tier 3 city prices continue to fall on a year-on-year basis, albeit more slowly, and were down by 0.9% yoy in December.

Despite improving prices, residential construction activity remains weak. New construction starts contracted in yearon-year terms over 2015. In December, (on a three month moving average basis) starts were 17.6% yoy lower.

Fixed Asset Investment Growth Receeding







#### International trade - trade balance and imports

China's trade surplus improved in December, with both imports and exports strengthening in month-on-month terms (although year-on-year growth remains negative for both exports and imports). The surplus was US\$60.1 billion (up from US\$53.7 billion last month), taking it back close to its all time high recorded in October.

China's imports rose to US\$164.1 billion in December (from US\$142.7 billion in November) – a fall of -7.6% in year-on-year terms. The substantial falls in import values have raised concerns around the health of the Chinese economy, although the pace of decline has moderated in recent months.

Account also needs to be taken of the impact of falling commodity prices on import values. In November 2015, import values fell by 5.6% yoy, while trade volumes increased 7.3% yoy (although in prior months it was lower). Looking at key commodities, in 2015, crude oil imports rose by 8.8% yoy, iron ore by 2.2%, and copper ore and concentrate by 12%, but coal imports plunged by 30% yoy.

While the weakness in imports highlight the subdued conditions in China's industrial sector, they provide little



guide to service sector conditions which were a key driver of growth in 2015. This is because services have a much lower import reliance.

#### International trade - exports

China's exports increased strongly in December to US\$224.2 billion, up from US\$196.5 billion previously). They are still negative in year-on-year terms at -1.4%, although this represents an improvement on previous months.

The new export orders index in the NBS PMI survey also rose to 47.5 points, its highest level in three months, but still indicating contraction.

Overall, these data provide tentative signs that exports may be stabilising but given the volatility in the data it is still too early to be sure.

The subdued year-on-year export performance is reflected across China's key markets – over the year to December exports to the U.S. fell 3.7%, and while they rose to East Asian economies (2.9% yoy) they fell excluding Hong Kong. Exports to the European Union only grew by 1.7% over the same period, but there was a clear trend improvement over 2015.



#### Exports To Key Markets Subdued



#### Retail sales and inflation

China's retail sales growth was slightly lower in December, rising by 11.1% yoy (from 11.2% in November). The slowdown in real retail sales was slightly greater (10.9% to 10.7% yoy) but remains around its trend level over the past few years.

Consumer confidence continues to edge down, with the indicator falling to 103.7 in December , more than unwinding November's gains (104.1). While this just further confirms the downwards shift in sentiment, from a relatively strong level in the first half of the year, sentiment is currently at a level around the middle of the post GFC range.

Headline inflation edged up again in December, to 1.6% yoy (from 1.5% in November), but is still very modest by historical standards.

Inflation has picked up over the last two months due to rising food price inflation. Food price inflation was 2.7% yoy in December, up from 1.9% in October. The pickup in food prices in December was attributed to the impact of heavy snow and rain in parts of China on fruit and vegetable prices.



## Little Change In Underlying Real Retail Sales Trend

In contrast, non-food price inflation was unchanged at 1.1% yoy, around where it has been since mid-2015. Fuel prices are still a drag, although the impact again moderated in December (with fuel prices down 11.7% yoy from -12.4% in the previous month).



#### Credit conditions

New credit expanded rapidly in December – totalling RMB 1.8 trillion (compared with RMB 1.0 trillion in November) – an increase of 7.1% yoy. The large increase was mainly due to stronger non-bank loan financing, which accounted for RMB 1.1 trillion of the increase. New entrusted loans were their highest for a year (RMB 353 billion), while banker's acceptance bills were positive for the first time since May. New equity financing also increased substantially.

For 2015 as a whole, total credit was RMB 15.3 trillion, down around -6.8% on 2014. Tighter regulation over the shadow banking sector has contributed to this decline, with traditional bank finance rising by 4.8% yoy over this period.

Key components of the shadow banking sector contracted in 2015 – with entrusted loans declining by -37% and trust loans by -92% compared to 2014.

We expect two cuts to interest rates in 2016 – bringing the benchmark one year lending rate to 3.85% by midyear. Similarly further cuts to the Required Reserve Ratio are likely to maintain liquidity in the finance sector, with capital outflows likely to continue in the short term.



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# **Carbon and Commodities**

- Crude Oil Prices plunge below \$30, the lowest levels since 2003
- The most recent drop follows realization that additional Iranian supply is imminent with the lifting of trade sanctions
- Global oversupply conditions remain, but it is expected uneconomic crude producers will face forced closures soon
- Metal prices have followed oil's lead, also driven by oversupply and anticipated reduction in China demand

		Change	Change	Change	Change
Commodity	US\$	(US\$)	(Fortnight)	(Month)	(Year)
Brent Crude	28.31	-0.44	-17.29%	-22.12%	-44.45%
WTI Crude	26.55	-1.78	-26.19%	-23.55%	-45.43%
Copper	4,360	-48.85	-5.67%	-7.03%	-33.07%
Zinc	1,478	-23.37	-3.71%	-1.99%	-32.26%
Aluminium	1,468	-12.89	-0.53%	-2.28%	-23.86%
Tin	13,524	212.28	-2.20%	-8.56%	-33.68%
Nickel	8,533	-42.78	-0.53%	-2.35%	-47.37%

If red means blood then commodity producers across the board are surely bleeding heavily, as the entire price board is heavily coloured rouge. It has been an horrific start to the year for oil producers with crude prices falling over 30% from near \$40 to below \$27 since 1 January. Renewed concern and focus on the Chinese economic slowdown and the likely fall in demand coupled with the current oversupply condition about to be compounded by the imminent fresh supply of Iranian crude has driven an already weak market lower.

Venezuela is very much feeling the pain and has requested an emergency OPEC meeting to address the falling prices. It is unlikely that such an emergency meeting will eventuate despite it legally only requiring a simple majority, because of the lack of support from the Saudis and other top Gulf producers. There is unwillingness from OPEC to agree production cuts anyway, when non-OPEC producers have so far resisted cuts themselves.

The OPEC market share strategy adopted in late 2014 is a long term play, aimed at forcing high cost producers permanently out of the game. So far production has not slowed, in fact the response has been to increase volumes in order to generate sufficient revenues at these lower prices. However, all producers except for the Saudis and other gulf states are operating at huge losses, with most production costs in excess of \$40. A prolonged period in the sub \$30 price zone will definitely force producers out of the game and start a self-correction in the global oversupply, and then ultimately prices should also stabilize.

The CFTC commitment of traders report, shows the speculative community is at all time short positioning in Brent crude. This creates major upside price risk when the supply/demand fundamentals ultimately swing back favouring a lift in prices.

Diesel prices in NZ are down near NZ30c/I, following falls in Crude Prices. Unfortunately the forward curve remains unattractively steep, but given the extreme low levels of spot, it seems reasonable for consumers to increase hedge activity given the asymmetrically favourable risk/return at these price levels.





Metal prices are also at 13 year lows, driven more from the slowdown in China activity, with the market not seemingly as oversupplied as the oil markets. China's large tin producers have agreed to cut production by 17,000 tonnes this year, which is equal to about 1 month's production. The low Nickel prices have also forced the closure of several large producers, which will also assist in rebalancing any oversupply.

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# NZD: An Update on BNZ Models

- NZD/USD has overshot BNZ's updated long-term fair value (PPP) estimate of 0.69 to the downside, while NZD/AUD continues to trade above PPP of 0.90. These PPP estimates anchor our medium term exchange rate projections.
- Our short-term NZD/USD model suggests current fair value is around the 0.62 mark. We project the NZD/USD to fall to around 0.60 by mid-year, before forming a base and recovering through next year.
- We now have two short-term NZD/AUD models. Both currently suggest fair value around the 0.9000-0.9150 mark. We project NZD/AUD to fall this year, reaching 0.88 towards the end of the year.

Early this week NAB published its latest Global FX Strategist publication with revised forecasts, including fresh NZD and AUD projections. In my NZD corporate FX update I reproduced these, although note that the NZD/EUR and NZD/GBP rates weren't properly updated, so the correct figures are updated in the table below.

BNZ For	eign Ex	change	e Forec	ast Sun	nmary		
Majors	EUR/USD	USD/JPY	GBP/USD	NZD/USD	AUD/USD	AUD/NZD	USD/CN
Current	1.09	117	1.43	0.65	0.69	1.07	6.58
Mar-16	1.09	115	1.42	0.62	0.67	1.08	6.60
Jun-16	1.07	116	1.39	0.60	0.66	1.10	6.70
Sep-16	1.06	118	1.36	0.61	0.68	1.11	6.75
Dec-16	1.07	121	1.39	0.61	0.69	1.13	6.80
Mar-17	1.07	123	1.39	0.61	0.69	1.13	6.80
Jun-17	1.08	124	1.42	0.62	0.70	1.13	6.75
Sep-17	1.09	124	1.44	0.63	0.72	1.14	6.75
Dec-17	1.10	123	1.45	0.65	0.73	1.12	6.70
Mar-18	1.12	122	1.45	0.66	0.74	1.12	6.70
Jun-18	1.13	121	1.47	0.67	0.75	1.12	6.70
Sep-18	1.14	120	1.46	0.68	0.75	1.10	6.70
Dec-18	1.15	119	1.47	0.69	0.76	1.10	6.70
NZD			NZD/GBP	NZD/USD			NZD/CN
Current	0.59	76	0.45	0.65	0.94	72	4.25
Mar-16	0.57	71	0.44	0.62	0.93	69	4.09
Jun-16	0.56	70	0.43	0.60	0.91	68	4.02
Sep-16	0.58	72	0.45	0.61	0.90	69	4.12
Dec-16	0.57	74	0.44	0.61	0.88	69	4.15
Mar-17	0.57	75	0.44	0.61	0.88	69	4.15
Jun-17	0.57	77	0.44	0.62	0.89	69	4.19
Sep-17	0.58	78	0.44	0.63	0.88	70	4.25
Dec-17	0.59	80	0.45	0.65	0.89	71	4.36
Mar-18	0.59	81	0.46	0.66	0.89	72	4.42
Jun-18	0.59	81	0.46	0.67	0.89	72	4.49
Sep-18	0.60	82	0.47	0.68	0.91	73	4.56
Dec-18	0.60	82	0.47	0.69	0.91	74	4.62

Source: BNZ, Bloomberg

The depreciation in the NZD is expected to continue on many of the crosses through much of 2016, front-loaded as we have seen so far this year – the key drivers reflecting low risk appetite, weak commodity pricing, and the risk of further RBNZ easing. The prospect of weaker Asian currencies continuing, linked to the likely ongoing devaluation of China's yuan, is another potential driver of downside for the NZD. While I made only minor forecast revisions for the NZD/USD exchange rate over the near term, I upgraded the medium-term assessment, based on some fresh modelling work.

Having recently joined BNZ I thought I'd outline my preferred modelling framework and how it relates to the current economic environment. In the interest of space and readability, I'll spare you all the gory details on theoretical underpinnings and differences in methodology and simply outline how I do things.

I'm a firm believer that in the long run, purchasing power parity anchors exchange rates. What this means in practice is that a real exchange rate between two countries will oscillate around a trend that is determined by the average nominal exchange rate adjusted for relative inflation between those countries.

I prefer to use a 15-year moving average exchange rate and CPI measures adjusted for major tax changes like GST. A longer period has better theoretical underpinnings, but structural breaks in an economy can throw off misleading readings. Relative productivity differences between countries over time can also affect exchange rates, which a longer-term PPP estimate will fail to pick up. I like to use a consistent framework across multiple markets and think that a 15-year average is a good compromise.

The first chart shows the real exchange rate between NZ and the US, and a trend estimate based on PPP, including error bands of two standard deviations. Incidentally, over the last 15-years or so, the average CPI for NZ and the US has been similar. In my framework, this means that the current PPP fair-value exchange rate is close to the average nominal exchange rate over the period, which is between 0.68-69. The current spot rate is 0.65. Therefore, on my calculations, the NZD is 6% "cheap" against the





USD on this long-term fair value measure. The NZD has spent much of the last 12 years in "expensive" territory, but the large depreciation of the NZD since early 2014 has now moved the NZD into cheap territory.

The second chart shows the NZD/AUD real exchange rate. Over the last 15 years, the average nominal exchange rate is around 0.85. But NZ's inflation rate has tracked consistently below Australia's over that period, so the NZD/AUD PPP exchange rate is close to 0.90. Therefore, at the current spot of 0.93, the NZD/AUD exchange rate is 3% overvalued on a PPP basis.

Looking forward, on my methodology there are two ways the PPP exchange rate can change. Firstly, if the current spot rate is above the spot rate of 15-years ago, then the PPP rate will naturally increase over time, as the dated figures drop out of the calculation; and secondly, if NZ's inflation rate tracks lower than the US or Australia then the PPP rate will increase.

My PPP exchange rates are expected to rise over time as the relatively low NZD exchange rates of 15-years ago drop out of the calculation. With a higher inflation target than NZ, there will be an added boost to the NZD/AUD PPP rate as NZ's inflation rate remains below that of Australia.

The following table shows my PPP exchange rates for various NZD crosses. Because of the inexact science, I have rounded the figures.

Spot And PPP Exchange Rates, NZD Versus:										
	USD	EUR	JPY	AUD	GBP	CAD	CNY			
Spot	0.65	0.59	75.72	0.93	0.46	0.94	4.26			
PPP	0.69	0.54	62.71	0.90	0.45	0.79	5.20			
% diff	-6	11	21	3	1	18	-18			

On my PPP model, the NZD is very expensive against JPY and CAD, somewhat expensive against EUR, within a few percent of fair value against the AUD and GBP, somewhat cheap against the USD and very cheap against the CNY. Long-term PPP estimates provide some sort of anchor to our medium-term exchange rate forecasts. Over-time, we'd expect the NZD to drift towards those PPP estimates, but it can take a long time and there can be significant periods of under or over-valuation. Over the short-term, the PPP estimates would be only given a passing thought in terms of our forecasts. For example, we expect NZD/USD to continue to track lower this year towards 0.60, moving further away from PPP and becoming even cheaper on this model.

Moving on to our short term modelling framework, I've used BNZ's previous modelling work as a base and tried to improve upon that work.

My preferred NZD/USD model tries to explain the currency as a function of risk appetite, NZ commodity prices and a short term interest rate differential between NZ and the US.

BNZ's previous model was similar. However, it used a risk appetite measure that was based solely on the VIX index. I've used a broader risk appetite measure based on the VIX index, the spread on emerging market government bonds and the spread on US high yield credit (see next chart). This makes the model less sensitive to the VIX index.



The other modifications are more in the nature of tweaks – using the CBA commodity price index based in USD rather than SDRs (to avoid any possible distortions with changing weights in the SDR basket) and extending the estimation period a couple of years to reflect new information.

The interest rate differential used remains unchanged – the NZ 1-year swap rate less Krippner's US shadow short rate. With US short rates now above the zero lower bound in the future I might look to use a more conventional US interest rate series, but certainly over the period of zero US rates, using the shadow short rate significantly enhances the model.



The next chart shows the NZD/USD against the model estimate based on a simple regression against the explanatory variables. Whereas the old model showed some large residuals over the last few years, the new model does a better job of explaining history. Current fair value on the new model is close to 0.62.



Finally, I've done some work on BNZ's NZD/AUD short term fair value model. The existing model explained the NZD/AUD cross rate as a function of the NZ-Australia 2-



year swap differential, relative NZ/AU commodity prices and relative NZ/AU business confidence.

While that model was estimated over a fairly short 3-year period 2011-2014, I extended the estimation period back to 2004 to hopefully produce some more robust estimates. These are produced in the next chart. Current fair value on this model is around 0.90.

While the model has some merits, in working with the model I found some stability issues when trying to look back further in time. This prompted me to think of a different formulation. I wanted to include some sort of relative growth or unemployment variable, as that seemed to have a good correlation with the cross rate (see next chart).



The model I ended up with was the NZD/AUD as a function of the relative NZ/AU CPI index (to capture the PPP underpinnings), the difference in unemployment rates and the difference in the 2-year swap rate.

The fit is not as good as the first model, but I was able to get more stable estimates over a longer time period, giving me more confidence in its output. The beauty of the model is that BNZ and NAB produce forecasts of all the input variables, so the exchange rate can be directly forecast by the model.

The output of this second model is shown in the next chart. Current fair value on this model is 0.9160, not far off the first model. Plugging BNZ/NAB's projections for the driving factors, gives a pretty flat profile for the cross rate going forward, with fair value in a broad 0.90-0.92 range. This is because we expect little change in the interest rate differential, while relatively better projected labour market conditions in Australia provide an offset to projected higher inflation in Australia compared to NZ.

We will keep clients abreast of what these models tell us. They are a useful tool and provide a good framework to think about currency movements, which inherently can be difficult to explain in real time. We'll look to expand and

## Strategist

improve upon the model suite, although some preliminary work on NZD/JPY did not prove as fruitful as expected.



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## **FX Momentum Model**

Model favours shorting the commodity currencies

- Momentum trading has been a profitable strategy of late.
- The NZD and AUD have been trashed so far this year and this is reflected in the momentum model positioning. The model went short NZD on all the key crosses at various stages over the last few weeks and is currently in the money on all of them except for NZD/GBP.
- The model is short AUD/USD and AUD/JPY, reflecting the weakening AUD. The long USD/CAD position entered into more than 2 months ago has been highly profitable.

The model likes Yen, neutral on EUR

 On the other major crosses, the model is neutral on EUR/USD and would go long just over the 1.10 level.
 The short USD/JPY position entered 6 weeks ago is working well, as is the short GBP/USD position.

#### **BNZ Foreign Exchange Momentum Model**

Our momentum model is used primarily as an indicator of speculative account activity, as opposed to a trading tool. The model provides some indication of the levels at which speculative accounts may be entering into long or short positions in the major currencies. It can also provide a steer on how basic trend following/momentum accounts are positioned.

The basic trading algorithm our model uses is as follows:

- 1. Buy if the price breaks above recent ranges, or sell if it breaks below recent ranges.
- In exiting a position, the model uses a trailing stop. The stop is set at the previous10-day high or low, but with an additional adjustment factor that sets a wider stop when markets are more volatile.

Together, these two conditions constitute the core of any momentum model, whose central premise is that a break outside of a range indicates that the price will continue in the direction of the break. A couple of extra conditioning filters have been added to our momentum model to try to stop the model reacting to false breaks.

	FX Momentum Model Positions												
20-Jan-16													
Currency pair	Position	Entry date	Entry level	Mkt	Return	Stop	Long trigger	Short trigger					
NZD/USD	Short	08-Jan-16	0.6591	0.6430	2.4%	0.6709							
NZD/AUD	Short	14-Jan-16	0.9320	0.9310	0.1%	0.9488							
NZD/EUR	Short	08-Jan-16	0.6051	0.5904	2.4%	0.6242							
NZD/GBP	Short	14-Jan-16	0.4477	0.4531	-1.2%	0.4590							
NZD/JPY	Short	05-Jan-16	79.75	75.19	5.7%	79.92							
AUD/USD	Short	06-Jan-16	0.7097	0.6908	2.7%	0.7172							
AUD/JPY	Short	14-Dec-15	86.80	80.78	6.9%	85.41							
DXY	Neutral	07-Jan-16	98.28	99.09			99.63	97.80					
EUR/USD	Neutral	15-Jan-16	1.0970	1.0890			1.1004	1.0711					
GBP/USD	Short	17-Dec-15	1.4895	1.4192	4.7%	1.4682							
USD/JPY	Short	09-Dec-15	122.23	116.94	4.3%	119.17							
USD/CHF	Neutral	11-Jan-16	0.9907	1.0043			1.0125	0.9853					
USD/CAD	Long	06-Nov-15	1.3280	1.4504	9.2%	1.3974							
Notes:	Notes: This portfolio represent hypothetical, not actual, investments. Reported returns do not include the cost-of-carry. All trades are entered and exited at triggered levels												

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## The BNZ OIS-ter: Easier Policy In Focus

- The US Federal Reserve projected four 25bps of rate hikes this year, but the plunge in oil prices, soft activity and inflation data, and poor market sentiment have seen market pricing for 2016 reduce from two hikes to just one hike.
- For the UK, market expectations for monetary policy have turned around completely. In December, the BoE looked on track to be the next cab off the rank in terms of raising rates, with the risk apparently rising through late 2016 into 2017. Currently, a small chance of a rate cut has been priced in.
- In Australia, the market has moved towards having more conviction on a further rate cut. A full 25bp cut is now priced in by June, with a 40% chance of a rate cut by March.
- The same trend is evident in NZ, recently fuelled by the very weak Q4 CPI result. A full 25bp cut is now priced in by June, with a 60% chance of a cut by March.

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Australia











## Interest Rate Strategy: NZ Fixed Income – Supply Snapshot

- Kauri issuance likely to dominate supply ahead of LGFA and NZDMO tenders in mid-Feb
- Kauri issuance so far well received, despite global market ructions
- Overall NZGB issuance fairly constrained in H1
- LGFA supply may find demand if LGFA-NZGB spreads are near current levels
- · Corporate issuance likely to remain muted

Against the always uncertain demand outlook, it's worth revisiting the basic supply dynamics for NZ fixed income.

The supply drought for NZGBs and LGFA bonds will not be broken for another month. The first NZGB nominal bond tender is scheduled for 18 Feb, while the LGFA's first tender is to take place on the previous day.

However, Kauri issuers have burst out of the starting blocks, as is traditional at this time of the year. (*Entering the Kauri Season*). So far, IFC, World Bank, IADB and EDC have come to market, with upsized deals. NZD1.175b has already been issued.

More will likely follow, given positive investor response to these first three issues. Mid-curve swap spreads are still fairly supportive. The greatest risk to issuance would be further general stress in global credit markets. We note the Aussie iTraxx has broken through the September highs, packing the 150 mark this week. We would be surprised to see this year's early year issuance match last year's. In 2015, NZD2.7b of bonds were issued during the Kauri season of Jan-Feb, in what was ultimately a record year of NZD6.3b of issuance.

Kauris are likely to enjoy the limelight until the LGFA and NZDMO return to the nominal bond market in the third week of February. But even then, NZDMO issuance will come in a trickle rather than a rush. Only NZD400m of nominal bonds are scheduled for issuance in Q1. However, we will also be on the alert for indications from the NZDMO that it is progressing toward syndication of its new NZGB 2025, scheduled for some time in H1.

The LGFA last issued on 9 Dec. In the year ahead, issuance is scheduled around every five to six weeks. NZD1.4b was issued over the course of last year, concentrated in the LGFA 2027 maturity. We suspect that further long-dated issuance may be in the offing, given this remains one of the LGFA's smallest lines.



A lot can happen over the next few weeks, before the tender, but LGFA-NZGB relative valuations have certainly improved in recent weeks, along with the widening of NZ swap-bond spreads. LGFA-NZGB 2027 spreads, now around 90bps, are likely to encourage demand. This is especially true, given LGFA's monopoly of long-dated high-grade credit issuance (Kauris predominatly issue at the mid-curve).

There is no corporate bond issuance to speak of so far this year. Corporate supply will likely remain muted. Corporate bond issuance was limited in 2015. Just NZD1.7b of non-financial corrporate bonds were issued. Inclusive of financials, NZD6.7b of corporate bonds were issued, in the backdrop of NZD5.7b of maturities.

This year, our database suggests there are around NZD4.8b of corporate bonds are schedueld to mature, of which NZD2.7b are financials and NZD2.1b corporates. This may prompt some replacement issuance. However, overall macro-economic data and anecdote suggest that non-financials will not be aggressively extending borrowing this year. Other forms of issuance such as the US PP market will also remain in competition as a funding source.

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## **Global Credit Indices**



## NZ Economic Review

Since our last Strategist, of 17 December 2015, the local data have broadly supported our belief that the economy is growing relatively well again, after a slow 2015 H2, albeit with still mild CPI inflation, on balance.

#### ANZ Business Survey (Dec) – 18 December

New Zealand's business community became even more assured, in December, that the way ahead is looking good to great, after a curious winter of discontent. Net confidence improved further – to +23.0, from +14.6 in November. The survey was consistent with GDP expanding around 3% at an annual rate. Pricing intentions edged up to +23.6, from +22.2 in November. However, general inflation expectations remained relatively subdued, at 1.64%.

#### WMM Consumer Confidence (Q4) – 21 December

This index of consumer sentiment increased to 110.7, from 106.0. This was a half-hearted bounce...to a level approximately at its 10-year average. We anticipated a bit more than this.

#### Int'l Travel and Migration (Nov) – 21 December

Net immigration hit a new all-time high in November, of a seasonally adjusted 6,260. While there were hints of slower growth in migrant arrivals, overall, this was more than offset by a renewed slump in departures.

Short-term visitor arrivals, meanwhile, also continued to defy predictions of a slowdown from prior strength. Their number in November was 11% up on a year ago. Within this, arrivals from China rose a staggering 48%.



#### Merchandise Trade (Nov) – 23 December

Goods exports in November, of \$4.08b, were 1% higher than a year earlier, despite slippage in commodity export prices. November's imports, excluding oil and lumpy transport items, were up 10% on a year ago. All of this was consistent with the economy expanding relatively well in Q4. November's merchandise trade figures also aided our view that the current account deficit is stabilising for the meantime, at around 3.3% of GDP.

#### Credit Aggregates (Nov) – 23 December

There was a fractional slowdown in November's household credit growth for the month – to 0.6%, from 0.7%. This was not surprising, given the Auckland investor lending restrictions that were tightened 1 November. Even so, annual growth in household credit picked up to 7.2%, from 6.9% in October. Annual growth in agriculture credit remained relatively strong – albeit down to 8.8%, from 9.0% - while for the business sector remained robust at 6.0% y/y.

#### Building Consents (Nov) – 11 January

New Zealand's new dwelling consents rose a seasonally adjusted 1.8% in the month of November. While this was flattered by a spike in consents for retirement village units – and apartments, largely in Wellington – the underlying trends remained positive. Compared to a year ago new dwelling consents were up 17% in November. On this basis, Auckland was steady, Canterbury was fading to the negative, but the likes of Waikato, Bay of Plenty, Otago (and Wellington, aided by the apartments) were expanding with gusto.



Non-residential building consents also remained broadly robust. In November their value was 25% higher than a year prior. All up, November's building consents were in line with our view that the construction industry is on the up again, overall, after something of a pause for breath through much of 2015.

#### ANZ Commodity Export Prices (Dec) – 12 January

December's ANZ commodity (export) price index, in world price terms, fell 1.8%. Dairy prices were the biggest drag, easing a further 3.5% in the month. Beef and wool prices eased 4.9% and 1.4% respectively. However, lamb prices rose 1.7% and skins/hides 2.0%. Horticulture prices fell 3.6% but log prices lifted 4.6% (underpinned by China, interestingly enough). Over calendar year 2015, the ANZ commodity price index, in world price terms, decreased 12.9%. But, because of the concurrent fall in the currency, prices in NZ dollar terms were down a mild 1.1% over the year.

#### QVNZ Housing Report (Dec) – 13 January

Overall, the QVNZ house price index for (the three months to) December 2015 was up 14.2% on a year ago. This was a bit slower than the 15.0% annual inflation recorded for November, as the quarterly progression eased to 2.9%, from 4.0%.

#### Electronic Card Transactions (Dec) – 14 January

Market expectations were that December's electronic card transactions would increase 0.5% in their retail component. Instead, they eased 0.2%. As for the total value of transactions, they rose a bare 0.1%, seasonally adjusted, compared to our expectation of +0.5%. Nonetheless, we are still able to estimate 0.6% growth in Q4 retail trade volumes, to follow their 1.6% jump of Q3. This would establish annual growth of 4.4%.

#### Food Price Index (Dec) - 15 January

New Zealand's Food Price Index declined 0.8% in the month of December, 2015. This was weaker than we had figured on (mainly on downward surprises in chicken and coffee prices).

#### QSBO (Q4) – 19 January

We were looking for a high-five from this latest NZIER Quarterly Survey of Business Opinion. We were not left hanging. Its net confidence measure rebounded to a solid +15, after its shaky -14 of Q3. The QSBO's real activity indicators improved, to be looking quite solid now. Capacity constraints were evident. Pricing variables edged up, but were still relatively subdued.



#### Dairy Auction – 20 January

The GDT price index fell a further 1.4% (-10.5% y/y). However, given the number of negative factors floating around this was arguably not so bad a result. There remains a clear risk of Fonterra having to pare its milk price forecast for 2015/16, presently \$4.60. We stick with our \$4.50 forecast, while stressing that it's still dependant on a decent recovery in prices this year.

#### CPI (Q4) – 20 January

The NZ Q4 CPI certainly looked weak. It dropped 0.5%, compared to expectations by the market, the RBNZ, and us, of a 0.2% fall. This dragged annual inflation down to 0.1%, from 0.4% in Q3. Following the negative surprise, we now expect annual CPI inflation to be 0.3% in Q1,

0.5% in Q2 and 0.7% in Q3. This will test the Reserve Bank's resolve to look through transitory weakness in CPI inflation, to relatively robust core inflation.



#### **REINZ Housing Report (Dec) – 20 January**

The Real Estate Institute's results for December provided further evidence that while Auckland's inflation looks to be cooling much of the rest of the country is now experiencing a strong pick up.

#### ANZ Job Ads (Dec) – 21 January

After sizable monthly increases in September (+2.3%)October (+1.3%) and November (+2.4%) ANZ job ads increased 1.1% in December. That's a massive run now.

#### BNZ Manufacturing PMI (Dec) – 21 January

The Performance of Manufacturing Index did itself proud in December. At a seasonally adjusted 56.7, from 54.9 in November, it was well above its long-term norm of 53.0. As such it continues to distance itself from the struggles that the global manufacturing sector is undergoing.



#### ANZ-RM Consumer Confidence (Jan) – 21 January

The 2.3% rise in this measure of consumer confidence in January, to 121.4, was largely seasonal. Even so, it implied a core level close to its long-run average. This is consistent with the steady growth we now forecast for personal consumption, rather than a noticeable tailing off, as we did previously.

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# NZ Upcoming Data/Events

#### Holiday (partial), Wellington Anniversary – 25 January

#### Crown Financial Accounts (Nov) - 26 January

These will be the first monthly results to compare to the (15 December) Half-year Economic and Fiscal Update. There is still potential for the government to avoid the (slight) operating deficit it's now forecasting for 2015/16. However, our more immediate focus will be on November's tax revenue, to see if it has maintained its recent robustness.

#### BNZ Services PSI (Dec) - 26 January

Today's PMI has set a good example. But just remember that the Performance of Services Index roared back to all of an 8-year high in November, with 59.8. It might be hard pressed to match that. But anything in the high 50s would be good enough by us.

#### **RBNZ OCR Review – 28 January**

The weaker than expected Q4 CPI outturn puts pressure on the Reserve Bank to send a clear message at this OCR Review. Either it doubles down on the PTA-flexibility framework it came out swinging with at its December MPS. Or it states that it is getting nervous, again, with particular focus now on the low headline CPI inflation. We still lean to the side of the Bank sticking to its guns. However, the risks of the Bank opening the door for further OCR easing are enlarging.

#### Merchandise Trade (Dec) - 28 January

The combination of a 1.1% y/y drop in commodity export prices (in \$NZ terms) and reports of solid dairy export volumes in December 2015, has us anticipating a 2% increase in merchandise export values, y/y. For merchandise imports we are looking for a flat result, y/y - although up 11% when excluding oil and big transport items. This would yield a monthly deficit of \$112m, compared to -\$200m in December 2014.

#### New Residential Lending (Dec) - 28 January

These relatively new flow figures on new residential lending picked up to an annual pace of 25.6% in November (having slowed to 19.8% in October). Further evidence that new mortgage borrowing is not exactly cooling off will probably be an affront to the RBNZ.

#### Building Consents (Dec) – 29 January

Building consents are in the process of taking another leg higher, after largely consolidating over the period mid-2014 to mid-2015. We expect December's consents to affirm this new upswing – regards both residential and non-residential building activity.

#### Credit Aggregates (Dec) - 29 January

Perhaps the most interesting number in December's credit aggregates will be household credit. It has the potential to slow further, after the recently tweaked LVR rules, and amid signs that Auckland's housing market is

losing some of its heat. However, there is also evidence of a pick-up in housing markets outside of Auckland, which could sustain firm growth in housing credit (which was 7.5% y/y in November).

#### Holiday (partial), Auckland Anniversary – 1 February

#### Int'l Travel and Migration (Dec) – 1 February

It's hard to see what will cause net immigration to begin tailing off from its recent record highs. Even the souring global situation might simply reinforce a low departure rate and a relatively high rate of migrant arrivals.

As for short-term visitor arrivals, their expansion remained strong in December. We'd guess a 10% lift when compared to December 2014. Arrivals from China remain at the forefront of this boom.

### ANZ Commodity Prices (Jan) – 2 February

With the Global Dairy Trade auction prices continuing to dribble off, and indicators for non-dairy commodity export prices becoming more mixed, we are braced for further slippage in these ANZ indices (albeit with a softer NZD acting as a buffer).

#### Dairy Auction – 3 February

Any further fall in prices at this auction will put added downward pressure on the price paid to NZ farmers for their milk.

#### Labour Market Reports (Q4) - 3 January

We took the view that the September quarter fall in the Household Labour Force Survey's measure of employment was a (technical) wobble rather than an end to the broader upswing. We are even more of this mind, having seen the QSBO labour market pointers. Indeed, there now seems upside to the 0.5% increase we anticipate for the HLFS jobs measure. It should be enough to limit the unemployment rate to 6.1%, from Q3's 6.0%, in the context of a higher participation rate, and migrationfuelled expansion in the labour force.



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## **Quarterly Forecasts**

Forecasts as at 21 January 2016

## **Key Economic Forecasts**

Quarterly % change unless otherwise specified

					_					
	Sep-14	Dec-14	Mar-15	Jun-15	Sep-15	Dec-15	Mar-16	Jun-16	Sep-16	Dec-16
GDP (production s.a.)	0.9	0.9	0.2	0.3	0.9	0.7	0.5	0.6	0.5	0.6
Retail trade (real s.a.)	1.5	1.9	2.0	0.1	1.6	0.6	0.5	0.4	0.5	0.5
Current account (ytd, % GDP)	-2.5	-3.1	-3.4	-3.4	-3.3	-3.2	-3.3	-3.4	-3.6	-3.6
CPI (q/q)	0.3	-0.2	-0.2	0.4	0.3	-0.5	0.1	0.6	0.5	-0.1
Employment	1.0	1.1	0.6	0.1	-0.4	0.5	0.6	0.6	0.7	0.8
Unemployment rate %	5.6	5.7	5.8	5.9	6.0	6.1	6.2	6.3	6.4	6.3
Avg hourly earnings (ann %)	2.9	3.0	2.6	3.2	2.7	3.0	3.1	2.7	2.8	2.7
Trading partner GDP (ann %)	3.8	3.5	3.4	3.3	3.3	3.3	3.2	3.4	3.4	3.5
CPI (y/y)	1.0	0.8	0.3	0.4	0.4	0.1	0.3	0.5	0.7	1.1
GDP (production s.a., y/y))	3.7	4.1	3.0	2.4	2.3	2.1	2.4	2.7	2.3	2.2

Forecasts

### **Interest Rates**

Historical data - qtr average		Govern	ment Sto	ck	Swaps			US Rate	s	Spread
Forecast data - end quarter	Cash	90 Day	5 Year	10 Year	2 Year	5 Year	10 Year	Libor	US 10 yr	NZ-US
		Bank Bil	ls					3 month		Ten year
2014 Dec	3.50	3.65	3.80	4.05	3.90	4.15	4.35	0.25	2.25	1.75
2015 Mar	3.50	3.65	3.25	3.40	3.65	3.70	3.80	0.25	1.95	1.40
Jun	3.45	3.50	3.15	3.50	3.30	3.60	3.90	0.30	2.15	1.35
Sep	2.95	3.00	2.75	3.20	2.85	3.15	3.65	0.30	2.20	1.00
Dec	2.70	2.85	2.85	3.35	2.75	3.10	3.60	0.40	2.20	1.15
Forecasts										
Mar	2.50	2.70	2.90	3.55	2.70	3.25	3.90	0.60	2.50	1.05
Jun	2.50	2.65	3.15	3.85	2.80	3.45	4.15	0.90	2.75	1.10
2016 Sep	2.50	2.65	3.20	3.80	3.10	3.60	4.20	1.10	2.75	1.05
Dec	2.50	2.70	3.25	3.80	3.30	3.75	4.30	1.45	2.75	1.05
Mar	2.50	2.70	3.50	3.95	3.60	4.00	4.45	1.75	3.00	0.95
Jun	2.75	3.15	3.60	4.05	3.80	4.10	4.55	2.00	3.00	1.05
2017 Sep	3.00	3.45	3.65	4.10	3.90	4.15	4.60	2.50	3.00	1.10
Dec	3.25	3.65	3.70	4.10	3.90	4.20	4.60	2.75	3.00	1.10
Mar	3.50	3.75	3.85	4.20	4.10	4.30	4.65	2.95	3.00	1.20

## **Exchange Rates (End Period)**

### **USD** Forecasts

	EUR/USD	USD/JPY	GBP/USD	NZD/USD	AUD/USD	NZD/EUR	NZD/JPY	NZD/GBP	NZD/USD	NZD/AUD	TWI-17
Current	1.0878	117.12	1.4197	0.6461	0.6939	0.5940	75.67	0.4551	0.6461	0.9311	71.54
Mar-16	1.0900	115.00	1.4200	0.6200	0.6700	0.5688	71.30	0.4366	0.6200	0.9254	69.05
Jun-16	1.0700	116.00	1.3900	0.6000	0.6600	0.5607	69.60	0.4317	0.6000	0.9091	67.66
Sep-16	1.0600	118.00	1.3600	0.6100	0.6800	0.5755	71.98	0.4485	0.6100	0.8971	68.73
Dec-16	1.0700	121.00	1.3900	0.6100	0.6900	0.5701	73.81	0.4388	0.6100	0.8841	68.67
Mar-17	1.0700	123.00	1.3900	0.6100	0.6900	0.5701	75.03	0.4388	0.6100	0.8841	68.61
Jun-17	1.0800	124.00	1.4200	0.6200	0.7000	0.5741	76.88	0.4366	0.6200	0.8857	69.27
Sep-17	1.0900	124.00	1.4400	0.6300	0.7200	0.5780	78.12	0.4375	0.6300	0.8750	69.73
Dec-17	1.1000	123.00	1.4500	0.6500	0.7300	0.5909	79.95	0.4483	0.6500	0.8904	71.37
Mar-18	1.1200	122.00	1.4500	0.6600	0.7400	0.5893	80.52	0.4552	0.6600	0.8919	71.80
Jun-18	1.1300	121.00	1.4700	0.6700	0.7500	0.5929	81.07	0.4558	0.6700	0.8933	72.42
						TWI Weig	hts				
						0.1087	0.0631	0.0434	0.1234	0.2198	

**NZD Forecasts** 

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

# Forecasts

Forecasts		March	Years	December Y							
as at 21 January 2016	Actu		Forecasts			Act			Forecasts		
as at 21 January 2010	2014	ais 2015	2016	2017	2018	2013	uais 2014	2015	2016	2017	
GDP - annual average % change											
Private Consumption	3.1	2.6	2.4	2.0	1.8	3.0	2.7	2.4	2.2	1.8	
Government Consumption	2.2	2.3	1.8	0.4	2.3	1.6	2.7	2.0	0.5	1.7	
Total Investment	7.2	9.7	3.3	4.4	2.6	5.2	10.9	3.4	4.5	3.3	
Stocks - ppts cont'n to growth	0.2	0.1	-0.4	0.3	0.0	0.1	0.0	-0.5	0.4	0.0	
GNE	3.9	4.1	2.3	2.7	2.1	3.2	4.4	2.2	2.8	2.1	
Exports	0.0	4.2	4.2	1.3	5.1	1.0	3.0	6.1	0.4	4.7	
Imports	8.1	7.4	2.3	2.5	3.1	6.4	7.9	3.8	1.8	3.3	
Real Expenditure GDP	1.6	3.2	3.2	2.3	2.6	1.7	3.0	3.2	2.5	2.5	
GDP (production)	2.7	3.6	2.3	2.4	2.6	2.4	3.7	2.4	2.4	2.5	
GDP - annual % change (q/q)	3.5	3.0	2.4	2.3	2.7	2.0	4.1	2.1	2.2	2.7	
Output Gap (ann avg, % dev)	0.3	1.2	1.0	0.7	0.7	0.3	0.9	1.1	0.8	0.7	
Household Savings (gross, % disp. income)	4.9	2.6	2.2	3.5	3.6						
Nominal Expenditure GDP - \$bn	231.1	239.5	248.5	259.8	273.2	226.7	238.3	246.3	256.3	270.3	
Prices and Employment - annual % change											
CPI	1.5	0.3	0.3	1.6	1.9	1.6	0.8	0.1	1.1	2.2	
Employment	3.7	3.2	0.8	2.8	2.3	2.9	3.6	0.8	2.7	2.5	
Unemployment Rate %	6.0	5.8	6.2	6.3	6.2	6.1	5.7	6.1	6.3	6.2	
Wages - ahote	2.9	2.6	3.1	2.8	3.0	3.2	3.0	3.0	2.7	2.7	
Productivity (ann av %)	0.1	0.0	0.6	0.0	0.0	0.4	0.1	0.2	0.5	-0.2	
Unit Labour Costs (ann av %)	2.6	2.1	2.3	2.7	2.8	2.2	2.4	2.4	2.3	3.0	
External Balance											
Current Account - \$bn	-5.9	-8.1	-8.2	-9.2	-9.5	-7.2	-7.5	-7.9	-9.3	-9.4	
Current Account - % of GDP	-2.5	-3.4	-3.3	-3.6	-3.5	-3.2	-3.1	-3.2	-3.6	-3.5	
Government Accounts - June Yr, % of GDP											
OBEGAL (core operating balance)	-1.2	0.2	-0.2	0.3	0.7						
Net Core Crown Debt (excl NZS Fund Assets)	25.6	25.2	26.9	27.5	26.6						
Bond Programme - \$bn	8.0	8.0	8.0	9.0	9.0						
Bond Programme - % of GDP	3.5	3.3	3.2	3.5	3.4						
Financial Variables <sup>(1)</sup>											
NZD/USD	0.85	0.75	0.62	0.61	0.66	0.82	0.78	0.67	0.61	0.65	
USD/JPY	102	120	115	123	122	103	119	122	121	123	
EUR/USD	1.38	1.08	1.09	1.07	1.12	1.37	1.23	1.09	1.07	1.10	
NZD/AUD	0.94	0.97	0.93	0.88	0.89	0.92	0.94	0.93	0.88	0.89	
NZD/GBP	0.51	0.50	0.44	0.44	0.46	0.50	0.50	0.45	0.44	0.45	
NZD/EUR	0.62	0.69	0.57	0.57	0.59	0.60	0.63	0.62	0.57	0.59	
NZD/YEN	87.1	89.9	71.3	75.0	80.5	85.1	92.6	82.1	73.8	80.0	
TWI	81.3	78.3	69.1	68.6	71.8	78.5	78.2	73.2	68.7	71.4	
Overnight Cash Rate (end qtr)	2.75	3.50	2.50	2.50	3.50	2.50	3.50	2.59	2.50	3.25	
90-day Bank Bill Rate	3.06	3.63	2.70	2.70	3.75	2.74	3.67	2.79	2.70	3.63	
5-year Govt Bond	4.11	3.20	2.90	3.50	3.85	4.23	3.66	2.90	3.25	3.70	
10-year Govt Bond	4.58	3.35	3.55	3.95	4.20	4.76	3.85	3.45	3.80	4.10	
2-year Swap	3.97	3.55	2.70	3.60	4.10	3.79	3.84	2.80	3.30	3.90	
5-year Swap	4.57	3.65	3.25	4.00	4.30	4.65	4.04	3.15	3.75	4.20	
US 10-year Bonds	2.71	2.05	2.50	3.00	3.00	2.89	2.20	2.25	2.75	3.00	
NZ-US 10-year Spread	1.87	1.30	1.05	0.95	1.20	1.87	1.65	1.20	1.05	1.10	
<sup>(1)</sup> Average for the last month in the quarter											

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

# Calendar

	Forecast	Mediar	n Last
Friday 22 January			
Euro, PMI Services, January 1st est		54.1	54.2
Euro, PMI Manufacturing, January 1	st est	53.0	53.2
UK, Retail Sales vol., December		-0.3%	+1.7%
US, Leading Indicator, December		-0.2%	+0.4%
US, Markit PMI, January 1st est		51.0	51.2
US, Existing Home Sales, December		5.20m	4.76m
Monday 25 January			
NZ, Holiday - partial, Wellington Ann	iv.		
Jpn, Merchandise Trade Balance, De	ecember		+¥380b
Germ, IFO Index, January			108.7
UK, CBI Industrial Trends, January			-7
Tuesday 26 January			
NZ, Crown Financial Statements, 4m	n-to-Nov 201	5	
NZ, BNZ PSI (Services), December			56.2
US, Shiller Home Price Index, Noven	1ber v/v		+5.2%
US, Consumer Confidence, January		96.8	96.5
US, Markit PSI, January 1st est			54.3
Wednesday 27 January			••
NZ, PM Key Speaks, Auckland Cham	ber of Comr	nerce	
Aus, CPI, Q4			+0.5%
Aus, NAB Business Survey, Decemb	er		+10
China, Industrial Profits, December y			-1.4%
US, New Home Sales, December	/ y	501k	490k
US, FOMC Policy Announcement	0.50%	0.50%	0.50%
Thursday 28 January	0.0070	0.00%	0.00%
NZ, RBNZ OCR Review	2.50%	2.50%	2.50%
NZ, Merchandise Trade, December	-\$112m	2.00%	-\$779m
Aus, Terms of Trade, Q4	ψΠΖΠΙ		-1.4%
Jpn, Retail Sales, December y/y			-1.0%
Euro, Economic Confidence, January	,		106.8
Germ, CPI, Jan y/y 1st est			+0.3%
UK, GDP, Q4 1st est			+0.4%
US, Durables Orders, December		-1.0%	flat
Friday 29 January			nat
NZ, Building Consents, December (re	es #)		+1.8%
NZ, Household Credit, December y/y			+7.2%
Aus, Private Sector Credit, December			+0.4%
Jpn, BOJ Policy Announcement, Mo		raet	+¥80T p.a.
Jpn, Industrial Production, Decembe		iger	-0.9%
Jpn, CPI, December y/y	1 131 031		+0.3%
Euro, CPI, Jan y/y 1st est			+0.2%
US, GDP, Q1 1st est		+0.9%	+2.0%
US, Employment Cost Index, Q4		10.370	+0.6%
US, Chicago PMI, January		46.0	42.9
Monday 1 February		40.0	72.5
NZ, External Migration, December s.	2		+6,260
NZ, Holiday - partial, Auckland Anniv			+0,200
Aus, CoreLogic HPI, January	•		flat
Aus, TD Inflation Gauge, January y/y	,		+2.0%
China, PMI (NBS), January			+2.0%
China, Non-manufacturing PMI, January	ian/		49.7 54.4
onina, non-manufacturing r wil, Jant	iui y		J4.4

	Last
Monday 1 Februarycontinued	
China, PMI (Caixin), January	48.2
UK, Markit/CIPS Manuf Survey, January	52.7
US, ISM Manufacturing, January	48.2
US, Personal Spending, December	+0.3%
US, Construction Spending, December	-0.4%
Tuesday 2 February	
NZ, ANZ Comdty Prices (world), January	-1.8%
Aus, RBA Policy Announcement	2.00%
Wednesday 3 February	
NZ, HLFS Employment, Q4	-0.4%
NZ, Dairy Auction	-1.4%
NZ, LCI Priv Ord Wages, Q4 y/y	+1.7%
NZ, Wheeler Speaks, Canterbury Employers Chamber of	f Commerce
NZ, HLFS Unemployment Rate, Q4	6.0%
Aus, Building Approvals, December	-12.7%
Aus, International Trade, December	-\$2.9b
China, Services PMI (Caixin), January	50.2
Jpn, BOJ Minutes, 17/18 Dec Meeting	00.2
Euro, Retail Sales, December	-0.3%
UK, CIPS Services, January	55.5
US, ISM Non-Manuf, January	55.3
US, ADP Employment, January	+257k
Thursday 4 February	12078
Aus, NAB Business Survey, Q4	flat
Euro, ECB Economic Bulletin	nat
UK, BOE Policy Announcement/Inflation Report	0.50%
US, Factory Orders, December	-0.2%
Friday 5 February	-0.2/0
Aus, Retail Trade, December	+0.4%
Aus, Otly Monetary Statement	+0.4%
Germ, Factory Orders, December	+1.5%
US, Non-Farm Payrolls, January	+ 1.5 %
US, International Trade, December	+292k -\$42.37b
	-942.370
Monday 8 February	
NZ, Holiday (obs), Waitangi Day	0.20/
Germ, Industrial Production, December	-0.3%
Tuesday 9 February	14.20/
NZ, QVNZ House Prices, January	+14.2%
US, Wholesale Inventories, December	-0.3%
US, JOLTS Job Openings, December	5,431
Wednesday 10 February	0.40
NZ, Electronic Card Transactions, January	+0.1%
Aus, Consumer Sentiment - Wpac, February	97.3
UK, Industrial Production, December	-0.7%
Friday 12 February	
NZ, Food Price Index, January	-0.8%
Aus, Housing Finance, December	+1.8%
•	
Euro, GDP, Q4 1st estimate	+0.3%
Euro, GDP, Q4 1st estimate Euro, Industrial Production, December	-0.7%
Euro, GDP, Q4 1st estimate	

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