

Dollar up, inflation down

With inflation surprising to the downside, we continue to expect that OCR hikes will come later than financial markets anticipate. However, we've brought our expectations for the Fed Funds rate forward, and revised our forecasts for the NZ dollar upwards.

Revised views on the Fed and NZ dollar

When we finalised our forecasts in late-2017, we expected that the Federal Funds rate would increase in both June and December of 2018 to reach 1.875% by year's end. However, we now expect that the Fed will raise the Funds rate 25bps at its March, June and September meetings. That would take the Funds Rate to 2.125%, leaving it a little above neutral levels. Underlying this change are several factors: recent US economic data has been positive; there has been an unexpected 4% drop in the USD that will help to support US manufacturing; finally, recent changes to US taxation rules are expected to boost investment spending.

The corollary of the US dollar's recent weakness has been a rise in other currencies, including the NZ dollar. At the same time, some of the nervousness that we saw following last year's election has faded and prices for some of our key commodity exports have lifted. Combined, these factors have seen the NZ dollar grinding higher in the early part of 2018, and at the time of writing the NZD/USD was trading at over 73 cents - much higher than we previously expected. We still expect the NZ dollar will depreciate over 2018 as the Fed hikes rates and the RBNZ stays pat. However, with the NZ dollar starting from a higher than expected point, our revised target for NZD/USD by the end of 2018 is now USD 0.65 cents (vs. 63 cents previously).

Soft December quarter inflation

Consumer prices rose by just 0.1% in the December quarter. That was below analysts' and our own forecasts for a 0.4% increase. It was also lower than the Reserve Bank's November forecast for a 0.3% rise. This soft result saw the annual inflation rate dropping back from 1.9% down to 1.6%.

Underlying this softness was widespread weakness in the prices of tradable goods, which are mostly imported. Prices in this group fell by 0.3% over the quarter, with virtually every item with some imported content coming in below our forecasts (the exception was fuel prices, which rose 6%).

There are two possible culprits here. The first is the New Zealand dollar, which strengthened through the middle part of 2017. Exchange rate movements typically affect retail prices with a lag of two to four quarters. It's likely that earlier gains in the New Zealand dollar are still flowing through into retail prices of imported products. That said, the rise in the exchange rate last year wasn't a particularly large or sustained one.

However, there continues to be a lack of price pressures for internationally-traded goods more generally. Softness in global inflation has puzzled forecasters for many years since the global financial crisis. With the world economy now on a stronger footing, many have been expecting higher inflation to follow – and a few central banks such as

Dollar up, inflation down continued

the US Federal Reserve have already started to lift interest rates in anticipation. However, there is little evidence of that inflation emerging yet. It's true that inflation rates have risen from the near-zero levels that prevailed a couple of years ago, as oil prices have been rising sharply instead of falling. But we haven't seen signs of price pressures passing through to the retail prices for the goods that New Zealand imports. That's consistent with ongoing reports of strong competitive pressures through the retail sector.

In contrast, the more persistent non-tradables component (which relates mainly to domestically produced goods and services) rose by 0.5% in the December quarter. Rents and new dwelling prices continued their steady rise. However, even in these groups, it is notable that annual inflation has failed to break higher over the past year. Annual nontradables inflation is currently sitting at 2.5% - broadly where it has been for the past 18 months, and still below its long run average.

RBNZ to stay on the sidelines for some time yet

We expect some of the softness in December's inflation result will reverse in the early part of this year. Nevertheless, it's looking very likely that inflation will remain below the RBNZ's 2% target mid-point through 2018.

While there are signs that the period of very weak global inflation that we saw in recent years is dissipating, we're certainly not in an environment where imported inflation is about to rocket higher. In addition, the continuation of strong competitive pressures in the retail sector means that the domestic prices of imported consumer goods are likely to remain soft for an extended period. The recent appreciation of the NZD since the start of this year also reinforces our expectation for softness in tradables prices through mid-2018.

The chances of a significant rise in domestic inflation also look slim. Recently released GDP figures showed that the New Zealand economy had been growing at a solid pace in recent years, with growth topping out at 4% through 2016. But even with solid domestic activity and rising pressures in the construction sector, we did not see a material lift in non-tradables inflation

Now, growth has eased off, and recent business sector indicators point to a further softening in activity through the early part of 2018. Combine those conditions with changes in government charges (like reduced costs for tertiary education and doctors' visits), and a strong rise in domestic inflation over the coming year looks like a longshot.

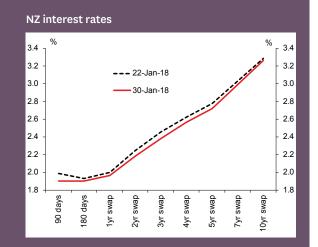
We are now well past the period of very weak inflation that we saw in the wake of the financial crisis. Nevertheless, inflation remains stubbornly below average. Furthermore, it's looking very doubtful inflation will rise back to 2% by mid-2018 like the RBNZ was expecting at the time of their November Monetary Policy Statement. Coming on top of signs that the momentum in GDP growth is fading, this makes it hard to argue for an OCR hike anytime soon.

Market pricing for an OCR hike edged back following the softer than expected CPI result and is consistent with a rate increase in the first quarter of 2019. We still think that is too soon, and maintain our forecast for the OCR remain on hold until the final quarter of 2019.

Fixed vs Floating for mortgages

For borrowers with a deposit of 20% or more, the best value lies in the two-year rate or shorter fixed terms. Three-to-five-year rates seem high relative to where we think short-term rates are going to go over that time. Some lending and deposit rates have been falling recently, so it may be worth waiting to see if there are further modest reductions in fixed-term rates.

Floating mortgage rates usually work out to be more expensive for borrowers than short-term fixed rates such as the six-month rate. However, floating may still be the preferred option for those who require flexibility



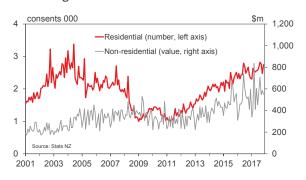
The week ahead

NZ Dec residential building consents

Feb 2, Last: 10.8%, WBC f/c: 2.0%

- Residential consent issuance rebounded in November, rising 10.8% over the month. In part, this strong result reflected some payback following earlier softness.
- Smoothing through recent month-to-month volatility, consent issuance remains at firm levels. We expect a further modest gain of 2% in December. Much of the recent strength in issuance has been centred on Auckland where there continues to be a significant shortfall of housing.
- We expect that the level of residential building activity will remain elevated for some time. However, we continue to expect that building activity will increase at a gradual pace over the next few years. As we've highlighted for some time, rising costs, as well as difficulties sourcing skilled labour and credit are acting as a brake on activity

NZ building consents

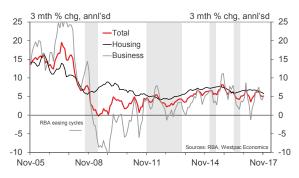


Aus Dec private credit

Jan 31, Last: 0.5%, WBC f/c: 0.4% Mkt f/c: 0.5%, Range: 0.4% to 0.6%

- Credit to the private sector grew by 0.5% in November, a touch above the 0.4% monthly average for 2017. For December, we anticipate a rise of 0.4%.
- Housing credit is slowing gradually, a trend that is likely to continue at this late stage of the cycle as the sector responds to tighter lending conditions. The 3 month annualised pace is 5.7% currently, down from 6.8% in March. In November, housing credit grew by 0.44%, 6.4%yr.
- Business credit is volatile month to month around a moderate upward trend as businesses expand investment. The November outcome was an above par increase of 0.7%. For December, we anticipate a result more in line with the 2017 monthly average of 0.3%.

Credit: momentum shift

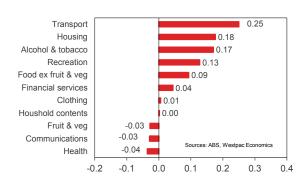


Aus Dec CPI

Jan 31, Last: 0.6%, WBC f/c: 0.8% Mkt f/c: 0.7%, Range: 0.4% to 1.4%

- The September quarter CPI came in broadly as we expected printing 0.6%qtr compared to Westpac's forecast of 0.7%. The market median was 0.8%. The annual rate moderated to 1.8%yr compared to 1.9%yr in Q2 and 2.1% in Q1. The average of the core measures, which are seasonally adjusted and exclude extreme moves, rose just 0.4%qtr and, in annual terms, was flat on Q2 at 1.9%yr.
- With a solid bump up from tobacco, auto fuel & domestic holidays but not much else, Westpac's forecast for the headline CPI is 0.8%qtr lifting the annual pace from 1.8%yr to 2.1%yr. Core inflation is forecast to print 0.5%qtr (0.54% at two decimal places) lifting the annual rate to 2.0%yr. The trimmed mean is forecast to rise 0.52%, while the weighted median forecast is 0.57%.

Contributions 2017Q4 CPI forecast



Aus Dec dwelling approvals

Feb 1, Last: 11.7%, WBC f/c: -8.0% Mkt f/c: -7.6%, Range: -12.5% to -3.0%

Dwelling approvals posted a surprise surge in Nov, up 11.7% vs expectations of a decline. The result was driven by an extraordinary spike in Vic high rise approvals that more detailed data shows centred on the CBD, Docklands and Southbank. While not down to one single 'mega project', the spike almost certainly relates to a handful of very large projects in the inner city. Approvals across the rest of Australia were much weaker, down 2.0% in the month following Oct's 8.3% drop. There looks to be some residual strength in the Vic market, with site purchases - a reasonable lead indicator for high rise activity - up in 2016-17 but still well below their 2015 peak. That said, Nov high rise approvals were an extreme high well above the state's previous peaks. As such, with conditions softening across other markets and segments, there is a risk of a sharp correction lower in Dec. We expect an 8% pull back, but a double digit monthly fall is plausible.

Dwelling approvals: houses, low-mid & high rise



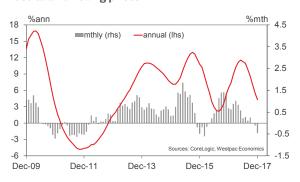
The week ahead

Aus Jan CoreLogic home value index

Feb 1, Last: -0.5%, WBC f/c: -0.3%

- Australia's housing market posted a weak finish to 2017, with prices nationally dipping 0.1% in Nov and a further 0.5% in Dec to be down 0.6% over the final quarter, the first negative quarterly result since early 2016. Annual growth slowed to 4.3%yr, an abrupt slowdown on the 11.5% peak in May. The daily index points to a further softening in January, with prices down about 0.3% nationally. As always, housing data should be treated with extra caution around the summer holiday low season as light trading means information can be less reliable. More generally, early 2018 is shaping as a key test for the market, with 'transitional' impacts from last year's macro prudential tightening set to ease. With weakening foreign buyer demand, downbeat buyer sentiment and surging apartment supply also in the mix, the market's post holiday opening performance will be an important tone setter for 2018.

Australian dwelling prices



Aus Q4 export price index

Feb 1, Last: -3.0%, WBC f/c: 2.7% Mkt f/c: 2.0%, Range: -3.5% to 3.0%

- The sharp rebound in export prices during 2016 and into early 2017 was punctuated by meaningful falls in the June and September quarters (-5.7% and -3.0%), as commodity prices eased back from recent highs. In the December quarter, global commodity prices took on a more resilient tone. In the period, the RBA commodity price index increased by 2.9% in AUD terms and was broadly flat in US dollar terms
- For Q4, we expect export prices to increase by 2.7% and be 2% higher than at the end of 2016. The terms of trade for goods, on these estimates, declined by 0.8% in the quarter, to be 2.5% below the level of a year ago. As to prices for services, an update will be available with the release of the Balance of Payments on March 6.

Commodity prices & export price index



Aus Q4 import price index

Feb 1, Last: -1.6%, WBC f/c: 3.5% Mkt f/c: 1.5%, Range: -1.5% to 5.0%

- Prices for imported goods were little changed over the past year, edging 0.4% lower, notwithstanding a drop of 1.6% in the September quarter.
- Roll forward to the December quarter, import prices likely took a step higher, increasing by a forecast 3.5%.
- The cost of imports rose as the Australian dollar dipped in the final quarter of 2017, a move which has since been reversed. In O4, the Aussie fell almost 3% to average US76.8¢ and declined by the same magnitude on a TWI basis.
- In addition, the bill for fuel imports rose as global energy prices increased in the period.

Import & export goods prices

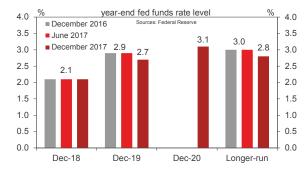


US FOMC Jan policy meeting

Jan 30-31, fed funds rate last 1.375%, WBC 1.375%

- Following the BoJ and ECB's meetings last week, this week sees the first meeting of the FOMC for 2018. It will also be Chair Yellen's last.
- The January meeting is a simple affair, the decision statement the only method of communication. Since December, a weaker US dollar; little change in term interest rates; and the passing of tax reform all warrant greater short and medium-term optimism over the outlook.
- Due to the above factors, we have revised our expectations for the FOMC.
- We look for 25bp hikes at the March; June and September meetings. At that point, the fed funds rate will be above neutral and the balance sheet unwind in full effect. This will be an appropriate time to pause and assess.

FOMC plans to keep raising interest rates



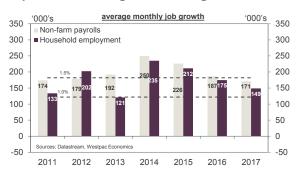
The week ahead

US Jan employment report

Feb 2, nonfarm payrolls, last 146k, WBC 170k Feb 2, unemployment rate, last 4.1%, WBC 4.1%

- Month to month volatility in nonfarm payrolls remains significant. In the December quarter, gains of 211k and 252k in October and November were followed by a 148k rise in December. The average $\,$ for the quarter was 204k, a step up from the average of the past six months and 2017 overall.
- We believe this acceleration at end-2017 is noise rather than signal, particularly given the economy is at full employment and the pace of employment growth in 2017 was well ahead of population growth. As a consequence, we look for a (still strong) 170k outcome in January. Looking ahead, 2018 is likely to see a further deceleration in employment growth to circa 155k per month, down from around 190k in 2016 and 170k in 2017.

US job creation slowing, but still strong



Data calendar

		Last		Westpac forecast	Risk/Comment
Гие 30					
NZ	Dec trade balance, \$m	-1193	-	-	Dairy exports reaching their seasonal peak.
Aus	Dec NAB business survey	-	-	-	Business conditions elevated, uneven. Confidence at average levels
Eur	Jan economic confidence	116	-	-	Very supportive of growth.
	Jan business climate indicator	1.66	-	-	Led by Germany, but optimism broad based.
	Jan EC consumer conf. (final)	1.3	-	-	Labour market and incomes key.
	Q4 GDP	0.6%	-	-	First estimate for Q4; no detail.
JK	Dec net mortgage lending £bn	3.5	-	-	The cooling in the housing market and a rise in interest rates
	Dec mortgage approvals	65.1k	-	-	have dampened lending growth.
	BOE Governor Carney speaking	-	-	-	Appearing before the UK's Economic Affairs Committee.
JS	Nov S&P/CS 20 city house prices	0.7%	0.7%	-	Annual growth robust at 6.45%yr.
	Jan consumer confidence	122.1	123.1	-	Conference Board measure; remains strong.
Ved 31					
lus	Q4 CPI, %qtr	0.6%	0.7%	0.8%	There will be a tobacco excise boost along with rising auto
	Q4 CPI, %yr	1.8%	2.0%	2.1%	domestic holiday travel & steady gains in housing. However
	Q4 core CPI, %yr	1.9%	1.9%	2.0%	competitive pressures are keeping a lid on core inflation.
	Dec private sector credit	0.5%	0.5%	0.4%	Housing slowing, business volatile around moderate trend.
hn	Jan NBS manufacturing PMI	51.6	51.5	-	External demand a key support
	Jan NBS non-manufacturing PMI	55.0	55.0	-	employment the variable to watch.
ur	Dec unemployment rate	8.7%	-	-	Will continue to drift lower.
	Jan CPI %yr	1.4%	-		Core inflation remains below 1%yr.
IK	Jan GfK consumer confidence	-13	-	_	Households remain nervous about the economic outlook.
IS	Q4 employment cost index	0.7%	0.5%	0.6%	Annual rate to hold around 2.5%yr.
	Jan Chicago PMI	67.8	63.5	-	Regional indices are falling back.
	Dec pending home sales	0.2%	0.5%	_	Supply of houses for sale to remain an issue.
	FOMC policy decision (mid-point)	1.375%	1.375%	1.375%	Chair Yellen's last meeting. Positive outlook to be maintained.
hu 1					
lus	Dec dwelling approvals	11.7%	-7.6%	-8%	Melb high rise spike to unwind, other segments weak.
	Jan CoreLogic home value index	-0.4%	-	-0.3%	Price softening continues. Jan data often less reliable.
	Q4 import price index	-1.6%	1.5%	3.5%	Import costs rise as AUD falls & global energy prices climb.
	Q4 export price index	-3.0%	2.0%	2.7%	Export prices up on lower currency.
	Jan AiG manufacturing PMI	56.2	-	-	Manuf'g sector up on construction and foods & beverages.
hn	Jan Caixin China PMI	51.5	51.5	_	A good cross-check of conditions v's NBS measure.
ur	Jan Markit manufacturing PMI (final)	59.6	-	_	Manufacturing very strong
JK	Jan Markit manufacturing PMI (final)	56.3	-	_	Watch for Sterling impact in coming months.
JS	Jan Markit manufacturing PMI (final)	55.5	_	_	More believable than ISM.
	Dec construction spending	0.8%	0.4%	_	Uncertainty over rates to limit further growth.
	Jan ISM manufacturing	59.7	58.9		Over estimating strength in economy.
	Initial jobless claims	-	-	_	Very low level.
ri 2					,
ız	Jan ANZ consumer confidence	121.8		_	Confidence has eased of late, partly due to political changes.
_	Dec building consents	10.8%	_	2.0%	Demand firm, but constraints will limit the rise in activity.
	Dec net migration	5610	_	5200	Annual migration still elevated, but is easing back.
Aus	Q4 PPI	0.2%	_	3200	Continues to show modest upstream price pressures.
	Jan non-farm payrolls	148k	180k		Employment growth to slow but remain strong
ıs		4.1%	4.1%		will see unemployment rate move lower in time.
JS				4.17()	vviii ava uhehidiovihehi igle hidve idvel ili uhie.
JS	Jan unemployment rate				
JS	Dec factory orders Jan consumer confidence	1.3%	0.6%		Underlying trend subdued; revisions to durables also due. Uni of Michegan measure; remains strong.

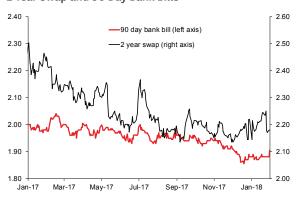
New Zealand forecasts

		Quarterly				Annual			
Economic Forecasts	20	2017		2018		Calendar years			
% change	Sep(a)	Dec	Mar	Jun	2016	2017f	2018f	2019f	
GDP (Production)	0.6	0.7	0.5	0.6	4.0	2.9	2.6	3.2	
Employment	2.2	-0.2	0.6	0.4	5.8	3.1	1.6	1.2	
Unemployment Rate % s.a.	4.6	4.5	4.5	4.6	5.3	4.5	4.7	4.7	
СРІ	0.5	0.5	0.5	0.2	1.3	2.0	1.5	1.8	
Current Account Balance % of GDP	-2.6	-2.6	-2.3	-2.4	-2.5	-2.6	-2.8	-2.3	

¹ Annual average % change

Financial Forecasts	Mar-18	Jun-18	Sep-18	Dec-18	Mar-19	Jun-19
Cash	1.75	1.75	1.75	1.75	1.75	1.75
90 Day bill	1.90	1.90	1.90	1.90	1.90	1.90
2 Year Swap	2.20	2.20	2.30	2.40	2.50	2.60
5 Year Swap	2.70	2.80	2.95	3.05	3.15	3.25
10 Year Bond	2.95	3.10	3.25	3.40	3.45	3.50
NZD/USD	0.67	0.66	0.64	0.63	0.63	0.63
NZD/AUD	0.89	0.89	0.89	0.90	0.91	0.93
NZD/JPY	77.1	76.6	75.1	74.3	74.3	74.3
NZD/EUR	0.58	0.58	0.57	0.57	0.57	0.56
NZD/GBP	0.51	0.51	0.51	0.50	0.50	0.50
TWI	71.4	70.9	69.8	69.3	69.6	69.8

2 Year Swap and 90 Day Bank Bills



NZ interest rates as at market open on 30 January 2018

Interest Rates	Current	Two weeks ago	One month ago
Cash	1.75%	1.75%	1.75%
30 Days	1.79%	1.78%	1.79%
60 Days	1.84%	1.83%	1.83%
90 Days	1.91%	1.90%	1.88%
2 Year Swap	2.18%	2.21%	2.14%
5 Year Swap	2.72%	2.71%	2.68%

NZD/USD and NZD/AUD



NZ foreign currency mid-rates as at 30 January 2018

Exchange Rates	Current	Two weeks ago	One month ago
NZD/USD	0.7318	0.7252	0.7098
NZD/EUR	0.5908	0.5945	0.5906
NZD/GBP	0.5202	0.5278	0.5263
NZD/JPY	79.73	80.56	79.90
NZD/AUD	0.9036	0.9171	0.9091
TWI	74.71	75.08	74.11

International forecasts

Economic Forecasts (Calendar Years)	2014	2015	2016	2017f	2018f	2019f
Australia						
Real GDP % yr	2.6	2.5	2.6	2.3	2.5	2.5
CPI inflation % annual	1.7	1.7	1.5	1.7	2.0	2.0
Unemployment %	6.2	5.8	5.7	5.5	6.1	6.0
Current Account % GDP	-3.0	-4.7	-2.7	-1.6	-2.2	-2.6
United States						
Real GDP %yr	2.6	2.9	1.5	2.3	2.2	2.0
Consumer Prices %yr	1.6	0.1	1.3	2.0	1.8	1.8
Unemployment Rate %	6.2	5.3	4.9	4.4	4.1	4.1
Current Account %GDP	-2.3	-2.3	-2.3	-2.6	-2.5	-2.4
Japan						
Real GDP %yr	0.3	1.1	1.0	1.4	1.1	0.9
Euroland						
Real GDP %yr	1.3	2.0	1.8	2.4	2.0	1.7
United Kingdom						
Real GDP %yr	3.1	2.2	1.8	1.6	1.6	1.5
China						
Real GDP %yr	7.3	6.9	6.7	6.8	6.2	5.9
East Asia ex China						
Real GDP %yr	4.2	3.8	3.9	4.2	4.2	4.2
World						
Real GDP %yr	3.6	3.4	3.2	3.8	3.7	3.6
Forecasts finalised 14 December 2017						

Interest Rate Forecasts	Latest	Mar-18	Jun-18	Sep-18	Dec-18	Mar-19	Jun-19	Sep-19
Australia								
Cash	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
90 Day Bill	1.79	1.77	1.80	1.80	1.80	1.80	1.80	1.80
10 Year Bond	2.83	2.70	2.75	2.90	2.85	3.00	3.10	3.05
International								
Fed Funds	1.375	1.625	1.875	2.125	2.125	2.125	2.125	2.125
US 10 Year Bond	2.65	2.60	2.75	3.00	3.00	3.00	2.90	2.75
ECB Deposit Rate	-0.40	-0.40	-0.40	-0.40	-0.40	-0.30	-0.30	-0.20

Exchange Rate Forecasts	Latest	Mar-18	Jun-18	Sep-18	Dec-18	Mar-19	Jun-19	Sep-19
AUD/USD	0.8074	0.78	0.76	0.74	0.72	0.70	0.71	0.72
USD/JPY	109.11	113	115	117	117	117	117	118
EUR/USD	1.2399	1.20	1.17	1.15	1.15	1.15	1.17	1.18
AUD/NZD	1.0873	1.10	1.10	1.10	1.11	1.11	1.11	1.11

Contact the Westpac economics team

Dominick Stephens, Chief Economist +64 9 336 5671 Michael Gordon, Senior Economist +64 9 336 5670 Satish Ranchhod, Senior Economist +64 9 336 5668 Anne Boniface, Senior Economist +64 9 336 5669 Paul Clark, Industry Economist +64 9 336 5656 Any questions email: economics@westpac.co.nz

Past performance is not a reliable indicator of future performance. The forecasts given in this document are predictive in character. Whilst every effort has been taken to ensure that the assumptions on which the forecasts are based are reasonable, the forecasts may be affected by incorrect assumptions or by known or unknown risks and uncertainties. The ultimate outcomes may differ substantially from these forecasts.

Disclaimer

Things you should know

Westpac Institutional Bank is a division of Westpac Banking Corporation ABN 33 007 457 141 ('Westpac').

This material contains general commentary, and market colour. The material does not constitute investment advice. Certain types of transactions, including those involving futures, options and high vield securities give rise to substantial risk and are not suitable for all investors. We recommend that you seek your own independent legal or financial advice before proceeding with any investment decision. This information has been prepared without taking account of your objectives, financial situation or needs. This material may contain material provided by third parties. While such material is published with the necessary permission none of Westpac or its related entities accepts any responsibility for the accuracy or completeness of any such material. Although we have made every effort to ensure the information is free from error, none of Westpac or its related entities warrants the accuracy, adequacy or completeness of the information, or otherwise endorses it in any way. Except where contrary to law, Westpac and its related entities intend by this notice to exclude liability for the information. The information is subject to change without notice and none of Westpac or its related entities is under any obligation to update the information or correct any inaccuracy which may become apparent at a later date. The information contained in this material does not constitute an offer, a solicitation of an offer, or an inducement to subscribe for, purchase or sell any financial instrument or to enter a legally binding contract. Past performance is not a reliable indicator of future performance. Whilst every effort has been taken to ensure that the assumptions on which the forecasts are based are reasonable, the forecasts may be affected by incorrect assumptions or by known or unknown risks and uncertainties. The ultimate outcomes may differ substantially from these forecasts

Country disclosures

Australia: Westpac holds an Australian Financial Services Licence (No. 233714). This material is provided to you solely for your own use and in your capacity as a wholesale client of Westpac.

New Zealand: In New Zealand, Westpac Institutional Bank refers to the brand under which products and services are provided by either Westpac or Westpac New Zealand Limited ("WNZL"). Any product or service made available by WNZL does not represent an offer from Westpac or any of its subsidiaries (other than WNZL). Neither Westpac nor its other subsidiaries guarantee or otherwise support the performance of WNZL in respect of any such product. The current disclosure statements for the New Zealand branch of Westpac and WNZL can be obtained at the internet address www. westpac.co.nz. For further information please refer to the Product Disclosure Statement (available from your Relationship Manager) for any product for which a Product Disclosure Statement is required, or applicable customer agreement. Download the Westpac NZ QFE Group Financial Advisers Act 2008 Disclosure Statement at www.westpac.co.nz.

China, Hong Kong, Singapore and India: This material has been prepared and issued for distribution in Singapore to institutional investors, accredited investors and expert investors (as defined in the applicable Singapore laws and regulations) only. Recipients in Singapore of this material should contact Westpac Singapore Branch in respect of any matters arising from, or in connection with, this material. Westpac Singapore Branch holds a wholesale banking licence and is subject to supervision by the Monetary Authority of Singapore. Westpac Hong Kong Branch holds a banking license and is subject to supervision by the Hong Kong Monetary Authority. Westpac Hong Kong branch also holds a license issued by the Hong Kong Securities and Futures Commission (SFC) for Type 1 and Type 4 regulated activities. This material is intended only to "professional investors" as defined in the Securities and Futures Ordinance and any rules made under that Ordinance. Westpac Shanghai and Beijing Branches hold banking licenses and are subject to supervision by the China Banking Regulatory Commission (CBRC). Westpac Mumbai Branch holds a banking license from Reserve Bank of India (RBI) and subject to regulation and supervision by the RBI.

UK: The contents of this communication, which have been prepared by and are the sole responsibility of Westpac Banking Corporation London and Westpac Europe Limited. Westpac (a) has its principal place of business in the United Kingdom at Camomile Court, 23 Camomile Street, London EC3A 7LL, and is registered at Cardiff in

Disclaimer continued

the UK (as Branch No. BR00106), and (b) authorised and regulated by the Australian Prudential Regulation Authority in Australia. Westpac is authorised in the United Kingdom by the Prudential Regulation Authority. Westpac is subject to regulation by the Financial Conduct Authority and limited regulation by the Prudential Regulation Authority. Details about the extent of our regulation by the Prudential Regulation Authority are available from us on request. Westpac Europe Limited is a company registered in England (number 05660023) and is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority.

This communication is being made only to and is directed at (a) persons who have professional experience in matters relating to investments who fall within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "Order") or (b) high net worth entities, and other persons to whom it may otherwise lawfully be communicated, falling within Article 49(2)(a) to (d) of the Order (all such persons together being referred to as "relevant persons"). Any person who is not a relevant person should not act or rely on this communication or any of its contents. The investments to which this communication relates are only available to and any invitation, offer or agreement to subscribe, purchase or otherwise acquire such investments will be engaged in only with, relevant persons. Any person who is not a relevant person should not act or rely upon this communication or any of its contents. In the same way, the information contained in this communication is intended for "eligible counterparties" and "professional clients" as defined by the rules of the Financial Conduct Authority and is not intended for "retail clients". With this in mind, Westpac expressly prohibits you from passing on the information in this communication to any third party. In particular this communication and, in each case, any copies thereof may not be taken, transmitted or distributed, directly or indirectly into any restricted jurisdiction. This communication is made in compliance with the Market Abuse Regulation (Regulation(EU) 596/2014).

Investment Recommendations Disclosure

The material may contain investment recommendations, including information recommending an investment strategy. Reasonable steps have been taken to ensure that the material is presented in a clear, accurate and objective manner. Investment Recommendations for Financial Instruments covered by MAR are made in compliance with Article 20 MAR. Westpac does not apply MAR Investment Recommendation requirements to Spot Foreign Exchange which is out of scope for MAR

Unless otherwise indicated, there are no planned updates to this Investment Recommendation at the time of publication. Westpac has no obligation to update, modify or amend this Investment Recommendation or to notify the recipients of this Investment Recommendation should any information, including opinion, forecast or estimate set out in this Investment Recommendation change or subsequently become inaccurate.

Westpac will from time to time dispose of and acquire financial instruments of companies covered in this Investment Recommendation as principal and act as a market maker or liquidity provider in such financial instruments.

Westpac does not have any proprietary positions in equity shares of issuers that are the subject of an investment recommendation.

Westpac may have provided investment banking services to the issuer in the course of the past 12 months.

Westpac does not permit any issuer to see or comment on any investment recommendation prior to its completion and distribution. Individuals who produce investment recommendations are not permitted to undertake any transactions in any financial instruments or derivatives in relation to the issuers covered by the investment recommendations they produce.

Westpac has implemented policies and procedures, which are designed to ensure conflicts of interests are managed consistently and appropriately, and to treat clients fairly.

The following arrangements have been adopted for the avoidance and prevention of conflicts in interests associated with the provision of investment recommendations.

- (i) Chinese Wall/Cell arrangements;
- (ii) physical separation of various Business/Support Units;
- (iii) and well defined wall/cell crossing procedures;
- (iv) a "need to know" policy;
- (v) documented and well defined procedures for dealing with conflicts of interest;
- (vi) steps by Compliance to ensure that the Chinese Wall/Cell arrangements remain effective and that such arrangements are adequately monitored.

U.S.: Westpac operates in the United States of America as a federally licensed branch, regulated by the Office of the Comptroller of the Currency. Westpac is also registered with the US Commodity Futures $\,$ Trading Commission ("CFTC") as a Swap Dealer, but is neither registered as, or affiliated with, a Futures Commission Merchant registered with the US CFTC. Westpac Capital Markets, LLC ('WCM'), a wholly-owned subsidiary of Westpac, is a broker-dealer registered under the U.S. Securities Exchange Act of 1934 ('the Exchange Act') and member of the Financial Industry Regulatory Authority ('FINRA'). This communication is provided for distribution to U.S. institutional investors in reliance on the exemption from registration provided $% \left(1\right) =\left(1\right) \left(1\right) \left$ by Rule 15a-6 under the Exchange Act and is not subject to all of the independence and disclosure standards applicable to debt research reports prepared for retail investors in the United States. WCM is the U.S. distributor of this communication and accepts responsibility for the contents of this communication. All disclaimers set out with respect to Westpac apply equally to WCM. If you would like to speak to someone regarding any security mentioned herein, please contact WCM on +1 212 389 1269. All disclaimers set out with respect to Westpac apply equally to WCM.

Investing in any non-U.S. securities or related financial instruments mentioned in this communication may present certain risks. The securities of non-U.S. issuers may not be registered with, or be subject to the regulations of, the SEC in the United States. Information on such non-U.S. securities or related financial instruments may be limited. Non-U.S. companies may not subject to audit and reporting standards and regulatory requirements comparable to those in effect in the United States. The value of any investment or income from any securities or related derivative instruments denominated in a currency other than U.S. dollars is subject to exchange rate fluctuations that may have a positive or adverse effect on the value of or income from such securities or related derivative instruments

The author of this communication is employed by Westpac and is not registered or qualified as a research analyst, representative, or associated person under the rules of FINRA, any other U.S. selfregulatory organisation, or the laws, rules or regulations of any State. Unless otherwise specifically stated, the views expressed herein are solely those of the author and may differ from the information, views or analysis expressed by Westpac and/or its affiliates.