Weekly Commentary

29 January 2019

New Zealand Bush Giant Dragonfly (Kapokapowai)

Middle ground

Inflation in New Zealand is now settling into the middle of the Reserve Bank's target range, after years of underperforming. We're forecasting a lift in domestically-generated inflation over the next few years, but it will be a gradual process and there are some potential stumbling blocks along the way.

The Consumers Price Index for the December quarter was up by 1.9% on a year earlier, putting it close to the midpoint of the Reserve Bank's 1-3% target range. The various 'core' inflation measures also sat around 2% or a little below, indicating that this was a broad-based result with no obvious distortions from temporary factors.

The December quarter itself saw a 0.1% increase, slightly below the RBNZ's forecast of a 0.2% rise. However, that hides some important detail. At the time the RBNZ was preparing the forecasts for its November *Monetary Policy Statement*, fuel prices had rocketed up to new record highs on the back of rising world oil prices, a lower exchange rate, and an increase in fuel excise duty. But fuel prices then fell surprisingly sharply into the year-end, taking some of the heat out of the overall inflation rate. This will also act to dampen inflation in the early part of 2019, but it's a temporary influence that the RBNZ can look through.

In contrast, prices for non-tradable goods and services were up 2.7% on a year ago, the fastest increase since June 2014, compared to the RBNZ's forecast of a slowdown to 2.4%. That difference is important because non-tradables inflation tends to be more persistent over time, and because it's considered to be more under the control of monetary policy settings.

For much of this decade, inflation has been at the low end or even below the RBNZ's 1-3% target range. That era of uncomfortably low inflation now seems to have passed; the next question is whether inflation could test the upper end of the target range, given that monetary policy remains very stimulatory. We're expecting a gradual pick-up in inflation pressures over the next few years, but there are a few hurdles that need to be crossed yet.

Firstly, a pickup in inflation will depend on continued solid growth in demand. We expect GDP to grow by around 3% over this year, with support from increased government spending, export earnings, and construction. Recent data, both here and overseas, has been on the softer side of expectations, so we'll be watching the numbers closely to get a clearer picture of the economy's momentum.

Tradables prices have been a persistent drag on overall inflation in past years, notwithstanding the recent bounce in world oil prices. More recently there have been signs of a mild pick-up (or a slower rate of decline) in tradables inflation, reflecting the lower New Zealand dollar over the last year. We're expecting a further fall in the exchange rate this year, which would flow through into prices for imported goods. But this doesn't have a sustained impact on the rate of inflation.

To get a sustained rise, it needs to come from domestic sources, most importantly a pickup in wage growth. There's a lot of evidence that the labour market is becoming tighter. The unemployment rate is at its lowest in a decade, and

Middle ground continued

increasingly employers are having difficulty in finding workers.

To date, we haven't seen that translate into faster wage growth, outside of government-mandated increases such as fair pay settlements and minimum wage hikes. It may be that the labour market has only recently moved into territory that could be considered 'tight' by historic standards, and that wage growth tends to have a lagging relationship with the economic cycle. Moreover, wage growth – as measured by the Labour Cost Index, which adjusts for changes in job composition and productivity gains – tends to evolve quite slowly. It could be some time before a pickup in the pace of wage growth becomes apparent in the data. Nevertheless, we think the right conditions are in place for a pickup over the next few years.

One final challenge to our view is that some of the most important components of non-tradables inflation may have already peaked. Prices for new home builds, which make up over 5% of the CPI, have slowed in the last year or so, in line with the slowdown in growth in house sales prices. With a range of Government policies aimed at dampening speculative demand in the housing market, we expect prices for both existing and new homes to remain under pressure over the next few years.

The outlook for rents, which make up almost 10% of the CPI, is less clear. There has been very little variation in rental growth at the national level in recent years. But the regional split is more telling: rental growth is actually slowing in Auckland, even as it picks up in other parts of the country.

The bottom line is that any pickup in home-grown inflation is likely to be a slow one, and it will be some time before the RBNZ needs to act to contain it. We're expecting the Official Cash Rate to remain at its current very low level through to the end of next year, with rate hikes progressing at a very gradual pace from then on.

On a different note, last week we saw the first release of the net migration figures based a new methodology, which uses actual outcomes 16 months after someone has entered or left the country, rather than their stated intentions on departure and arrival cards. This produces a somewhat different picture of migration over history – net inflows peaked slightly earlier, and at a lower level, than under the previous method. However, it remains the case that net migration is in decline, which is a key reason why we expect the economy's potential growth to take a step down over the next few years.

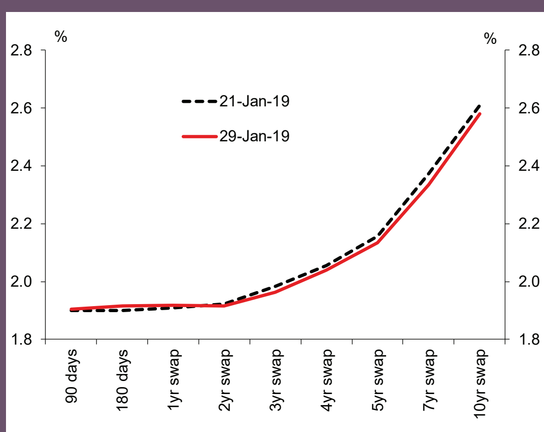
Fixed vs Floating for mortgages

Fixed-term mortgage rates fell sharply during spring, but have now settled down. From here, we expect wholesale fixed interest rates to remain stable or rise slowly. This means that retail fixed mortgage rates are more likely to rise than fall, although there are uncertainties around any forecast.

One-year fixed rates are currently the lowest on offer, and appear to offer good value to borrowers. However, longer-term rates offer security against the possibility of mortgage rates rising more rapidly than expected in the future.

Floating mortgage rates usually work out to be more expensive for borrowers than fixed rates. However, floating may still be the preferred option for those who require flexibility in their repayments.

NZ interest rates



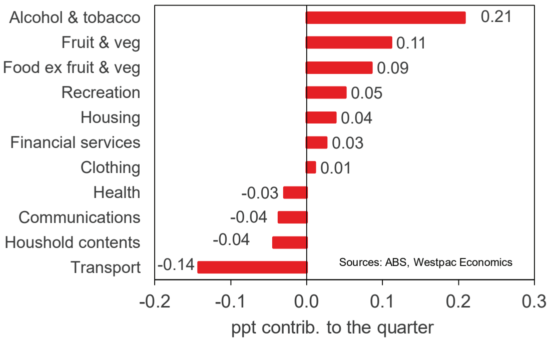
The week ahead

Aus Q4 Consumer Price Index

Jan 30 Last: 0.4%, WBC f/c: 0.3%
Mkt f/c: 0.4%, Range: 0.3% to 0.6%

- The September Quarter CPI printed 0.4%qtr,/1.9%yr compared to the market expectations for 0.5%qtr. The average of the core measures rose 0.3%qtr while the annual pace printed 1.7%yr, a further deceleration from 1.8%yr in Q2 2018 and 2.0% in Q1. There were isolated inflationary pressures in petrol and tobacco as well as embryonic indicators of an easing in the retail disinflationary pulse but the moderation in housing was significant.
- Westpac's forecasting 0.3%qtr for the December quarter will see the annual pace ease to 1.5%yr from 1.9%yr. Falling auto fuel, moderating housing costs & a lack of pass-through from a weaker AUD are more than offsetting a strong rise in tobacco prices. It is worth remembering that market forecasters have now overestimated the quarterly rise in the CPI for every quarter in the last two years.

Contributions 2018 Q4 CPI forecast

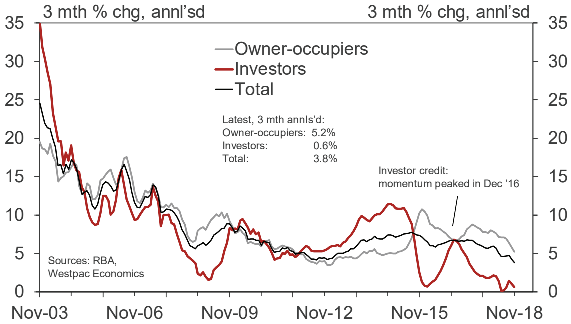


Aus Dec private credit

Jan 31, Last: 0.3%, WBC f/c: 0.3%
Mkt f/c: 0.3%, Range: 0.3% to 0.5%

- Private sector credit growth is relatively modest at 4.4% for the year, moderating progressively over the past three years as housing cools - slowing from 6.6% in 2015 to 5.6% in 2016 and 4.8% in 2017.
- The November outcome was a soft one, up only 0.3%, including a +0.3% for housing and a -0.3% for personal.
- Housing credit, at this late stage of the cycle, is slowing as tighter lending conditions and weaker demand see new lending decline, particularly for investors. In November housing credit grew by 0.3%, 4.9%yr (including investors, at flat mth, 1.1%yr).
- Business credit, 4.4% above the level of a year ago (including a 3.0% jump over the past five months), is volatile around a modest uptrend as businesses increase investment in the real economy.

Housing: investor credit stalls

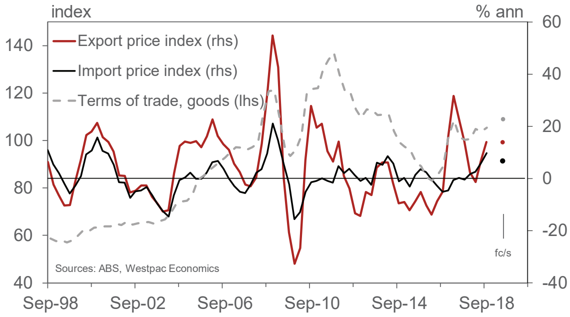


Aus Q4 import price index

Jan 31, Last: 1.9%, WBC f/c: -0.5%
Mkt f/c: 0.3%, Range: -1.4% to 3.5%

- Prices for imported goods increased by 1.9% in the September quarter to be almost 10% above a year earlier. The lift in prices is centred on a jump in global energy prices and the impact of a lower Australian dollar.
- For the December quarter, import prices are expected to ease a little, down a forecast 0.5%.
- Key to the expected fall for Q4, oil prices - which corrected lower after a strong run.
- Outside of fuels, there was upward pressure on the cost of imports. Notably, the Aussie took another step lower, down 0.8% on a TWI basis and falling almost 2% against the USD.

Import & export goods prices

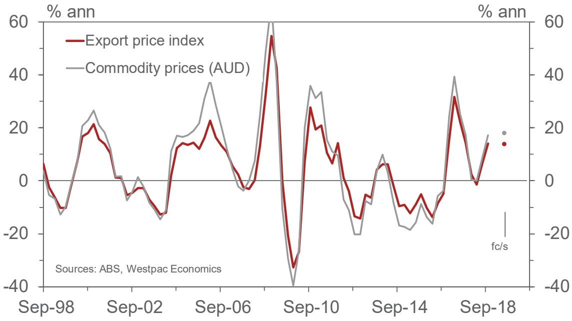


Aus Q4 export price index

Jan 31, Last: 3.7%, WBC f/c: 2.7%
Mkt f/c: 2.7%, Range: 1.5% to 3.5%

- Export prices increased in 2018 on higher commodity prices (across iron ore, coal and oil/LNG) and a weaker Australian dollar.
- For Q3, the export price index printed at 3.7%qtr, 14.0%yr.
- In Q4, export prices were up again (on higher commodity prices and a lower dollar) - we expect a rise of around 2.7%, which would hold annual growth close to 14%.
- The terms of trade for goods, on these estimates, increased by around 3% in the December quarter, capping off a positive year for Australian national income growth.
- As to prices for services, an update will be available with the release of the Balance of Payments on March 5.

Commodity prices & export price index



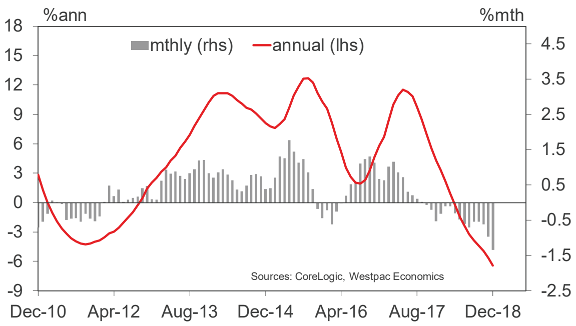
The week ahead

Aus Jan CoreLogic home value index

Feb 1, Last: –1.3%, WBC f/c: –1.0%

- The Australian housing market's very weak finish to 2018 looks to have carried into early 2019. The CoreLogic home value index fell 1.3% in the December month, marking the biggest monthly fall in the correction to date, albeit likely accentuated by seasonal weakness heading into year end.
- Both cyclical and seasonal weakness carried into January although extremely low levels of activity during the summer holiday period mean all housing related data should be treated with caution. The daily index points to a 1% decline for the month taking the cumulative decline since the late 2017 peak to –7.7% nationally.

Australian dwelling prices

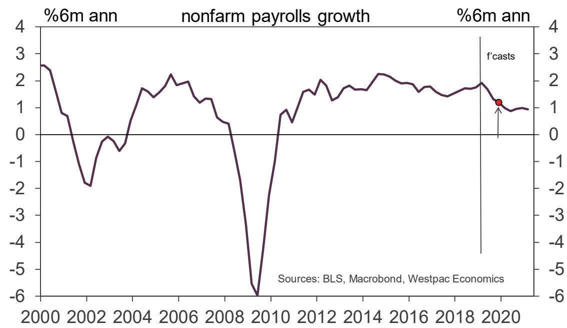


US Jan FOMC meeting

Jan 30, last 2.375%, WBC 2.375%

- The first meeting for the FOMC for 2019 will be a focus for markets, particularly Chair Powell's press conference – now scheduled for every meeting.
- Since December's meeting, the market's awareness of global and financial risks has clearly grown. And their confidence in the US real economy diminishes every day that the Federal Government keeps its doors shut.
- FOMC officials have focused on global risks to date. While these factors will remain front of mind, a more in-depth discussion of the shutdown's impact is anticipated.
- With many partial data prints unavailable, a March hike is clearly off the agenda. The market will therefore focus on what will and won't see the FOMC act from June on.

Employment growth justifies two more hikes

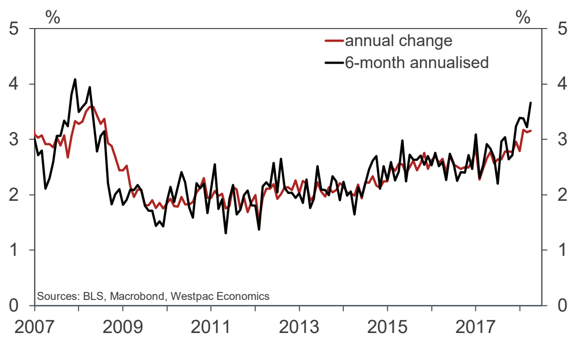


US Jan employment report

Feb 1, nonfarm payrolls, last 312k, WBC 150k
Feb 1, unemployment rate, last 3.9%, WBC 3.9%

- The very, very strong 312k nonfarm payrolls print of Dec (with an additional 58k in back revisions to the prior two months) was largely ignored by financial markets. This occurred because, around the same time, the ISM's disappointed and, more importantly, Fed Chair Powell put forward a more cautious view of the outlook.
- There is no reason to disregard the strength of this data print. Though being 100k over the month average of 2018, there is however reason to expect some payback in Jan. We consequently look for a 150k gain in the month.
- There has been considerable uncertainty over the impact of the shutdown on these numbers. It won't affect the payrolls count, but it is likely to add to unemployment owing to temporary layoffs.

Wages growth accelerating as job growth continues

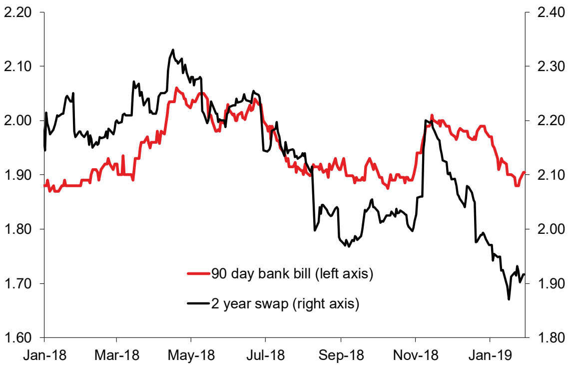


New Zealand forecasts

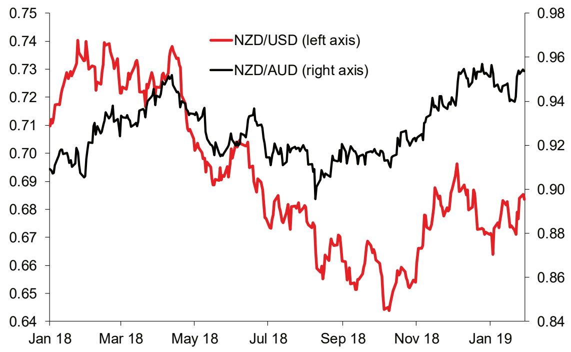
Economic Forecasts	Quarterly				Annual			
	2018		2019					
% change	Sep (a)	Dec	Mar	Jun	2017	2018f	2019f	2020f
GDP (Production)	0.3	0.8	0.7	0.9	3.1	2.9	3.0	3.1
Employment	1.1	0.0	0.2	0.4	3.7	2.3	1.3	1.7
Unemployment Rate % s.a.	3.9	4.3	4.4	4.3	4.5	4.3	4.2	4.0
CPI	0.9	0.1	0.3	0.5	1.6	1.9	2.0	2.1
Current Account Balance % of GDP	-3.6	-3.9	-3.6	-3.7	-2.9	-3.9	-3.6	-3.1

Financial Forecasts	Mar-19	Jun-19	Sep-19	Dec-19	Mar-20	Jun-20
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	1.90	1.90	1.95	2.00	2.05	2.10
5 Year Swap	2.20	2.25	2.30	2.35	2.40	2.50
10 Year Bond	2.40	2.45	2.60	2.60	2.65	2.75
NZD/USD	0.66	0.64	0.62	0.63	0.64	0.65
NZD/AUD	0.93	0.91	0.91	0.91	0.91	0.92
NZD/JPY	72.6	71.0	70.1	70.6	71.0	71.5
NZD/EUR	0.58	0.58	0.56	0.57	0.58	0.57
NZD/GBP	0.52	0.50	0.48	0.48	0.48	0.49
TWI	72.3	70.8	69.0	69.6	69.9	70.2

2 Year Swap and 90 Day Bank Bills



NZD/USD and NZD/AUD



NZ interest rates as at market open on 29 January 2019

Interest Rates	Current	Two weeks ago	One month ago
Cash	1.75%	1.75%	1.75%
30 Days	1.83%	1.83%	1.86%
60 Days	1.87%	1.88%	1.92%
90 Days	1.91%	1.93%	1.97%
2 Year Swap	1.92%	1.93%	1.97%
5 Year Swap	2.13%	2.18%	2.21%

NZ foreign currency mid-rates as at 29 January 2019

Exchange Rates	Current	Two weeks ago	One month ago
NZD/USD	0.6835	0.6832	0.6714
NZD/EUR	0.5976	0.5954	0.5840
NZD/GBP	0.5192	0.5316	0.5273
NZD/JPY	74.67	74.03	73.64
NZD/AUD	0.9536	0.9473	0.9512
TWI	74.03	73.97	73.42

Data calendar

		Last	Market median	Westpac forecast	Risk/Comment
Tue 29					
NZ	Dec trade balance $m	-861	250	400	Seasonal strength in exports, oil imports getting cheaper.
Aus	Dec NAB business conditions	11	–	–	Conditions moderated over the 2nd half of 2018.
Eur	ECB Draghi speaks	–	–	–	European Parliament in Brussels.
US	Dec wholesale inventories	0.8%	0.5%	–	Data delayed due to shutdown.
	Nov S&P/CS home price index %yr	5.0%	–	–	Prices easing but annual pace still ahead of income growth.
	Jan consumer confidence index	128.1	125.0	–	Uni. of Michigan Survey showed sharp drop.
Wed 30					
Aus	Q4 CPI	0.4%	0.4%	0.3%	Falling petrol prices, moderating housing costs & a lack of
	Q4 CPI, %yr	1.9%	1.7%	1.5%	pass through from the weaker AUD suggest downside risk
	Q4 RBA avg core CPI	0.3%	0.4%	0.3%	to the Q4 CPI. If our forecast is correct this will be the 9th
	Q4 RBA avg core CPI, %yr	1.7%	1.7%	1.6%	consecutive quarter forecasters have overestimated the CPI.
Eur	Jan economic confidence	107.3	107.0	–	Business surveys continue to weaken…
	Jan business climate indicator	0.82	0.80	–	… but are still at above average levels…
	Jan consumer confidence final	-7.9	-7.9	–	… consumer likewise, despite stable Jan flash read.
UK	Dec net mortgage lending £bn	3.5	3.5	–	Weighed down by softness in the housing market.
US	Jan ADP employment change	271k	170k	–	Ahead of Friday payrolls.
	Q4 GDP	3.4%	2.5%	2.5%	Data delayed due to shutdown.
	Dec pending home sales	-0.7%	1.0%	–	Reports sales for existing homes, at start of sale process.
	FOMC policy decision, midpoint	2.375%	2.375%	2.375%	All eyes on Chair Powell press conference, now every meeting.
Thu 31					
Aus	Dec private credit	0.3%	0.3%	0.3%	Sluggish growth as housing cools.
	Q4 import price index	1.9%	0.3%	–0.5%	Drop in fuel prices to outweigh rises due to lower AUD.
	Q4 export price index	3.7%	2.7%	2.7%	Up on lower AUD impact and higher commodity prices.
Chn	Jan manufacturing PMI	49.4	–	–	Concerns growing over China's cyclical momentum…
	Jan non-manufacturing PMI	53.8	–	–	…. but structural change sets them up for long term.
Eur	Dec unemployment rate	7.9%	7.9%	–	Has continued to trend down but with slower jobs growth.
	Q4 GDP 1st estimate	0.2%	0.2%	–	Likely another sub-trend read.
	ECB speak	–	–	–	Coeure, Mersch and Weidmann.
UK	Jan GfK consumer sentiment	-14	-15	–	Has been easing, Brexit uncertainty likely to see a further fall.
US	Q4 employment cost index	0.8%	0.8%	0.8%	Momentum for wages is certainly gathering pace.
	Dec personal income	0.2%	0.5%	–	Data delayed due to shutdown.
	Q4 personal spending	0.4%	0.3%	–	Data delayed due to shutdown.
	PCE core	0.1%	0.2%	–	Data delayed due to shutdown.
	Initial jobless claims	199k	–	–	At historic lows.
Fri 01					
NZ	Jan ANZ consumer confidence	121.9	–	–	At moderate levels, but questions about the pace of spending.
Aus	Jan CoreLogic home value index	-1.3%	–	–	Weak finish to 2018 carried into the new year.
	Jan AiG PMI	49.5	–	–	Manf'g index slipped below 50 - 1st contraction in 26 months.
	Q4 PPI	0.8%	–	–	Follows CPI release, less of a market mover.
Chn	Jan Caixin China PMI	49.7	–	–	A follow-up cross check of official NBS PMI.
Eur	Jan Markit manufacturing PMI final	50.4	–	–	Flash indicated downtrend continued.
	Jan core CPI %yr preliminary	1.0%	1.0%	–	Has remained stuck around 1% but wage growth is higher.
UK	Jan Markit manufacturing PMI final	54.2	53.4	–	Anecdotes point to softness in early 2019.
US	Jan non-farm payrolls	312k	163k	150k	Shutdown should not affect payrolls count…
	Jan unemployment rate	3.9%	3.8%	3.9%	… but could jolt unemployment rate.
	Jan average hourly earnings %mth	0.4%	0.3%	–	6'mth annualised pace jumped to 3.7% in December.
	Jan ISM manufacturing	54.1	54.3	–	Stability anticipated after pullback.
	Dec construction spending	–	–	–	Data delayed due to shutdown.
	Jan Uni. of Mich. sentiment final	90.7	–	–	First evidence of shutdown impact on sentiment.

International forecasts

Economic Forecasts (Calendar Years)	2015	2016	2017	2018f	2019f	2020f
Australia						
Real GDP % yr	2.5	2.8	2.4	3.0	2.4	2.8
CPI inflation % annual	1.7	1.5	1.9	1.7	1.8	1.7
Unemployment %	5.8	5.7	5.5	5.0	5.0	4.8
Current Account % GDP	-4.7	-3.1	-2.6	-2.4	-2.4	-3.0
United States						
Real GDP %yr	2.9	1.5	2.3	2.9	2.5	2.1
Consumer Prices %yr	0.1	1.4	2.1	2.4	1.9	1.9
Unemployment Rate %	5.3	4.9	4.4	3.9	3.6	3.6
Current Account %GDP	-2.3	-2.3	-2.3	-2.6	-2.5	-2.4
Japan						
Real GDP %yr	1.4	0.9	1.7	0.9	0.8	0.7
Euro zone						
Real GDP %yr	2.1	1.8	2.5	1.9	1.5	1.5
United Kingdom						
Real GDP %yr	2.3	1.8	1.7	1.3	1.4	1.4
China						
Real GDP %yr	6.9	6.7	6.9	6.4	6.1	6.0
East Asia ex China						
Real GDP %yr	3.8	3.9	4.5	4.3	4.1	4.1
World						
Real GDP %yr	3.5	3.2	3.8	3.8	3.5	3.5
Forecasts finalised 12 December 2018						

Interest Rate Forecasts	Latest	Dec-18	Mar-19	Jun-19	Sep-19	Dec-19	Jun-20	Dec-20
Australia								
Cash	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
90 Day BBSW	2.08	2.05	2.05	2.00	2.00	1.95	1.95	1.90
10 Year Bond	2.21	2.35	2.40	2.60	2.60	2.50	2.50	2.50
International								
Fed Funds	2.375	2.375	2.625	2.875	2.875	2.875	2.875	2.875
US 10 Year Bond	2.72	2.85	3.00	3.10	3.00	2.90	2.80	2.75
ECB Deposit Rate	-0.40	-0.40	-0.40	-0.40	-0.30	-0.20	-0.10	0.00

Exchange Rate Forecasts	Latest	Dec-18	Mar-19	Jun-19	Sep-19	Dec-19	Jun-20	Dec-20
AUD/USD	0.7101	0.71	0.70	0.68	0.69	0.70	0.71	0.72
USD/JPY	109.74	110	111	113	112	111	110	106
EUR/USD	1.1318	1.13	1.11	1.10	1.10	1.11	1.14	1.20
AUD/NZD	1.0496	1.08	1.09	1.10	1.10	1.09	1.09	1.08

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').

Disclaimer

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 yield 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 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. self-regulatory 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.