

Weekly Commentary

16 April 2018



The almost good, the slightly bad, and the really ugly

Recent updates on business sector conditions indicate that the economy is continuing to muddle along. However, we're not seeing signs of the re-acceleration in GDP growth that government agencies are banking on. This week, we also look at the impact of minimum wage changes, and Auckland's growing housing shortage.

Activity muddling along

For some time we've been highlighting that GDP growth over the next few years is likely to be slower than both the NZ Treasury and the RBNZ are assuming. We expect that growth is going to slow from rates of around 3.5 to 4% in recent years, to around 2.8% over 2018 and 2019. In part, that reflects some developments that are already underway, including increasing capacity constraints in the construction sector and a gradual slowdown of population growth from the current rapid pace. We also expect that the housing market will cool, putting a dampener on consumer spending.

With this in mind, the latest Quarterly Survey of Business Opinion provided some interesting reading. While business confidence has picked up as the uncertainty around last year's election has faded, it remains lower than the levels we saw over the past few years. Importantly, both trading activity and forward orders remain down on the levels we saw through 2016 and early 2017. Overall, we're left with a picture of an economy that is continuing to muddle along. However, we're not seeing signs of the re-acceleration in activity that government agencies are banking on. And that's also the message we're getting from other surveys of business conditions, including the latest PMI.

Consistent with signs that the momentum in economic

activity is softening, we've also seen some easing in businesses' hiring intentions, and firms have reported less difficulty finding labour. However, at least at this stage, businesses' investment intentions have been a bit more resilient than we might have expected.

On the prices front, we have seen a lift in cost pressures. However, this does not appear to be spilling over into widespread increases in consumer price inflation. In fact, looking at key sectors like retail, the number of firms who have been increasing their prices remains at low levels. Prices are rising a bit faster in the construction sector than elsewhere, but even here, things look like they are levelling off.

The impact of minimum wage hikes

Over the past week we released two Bulletins looking at some key developments in the New Zealand economy. The first looks at the impact of planned minimum wage hikes.¹ From the start of April the minimum wage increased from \$15.75/hr to \$16.50/hr. This was the first step in the new Government's plan to raise the minimum wage to \$20/hr by April 2021, economic conditions permitting.

Compared to other developed countries, minimum wage changes are likely to have a larger impact in New Zealand. That's because, relative to average wage rates, New Zealand already has the highest minimum wage rate in the OECD.

The almost good... continued

Planned policy changes will extend this lead further over the next few years.

Prior to the most recent increases, we estimate that around 8% of workers were covered by the minimum wage (around 155,000 people). The planned increases will likely cover around 10% more of workers. There will also be some workers who will receive a pay rise in order to maintain wage relativities across roles. This means that by April 2021, as much as 25% of the workforce – about 530,000 workers – will have their pay rates affected by the increase in the minimum wage. However, the impact on labour costs will not be as dramatic, as these workers share of the total wage bill will be around 12%.

We estimate that the minimum wage hikes will add about 1 percentage point to the Labour Cost Index (LCI) over the next four years combined. That's compared to what would have happened if the minimum wage had continued to rise at the same rate as in recent years. The minimum wage has been rising by around 3.3% per annum since 2011, which has added around 0.1% to the LCI each year. Over the coming years, the minimum wage will rise by around 6.2% per annum, and will have a larger impact in later years as increasing numbers of people are affected.

A 1% rise in the LCI as a result of minimum wage hikes is expected to reduce the number of hours worked by 0.3%, and raise the unemployment rate by 0.2%.

The impact on the CPI is expected to be much smaller than the increase in wage costs. Increases in the minimum wage are expected to add an additional 0.3 percentage points

to the CPI, spread over the next four years. While some industries (such as hospitality) may increase prices due to minimum wage changes, competitive pressures are keeping a cap on many prices. In addition, in many affected industries, there is not a close relationship between wage costs and the prices faced by consumers (e.g. health care services).

Auckland's growing housing shortage

The second Bulletin we released looks at Auckland's growing housing shortage.² Population growth in Auckland has continued to outpace home building, and around a decade of strong construction activity will be required. That is going to be a tough task to achieve. Auckland already has a shortage of around 30,000 homes, and the region's population is set to grow by around 300,000 people over the coming decade.

We expect that construction activity will increase over the next few years. However, it will be a slow grind higher. Even with building levels still below the required pace, the construction sector is already encountering growing pains, including a shortage of skilled labour. This is providing a brake on how quickly construction activity can ramp up, and means that home building will need to remain strong even as population growth slows.

The shortage of housing is going to get worse before it gets better. Although we expect that population growth will slow over time, it will be several years before building levels catch up, and even longer for the shortage of homes to be eroded.

¹ Available here: <https://www.westpac.co.nz/assets/Business/Economic-Updates/2018/Bulletins-2018/Raising-the-bar-April-2018.pdf>

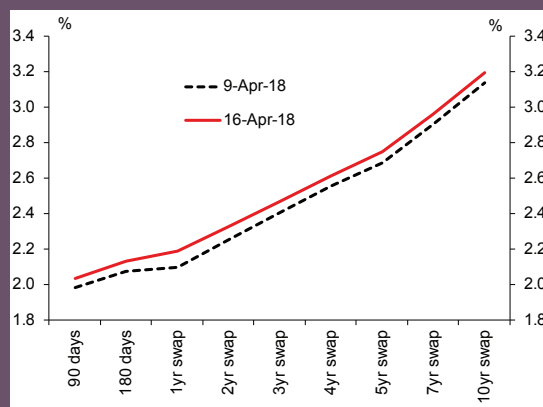
² Available here: <https://www.westpac.co.nz/assets/Business/Economic-Updates/2018/Bulletins-2018/Auckland-Housing-Bulletin-April-2018.pdf>

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 in their repayments.

NZ interest rates



The week ahead

NZ Mar REINZ house sales and prices

Apr 17, Sales last: +1.5%, Prices last: 3.9%/yr

- After slowing in early- to mid-2017, the New Zealand housing market has been more positive in recent months. House prices lifted 1.5% over the three months to February – slightly less in Auckland and Canterbury, slightly more elsewhere. Market turnover has also picked up, albeit less emphatically.
- March will probably be another relatively buoyant month. Banks have been reducing mortgage rates and lending more freely.
- However, later in 2018 we expect a marked housing market slowdown. The bright-line test for taxing capital gains on resold properties will be extended from two to five years, foreign buyers will be restricted from mid-year, and further tax changes designed to cool house prices can be expected. At the same time, population growth is slowing and fixed mortgage rates will soon stop falling.

REINZ house prices and sales

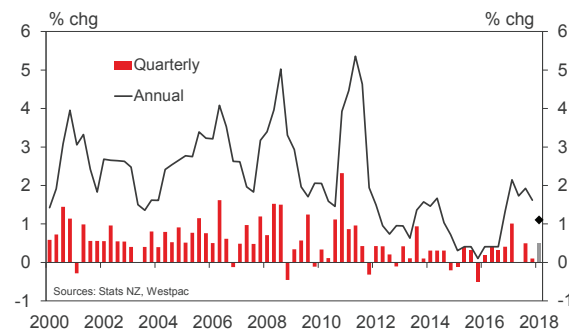


NZ Q1 CPI

Apr 19, Last: 0.1%, Westpac f/c: 0.5%, Mkt f/c: 0.5%

- We expect a 0.5% rise in consumer prices for the March quarter, barring any major surprise in March food prices (released on Monday). This would bring annual inflation down from 1.6% to 1.1%, the lowest since September 2016.
- There are two factors behind the drop in annual inflation. The first is the introduction of a years' free tertiary education, which we estimate will take 0.2% off the CPI. The second is base effects: a surge in oil prices a year ago saw annual inflation rise to 2.2% in March 2017, before dropping back to 1.7% in June. The dip in annual inflation this year will be similarly short-lived. Setting aside the expected volatility, underlying inflation remains subdued. The lower New Zealand dollar over the last year will add to tradables inflation, but domestic inflation pressures have yet to pick up.

NZ CPI inflation

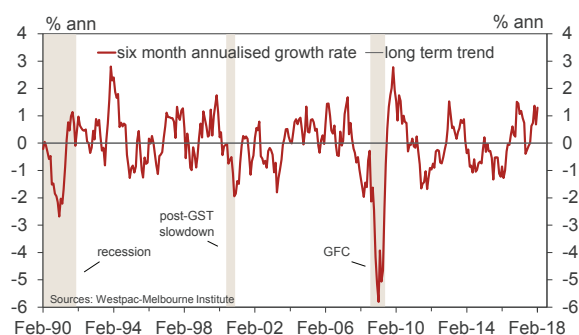


Aus Mar Westpac-MI Leading Index

Apr 18, Last: +1.30%

- The six month annualised growth rate in the Leading Index rose from +0.68% in January to +1.30% in February, a well above trend read indicating improving prospects for growth in the first half of 2018. That said the index has been very choppy over the last four months, mainly reflecting volatile swings in the dwelling approvals component. The Mar read looks likely to see some easing. It will include weaker updates on: the ASX200, down -4.3% vs -0.4% last month; the Westpac-MI Consumer Expectations Index, down -0.9% vs -0.1% last month; dwelling approvals, down -6.2% vs 17.2% last month; the yield spread, which has narrowed 30bps vs a 13bps widening last month; and the Westpac-MI Unemployment Expectations Index, which deteriorated 3.1% vs 1% last month. These moves will likely dominate small gains in total hours worked, US industrial production and commodity prices.

Westpac-MI Leading Index



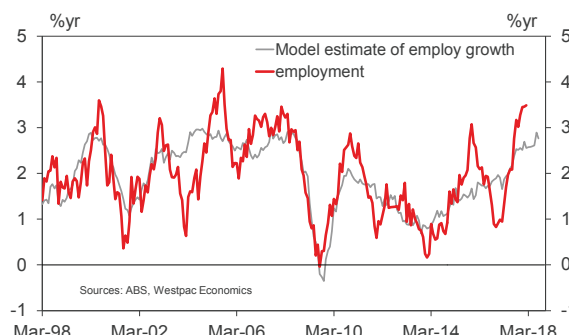
Aus Labour Force Survey – total employment '000

Apr 19, Last: 15.8k, WBC f/c: 20k

Mkt f/c: 20k, Range: 10k to 30k

- Total employment grew 17.5k in February, broadly in line with the market expectation of 20k and a little below Westpac's forecast of +25k. Full time employment rose 65k and part-time fell 47k reversing January's mix of -53k and +66k respectively. Hours worked gained 1.2% in February after falling 1.3% in January. 2017 was a strong year for employment ending the year at a 3.4%/yr pace. But momentum steadied over the past three months and the three month annualised pace has slowed to 2.1%. This pace is more consistent with a solid, rather than aggressive, employment growth outlook over the near-term as suggested by business surveys. The business surveys have flattened a little but are still holding very robust levels suggesting healthy employment growth. Our 20k forecast will see the annual pace of employment growth ease modestly to 3.2%/yr.

Jobs Index model of employment



The week ahead

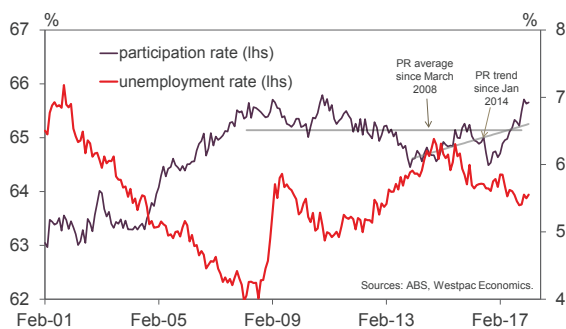
Aus Labour Force Survey – unemployment rate %

Apr 19, Last: 5.6%, WBC f/c: 5.6%

Mkt f/c: 5.5%, Range: 5.4% to 5.6%

- In February the unemployment rate lifted to a soft 5.6% (5.56%) from 5.5% (5.50%) in January. Over the first three quarters of 2017, we saw some progress in reducing the unemployment rate, falling from a peak of 5.9% in February to 5.5% in September. However, that has since stalled as the participation rate has steadily risen from 64.5% in September 2016 to 65.7% as at February, while employment momentum has recently eased. We are looking for the participation rate to hold at 65.7% which given the current rate of working age population growth should see the labour force lift by 25.7k in the month. As such we expect the unemployment rate to hold 5.6% when rounded to one decimal place.

Unemployment and participation rates

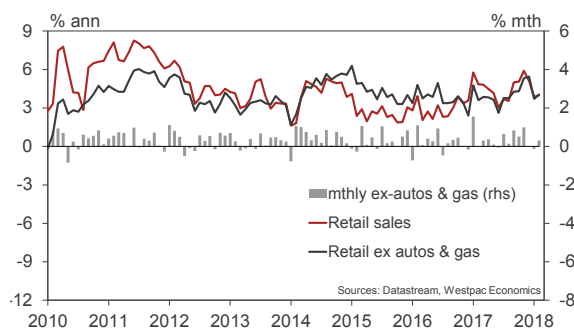


US Mar retail sales

Apr 16, last -0.1%, WBC 0.4%

- US retail sales have continued to disappoint through Q1 2018. In the February report, a third consecutive negative was recorded for total sales. It is certainly the case that one-off factors have been at play: auto sales continue to come back to a more normal level after their hurricane-induced spike in late 2017; also abnormally cold weather in February weighed on gasoline and store sales as consumers stayed home. However, a surge back in Mar is highly unlikely.
- Evident in the income and savings data in recent months is that real wages growth (excluding the tax cuts) remains soft, and household savings low versus history. These restrictions on spending are unlikely to abate anytime soon. As such, we look for continued modest gains for spending through 2018 – circa 0.4% for headline sales in March, and 0.2% for core.

Retail sales growth

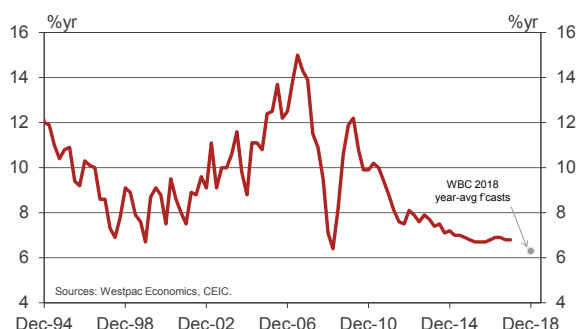


China Q1 GDP

Apr 17, last 6.8%, WBC 6.8%

- In the final quarter of 2017, annual growth was sustained at a strong 6.8% despite a pull back in the quarterly growth pulse, from 1.8% to 1.6%. The first quarter of 2018 looks as though it will be a repeat of the last (1.6%; 6.8%). As we move through 2018, quarterly growth will be sustained near 1.6%, and that will result in the annual growth rate slowing to 6.3%, a little below authorities 6.5% growth target for the year.
- Driving this outcome is expected to be a much-reduced contribution from net exports and continued modest momentum in investment, across both housing and infrastructure.
- Evident from the PMI reports, restraint on hiring and incomes will preclude an acceleration in spending by the consumer. This trend will be sustained into 2019.

China real GDP to decelerate in 2018



Data calendar

		Last	Market median	Westpac forecast	Risk/Comment
Mon 16					
NZ	Mar BusinessNZ PSI	55.0	-	-	Services conditions taken a step down in recent months.
	Mar food price index	-0.5%	-	0.6%	May see another weather-related bump in vegetable prices.
US	Apr Fed Empire state index	22.5	19.6	-	Regional manufacturing PMIs remains elevated.
	Mar retail sales	-0.1%	0.3%	0.4%	Has disappointed of late; autos to support in Mar.
	Feb business inventories	0.6%	0.6%	-	Positive for growth in Q1.
	Apr NAHB housing market index	70	70	-	Conditions robust despite higher rates.
	Feb total net TIC flows \$bn	119.7	-	-	Likely to receive more attention given US/China tension.
	Fedspeak	-	-	-	Bostic on the economy and rural market trends.
Tue 17					
NZ	Mar REINZ house prices, %yr	3.9%	-	-	Prices firmed, although gains remain muted in Auckland...
	Mar REINZ house sales	1.2%	-	-	... and turnover remains subdued.
Aus	RBA minutes	-	-	-	Further colour ahead of May growth forecast update.
Chn	Q1 GDP %yr	6.8%	6.8%	6.8%	Annual rate to hold up; annualised pace slows to 6.4%.
	Mar retail sales ytd %yr	9.7%	9.7%	-	Consumer demand robust, but not accelerating.
	Mar industrial production ytd %yr	7.2%	7.0%	-	PMI's continues to point to robust growth.
	Mar fixed asset investment ytd %yr	7.9%	7.7%	-	Slowed through 2017, but looks to be stabilising.
Eur	Apr ZEW survey of expectations	13.4	-	-	Very strong.
UK	Feb ILO unemployment rate	4.3%	-	-	Despite headwinds, unemployment remains very low.
US	Mar housing starts	-7.0%	1.9%	-	Lack of supply in existing market aiding new...
	Mar building permits	-4.1%	0.3%	-	... buy-to-let development also supportive.
	Mar industrial production	0.9%	0.3%	-	Modest versus ISMs.
	Fedspeak	-	-	-	Williams on the US economic outlook in Madrid.
	Fedspeak	-	-	-	Quarles testimony on bank regulation to the House.
	Fedspeak	-	-	-	Harker on the economics of equitable education.
	Fedspeak	-	-	-	Evans on the US economic outlook in Chicago.
Wed 18					
Aus	Mar Westpac-MI Leading Index	1.30%	-	-	Well above trend but component updates look weak.
Eur	Mar CPI (final) %yr	1.4%	-	-	Core continues to hold around 1.0%yr.
UK	Mar CPI	0.4%	-	-	While still elevated, core inflation has started to ease back.
	Feb house price index	4.9%	-	-	Price growth muted, but is showing signs of firming.
US	Federal Reserve's Beige book	-	-	-	Conditions around the 12 districts.
	Fedspeak	-	-	-	Bostic on the economy at a Bloomberg event.
	Fedspeak	-	-	-	Dudley on the US economic outlook in the Bronx.
	Fedspeak	-	-	-	Quarles at the Bretton Woods annual committee.
Thu 19					
NZ	Q1 CPI	0.1%	0.5%	0.5%	Yoy rate pulled down by free tertiary study & base effects.
Aus	Mar employment growth	17.5k	-	20k	Employment momentum has slowed in 2018 following a ...
	Mar unemployment rate	5.6%	-	5.6%	... 2017 overshoot but still enough to steady unemployment.
	Q1 NAB business survey	15	-	-	Monthly series remains above average.
UK	Mar retail sales	0.8%	-	-	The squeeze on spending power remains a significant drag.
US	Initial jobless claims	233k	-	-	Very low.
	Apr Philly Fed index	22.3	21.8	-	Holding onto 2017's gains.
	Mar leading index	0.6%	0.3%	-	Slowly trending higher.
	Fedspeak	-	-	-	Quarles at an Institute of International Finance event.
Fri 20					
Eur	Apr consumer confidence advance	0.1	-	-	Remains strong.
US	Fedspeak	-	-	-	Mester on the US economy in Pittsburgh.
	Fedspeak	-	-	-	Evans on the US economy in Chicago.

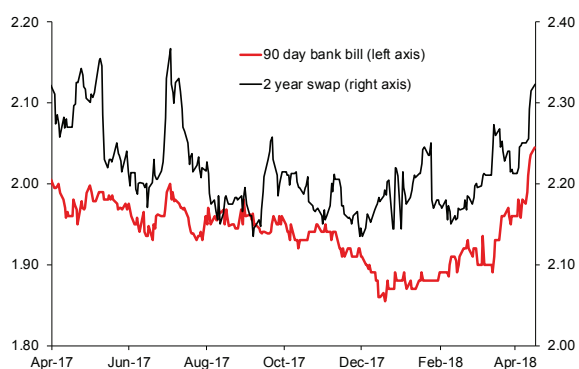
New Zealand forecasts

Economic Forecasts	Quarterly				Annual			
	2017	2018			Calendar years			
% change	Dec(a)	Mar	Jun	Sep	2016	2017	2018f	2019f
GDP (Production)	0.6	0.6	0.6	0.7	4.0	2.9	2.7	3.0
Employment	0.5	0.4	0.4	0.4	5.8	3.7	1.4	1.0
Unemployment Rate % s.a.	4.5	4.4	4.4	4.4	5.3	4.5	4.5	4.7
CPI	0.1	0.5	0.4	0.6	1.3	1.6	1.7	1.5
Current Account Balance % of GDP	-2.7	-2.2	-2.3	-2.5	-2.2	-2.7	-2.4	-2.7

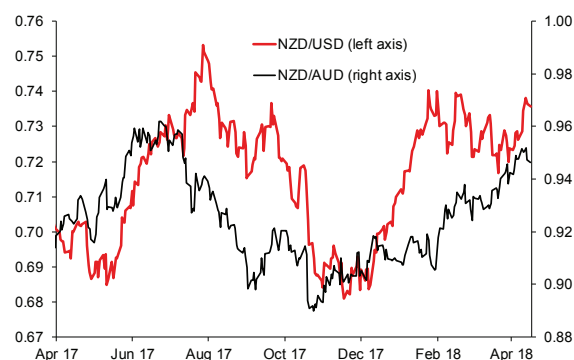
¹ Annual average % change

Financial Forecasts	Jun-18	Sep-18	Dec-18	Mar-18	Jun-19	Sep-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	2.05
2 Year Swap	2.20	2.20	2.30	2.40	2.55	2.70
5 Year Swap	2.70	2.75	2.90	3.05	3.15	3.25
10 Year Bond	2.90	3.00	3.20	3.30	3.35	3.40
NZD/USD	0.72	0.70	0.68	0.66	0.65	0.64
NZD/AUD	0.94	0.92	0.92	0.92	0.92	0.91
NZD/JPY	77.8	76.3	75.5	73.3	72.2	70.4
NZD/EUR	0.59	0.57	0.56	0.55	0.54	0.52
NZD/GBP	0.53	0.53	0.54	0.54	0.53	0.52
TWI	74.5	73.0	71.7	70.3	69.6	68.6

2 Year Swap and 90 Day Bank Bills



NZD/USD and NZD/AUD



NZ interest rates as at market open on 16 April 2018

Interest Rates	Current	Two weeks ago	One month ago
Cash	1.75%	1.75%	1.75%
30 Days	1.89%	1.88%	1.81%
60 Days	1.95%	1.92%	1.87%
90 Days	2.04%	1.96%	1.93%
2 Year Swap	2.32%	2.22%	2.27%
5 Year Swap	2.75%	2.62%	2.73%

NZ foreign currency mid-rates as at 16 April 2018

Exchange Rates	Current	Two weeks ago	One month ago
NZD/USD	0.7357	0.7216	0.7222
NZD/EUR	0.5965	0.5865	0.5879
NZD/GBP	0.5163	0.5137	0.5178
NZD/JPY	79.09	76.44	76.53
NZD/AUD	0.9464	0.9421	0.9362
TWI	75.63	74.39	74.58

International forecasts

Economic Forecasts (Calendar Years)	2014	2015	2016	2017	2018f	2019f
Australia						
Real GDP % yr	2.6	2.5	2.6	2.3	2.7	2.5
CPI inflation % annual	1.7	1.7	1.5	1.9	2.1	1.9
Unemployment %	6.2	5.8	5.7	5.5	5.5	5.6
Current Account % GDP	-3.0	-4.7	-3.1	-2.3	-2.8	-3.8
United States						
Real GDP %yr	2.6	2.9	1.5	2.3	3.0	2.5
Consumer Prices %yr	1.6	0.1	1.3	2.1	2.5	2.0
Unemployment Rate %	6.2	5.3	4.9	4.4	4.0	3.8
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	1.5	1.3	1.0
Euroland						
Real GDP %yr	1.3	2.0	1.8	2.5	2.1	1.6
United Kingdom						
Real GDP %yr	3.1	2.2	1.8	1.7	1.6	1.6
China						
Real GDP %yr	7.3	6.9	6.7	6.9	6.3	6.1
East Asia ex China						
Real GDP %yr	4.2	3.8	3.9	4.5	4.3	4.3
World						
Real GDP %yr	3.6	3.4	3.2	3.8	3.9	3.7

Forecasts finalised 6 April 2018

Interest Rate Forecasts	Latest	Jun-18	Sep-18	Dec-18	Mar-19	Jun-19	Sep-19	Dec-19
Australia								
Cash	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
90 Day Bill	2.07	2.02	1.98	1.94	1.90	1.88	1.86	1.85
10 Year Bond	2.72	2.75	2.95	3.15	3.20	3.10	3.10	3.10
International								
Fed Funds	1.625	1.875	2.125	2.125	2.375	2.625	2.625	2.625
US 10 Year Bond	2.82	2.90	3.10	3.35	3.50	3.50	3.40	3.30
ECB Deposit Rate	-0.40	-0.40	-0.40	-0.40	-0.20	0.00	0.00	0.00

Exchange Rate Forecasts	Latest	Jun-18	Sep-18	Dec-18	Mar-18	Jun-19	Sep-19	Dec-19
AUD/USD	0.7773	0.77	0.76	0.74	0.72	0.71	0.70	0.70
USD/JPY	107.37	108	109	111	111	111	110	110
EUR/USD	1.2330	1.22	1.22	1.21	1.19	1.21	1.23	1.26
AUD/NZD	1.0539	1.07	1.09	1.09	1.09	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 licence 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 be 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.