Weekly Commentary

4 September 2017

Auckland construction falling behind

New Zealand is wrestling with a large and growing shortage of houses, with the shortfall centred squarely on Auckland. However, strong headwinds in the construction sector mean that building levels are likely to rise only gradually. This will challenge the strength of GDP growth over the coming year, and reinforces the case for the OCR staying on hold for an extended period.

Pressures in the Auckland housing market have continued to grow...

Back in 2009, we highlighted the emerging pressures in the Auckland housing market, and forecast that this would result in a strong pick up in construction activity. Eight years on, that's exactly what we have seen. Residential construction has risen rapidly in recent years. That includes a sizeable lift in home building in Auckland.

But despite the lift in home building, pressures in the Auckland market haven't gone away. In fact, they've gotten worse. Auckland's population has risen by much more than expected, and home building has not kept pace. This has seen housing market tightness in Auckland rising to acute levels, reflected in a sharp increase in the average number of people per dwelling.

Looking ahead, Auckland's population is set to continue growing at a rapid pace, with around 290,000 more people expected to settle in the region over the coming decade. Coming on top of the existing tightness in the Auckland housing market, this signals the need for a significant number of new homes in the region.

... however growing headwinds mean that residential construction is set to increase only gradually...

Despite the growing need for new building in Auckland, headwinds in the construction sector mean that we're expecting only subdued growth in residential construction over the coming year. And recent developments indicate that growth in construction could be even softer than we're assuming.

Several factors are providing a brake on residential construction. First is that developers are encountering increasing difficulties accessing finance. This is particularly important in Auckland, given the greater prevalence of medium to high-density housing developments, for which finance can be a significant hurdle.

At the same time, capacity in the construction sector has become stretched following strong increases in building activity over the past few years. This has resulted in building costs rising at a rapid pace, with the cost of building a new home in Auckland up around 40% over the past five years alone.

Importantly, this rise in building costs has come at the same time as the housing market in Auckland has been softening. Existing homes prices in Auckland are down 4% since the start of this year, and sales are at their lowest level since 2011. Many developers will be nervous about building into a slowing market.

These headwinds have sapped the momentum in Auckland's construction sector, which showed through

Auckland construction falling behind continued

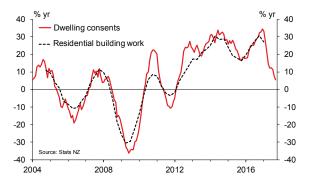
very clearly in last week's July dwelling consent numbers. Consent issuance in Auckland has fallen 8% over the past three months (though that does include a pullback in the volatile multiples consent category). Looking at the longer-term trend, annual dwelling consent numbers have essentially flatlined at just over 10,000 since the start of this year. And the most recent figures actually point to some softening in building activity over the coming months. Importantly, dwelling consents numbers have plateaued at levels that are still well short of what's needed to keep up with population growth. Consequently, it's likely that tightness in the Auckland housing market will get worse before it gets better.

... reinforcing the case for the OCR remaining low for an extended period

Our forecasts for subdued residential construction are a key point of difference between us and the Reserve Bank. The RBNZ's August policy assessment factored in continued strong increases in residential construction over the next few years. However, such increases look doubtful, especially with the slowdown in Auckland coming on top of the continued gradual wind-down of reconstruction work in Canterbury.

This subdued outlook for residential construction has important implications for economic conditions more generally. Construction activity was a key contributor to

Auckland building work and dwelling consents



increases in GDP and employment in recent years, with spillovers to a number of associated industries. But with the momentum in the construction sector now waning, it's likely that we'll see more moderate GDP growth over the coming year. This will make it even harder for the RBNZ to generate the pick-up in domestic inflation that they have long pursued.

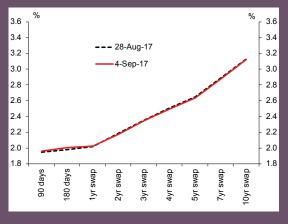
With the headwinds for growth increasing and a sustained pick-up in domestic inflation remaining elusive, the case for Official Cash Rate hikes in the near term looks thin. We expect that the OCR will remain on hold until late 2019. This is in contrast to financial markets pricing, which is consistent with OCR hikes from around September of next year.

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 terms. Threeto five-year rates seem high relative to where we think short-term rates are going to go over that time. That said, these rates are most likely to be pressured higher by global market trends, so borrowers who prefer the security of a longer term still have a chance to lock in at historically quite low levels.

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 Q2 building work put in place

Sept 5, Last: -3.5%, Westpac f/c: +4.5, Mkt f/c: 1.6%

- Following an unexpected fall in March, we expect the upcoming building work report will show that construction activity rebounded in the June quarter.
- Much of the weakness seen earlier in the year related to nonresidential projects, which can be lumpy on a quarter-to-quarter basis. With a large amount of construction activity occurring nationwide, we expect a solid rise in non-residential building in June.
- Residential construction is also expected to rise modestly. However, rising building costs, stretched capacity in the building sector, and tighter bank lending standards for property developers are all providing some brake on how quickly building activity ramps up.

\$h \$h 1.8 1.8 1.6 1.6 1.4 1.4 1.2 1.2 1.0 1.0 0.8 0.8 0.6 0.6 Residential 0.4 04 Non-residential 0.2 0.2 Stats NZ Westn 0.0 0.0 1990 1995 2000 2005 2010 2015

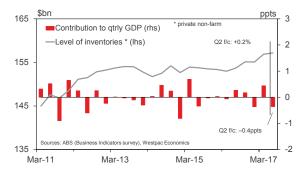
NZ real building work put in place

Aus Q2 inventories

Sep 4, Last: 1.2%, WBC f/c: 0.2% Mkt f/c: 0.3%, Range: -0.7% to 1.0%

- Inventories were a likely swing factor over the first half of 2017, centred on mining. In Q1, inventories rose 1.2%, +\$1.8bn, the largest rise since March 2012, and added 0.4ppts to quarterly growth.
- There was a \$1.0bn build-up on mining inventories as some rail links to the ports were closed due to flooding.
 In O2, we expect total inventories to increase by only 0.2%.
- In Q2, we expect total inventories to increase by only 0.2%, subtracting 0.4ppts from growth. The headline figure is constrained by a likely drawing down of mining inventories as rail links re-opened.
- Total inventories ex mining and ex manufacturing (where there is a structural decline) are forecast to rise by a strong 1.5% in Q2, matching the outcome for Q1. Firms across the non-mining economy are expanding inventories to meet rising sales.

Inventories Q2 f/c: +0.2%; -0.4ppts cont'n



Aus Q2 profits

Sep 4, Last: 6.0%, WBC f/c: -4.0%, Mkt f/c: -4.0%, Range: -9.0% to 6.0%

In the year to March 2017, company profits surged, jumping 40%, including a 6% rise in the quarter. The key was the rebound in commodities, up from the lows of late 2015, early 2016. Mining profits (36% of the total) more than doubled, +113%, over the period, while profits ex-mining rose 17%. However, in the June quarter, commodity prices stumbled and hence profits dipped. We anticipate the Business Indicators survey will report profits declined by 4%. Mining profits came off their highs in the quarter, with a potential double digit fall, a forecast -11.5%, associated with an 8% decline in global commodity prices. Non-mining profits were potentially constrained to only a small rise, a forecast +0.5%. Expanding sales were a plus in Q2 but margins remained under pressure, with a lack of pricing power at a time of rising costs.

Company profits: Q2 hit from commodities

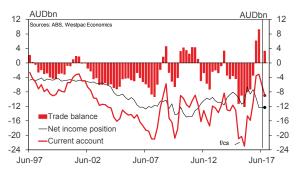


Aus Q2 current account, AUDbn Sep 5, Last: -3.1, WBC f/c: -9.0

Mkt f/c: -7.4, Range: -9.5 to -1.0

Australia's current account deficit narrowed to only \$3.3bn in Q1, 0.7% of GDP. That was the smallest deficit as a share of the economy since the end of 1979. The trade surplus was 2.1% of GDP, the largest since mid-1973. In Q2, the current account widened to a forecast \$9.0bn as the trade position deteriorated on a dip in export prices as commodity prices eased. The trade balance was \$3.3bn in Q2, a \$5.9bn deterioration on Q1 (or, after revisions, a deterioration of \$4.0bn). Export earnings declined by around 3%, dented by lower prices, while the import bill increased by around 2%. The terms of trade declined by an estimated 5%. The net income deficit is expected to hold around the Q1 level of \$12.35bn, which represented a \$5bn deterioration on six months earlier, as foreign investors in the mining sector enjoyed stronger returns.

Current account: f/c -\$9.0bn in Q2



The week ahead

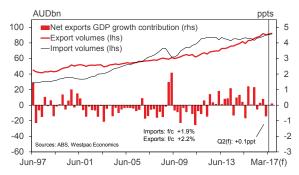
Aus Q2 net exports, ppts cont'n

Sep 5, Last: -0.7, WBC f/c: 0.10

Mkt f/c: -0.05, Range: -0.60 to 0.10

- Net exports, like inventories, were a swing factor over the first half of 2017 - but moving in the opposite direction. In Q1, net exports subtracted a hefty 0.7ppts from growth as exports fell by 1.6% and imports increased by 1.6%, to meet rising demand. The key surprise was that resource exports slumped 4.6%, subtracting 2.5ppts of total exports, hit by bad weather and mechanical disruptions.
- In Q2, net exports are expected to be broadly neutral, at +0.1ppt.
- Export volumes rose an estimated 2.2%, with gains in iron ore, LNG, services and manufacturing outweighing a fall in coal. Coal shipments are set to rebound in Q3 with a return to more normal conditions. Import volumes advanced a further 1.9% we estimate, with broad based strength (excluding gold).

Net exports: f/c +0.1ppt in Q2



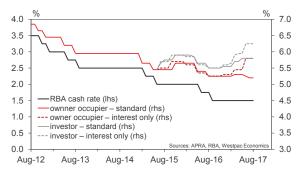
Aus RBA policy decision

Sep 5, Last: 1.50%, WBC f/c: 1.50%

Mkt f/c: 1.50%, Range: 1.50% to 1.50%

- The RBA is certain to leave rates unchanged again at its September meeting. The Bank has left the cash rate unchanged since August last year. Over the past year, economic growth has been patchy, core inflation is below the target band, there is significant slack in the labour market and wages growth is at historic lows.
- With a number of these trends likely to persist, we expect rates to remain on hold throughout 2017 and 2018. However, market pricing is for one rate hike by the second half of 2018.
- The 2018 outlook is critical to the rates debate. The RBA's central case forecast is for growth to accelerate to be above trend in 2018 and into 2019. We are less convinced, expecting growth to slow to below trend in 2018.

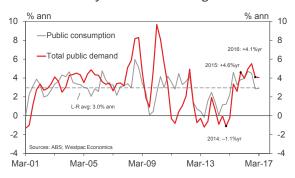
RBA cash rate and mortgage interest rates



Aus Q2 public demand

Sep 5, Last: 0.5%, WBC f/c: 1.3%

- Public demand grew by an above trend pace in 2015 and 2016, 4.6% and 4.1%, respectively. This followed four years of weakness.
- An upswing in public investment is underway, lifting from recent lows, as governments commit to additional projects now that earlier fiscal pressures at the state level have receded.
- In Q1, public demand surprised to the down side, with a gain of only 0.5%, constrained by a dip in investment.
- In Q2, the upswing in public investment resumed. Overall public demand is expected to increase by 1.3% in the quarter, adding 0.3ppts to growth.



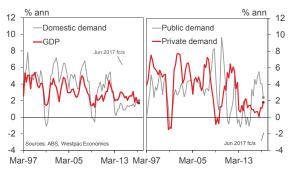
Public demand: 2 years of above trend growth

Aus Q2 GDP

Sep 6, Last: 0.3%qtr, 1.7%yr; WBC f/c: 0.7%qtr, 1.7%yr Mkt f/c: 0.7%, Range: 0.5% to 1.0%

The Australian economy gained momentum in Q2. Real GDP grew by a forecast 0.7%, after a 0.3%, comprised of: domestic demand +1.0%; inventories -0.4ppts; and net exports +0.1ppts. Conditions rebounded from recent weather disruptions (except coal shipments in April). Public investment and business investment increased, with the waning of the mining investment downturn. As well, global growth has improved. There was a hiring burst in the period, with employment up 0.9%, including full-time +1.1%, and hours worked rose 1.2%. This corrects for undue employment weakness in 2016. Consumers spent more freely in the period, a forecast +1.0%, twice the Q1 pace. Household incomes were supported by employment strength but wages growth remains weak. Home building activity was little changed in the quarter.

Australian economic conditions



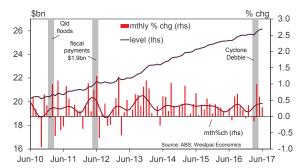
The week ahead

Aus Jul retail trade

Sep 7, Last: 0.3%, WBC f/c: 0.2% Mkt f/c: 0.2%, Range: 0.1% to 0.6%

- Recent months have seen retail sales recover from weather disruptions at the start of the year, with a 1% rise in Apr followed by a 0.6% gain in May and a 0.3% gain in June. Recall that the start of 2017 saw an abnormally high number of heatwave and wet weather days across the eastern capital cities with severe weather from Cyclone Debbie also impacting in late March.
- The rebound in momentum is now fading. Meanwhile the backdrop in terms of consumer sentiment remains shaky with signs family finances came under renewed pressure through mid 2017 with mortgage rate increases and continued concerns around housing markets more than offsetting an improvement in labour markets. Aggressive price discounting remains a factor as well. On balance, we expect July to post a weak 0.2% gain for monthly sales.

Monthly retail sales

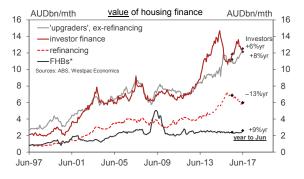


Aus Jul housing finance (no.) Sep 8, Last: 0.5%, WBC f/c: 1.5%

Mkt f/c: 1.0%, Range: -4.0% to 2.5%

- The number of housing finance approvals to owner occupiers edged up 0.5% in June but with the detail more positive, approvals ex-refi up 1.9% and investor loans and construction-related loans also posting solid rises. Note that the first round of mortgage interest rate rises associated with macro prudential tightening measures came through in late March with a second round of changes only coming in late June.
- The July update should provide more clues as to the impact of these measures although its still likely to be too early for June rate moves to impact. Industry data points to a solid lift in owner occupier loans in the July month, some of which may be indirect spillover effects of higher rates for investor loans. We expect approvals to be up 1.5% but the focus will be on investor loans.

Value of finance approvals by segment

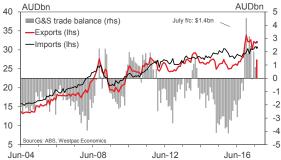


Aus Jul trade balance, AUDbn Sep 7, Last: 0.9, WBC f/c: 1.4 Mkt f/c: 0.9, Range: 0.2 to 3.0

- Australia's trade balance has been in surplus in seven of the past eight months.
- For July, we expect the surplus to widen from \$0.86bn to \$1.4bn, an improvement of \$550mn.
- Export earnings are forecast to rise by 0.8%, \$250mn. Gains in iron ore (higher prices) and coal (volumes) offset slippage in LNG (disruptions) and gold (off a high base).
- The import bill declines by an anticipated 1%, \$300mn, as prices fall in association with a stronger currency. The Australian dollar made solid gains in the month, up 3% against the US dollar and +2.5% on a TWI weighted basis.



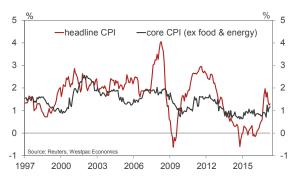
Australia's trade balance



ECB Sep policy meeting Sep 7, deposit rate -0.40%

- President Draghi put off speaking on the topic of monetary policy at the Jackson Hole Symposium, instead choosing to focus on the long-term concerns of confidence and productivity. Before and after that engagement, the Euro continued to rally past USD1.20.
- To our mind, the ECB Governing Council is not overly concerned about the current level of the currency, but a further jolt higher is certainly not desired.
- Come September, the market will be focused on guidance on a 2018 taper and forecast revisions. To hold off a higher Euro, the Council needs to emphasise that the taper process will be slow and that rates won't rise until well after it is completed. Note it is not a given that hard detail on the taper will be provided in September: the Council may wait until October or December.

Inflation still a long way from target



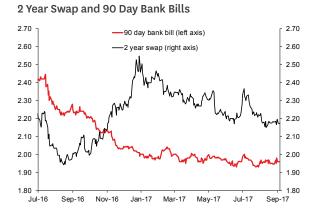
Data calendar

		Last		Westpac forecast	Risk/Comment
Mon 4					
Aus	Q2 company profits	6.0%	-4.0%	-4.0%	Profits dip on lower commodity prices & margin squeeze.
	Q2 business inventories	1.2%	0.3%	0.2%	Q2 –0.4ppt impact, on pull-back in mining.
	Aug ANZ job ads	1.5%	-	-	In a solid recovery up 12.8%yr fastest pace since Oct 15.
	Aug MI inflation gauge	2.7%	-	-	The pace lifted through Q2 but has eased back since May.
Eur	Sep Sentix investor confidence	27.7	27.3	-	Strong and will remain that way.
JS	Labor Day	-	-	-	National public holiday.
lue 5					
NZ	Aug ANZ commodity prices	-0.8%	-	-	Commodities firmness to continue, driven by dairy and meat.
	Q2 building work put in place	-3.5%	1.6%	4.5%	Recovery in non–res construction, limited gain in residential.
Aus	Q2 current account balance, AUDbn	-3.1	-7.4	-9.0	Trade surplus narrowed, lower export (commodity) prices.
	Q2 real net exports, ppts cont'n	-0.70	-0.05	0.10	Broadly neutral impact, export shipments rebound.
	Q2 public demand	0.5%	-	1.3%	Above trend growth past 2 yrs, public investment upswing.
	Aug AiG services PSI	56.4	-	-	Strength overdone? July reading on par with 2007/08 period.
	RBA policy announcement	1.50%	1.50%	1.50%	On hold for over a year, likely to remain so for some time yet.
	RBA Governor Philip Lowe	-	-	-	Remarks at RBA Board dinner, Brisbane.
Chn	Aug Caixin China PMI services	51.5	-	-	NBS variant disappointed in August.
ur	Q2 GDP – final	0.6%		0.6%	Growth has broad support.
	Aug Markit services PMI – final	54.9	54.9		Conditions very strong.
	Jul retail sales	0.5%			Annual pace trend up in 2017.
JK	Aug Markit services PMI	53.8			Elevated in line with other developed economies' PMIs.
JS	Jul factory orders	3.0%			Durables slumped back in Jul; though core pulse solid.
	Fedspeak	_	_	_	Brainard on economy and policy, Kashkari holds townhall.
Ned 6					
νZ	GlobalDairyTrade auction	-0.4%	-	-	WMP dairy futures signalling a decline in prices.
Aus	Q2 real GDP	0.3%		0.7%	Rebound from weather disruptions, consumer spending up
	Q2 real GDP, %yr	1.7%			supported by hiring burst, business & public investment up.
	RBA Head of Economic Analysis	_	-	_	Alex Heath, Economic Society, Tasmania, 2:30pm.
JS	Jul trade balance US\$bn	-43.6	-44.5	-	Weaker USD won't spur export momentum.
	Aug Markit service PMI – final	56.9			Held up better than ISM variant which
	Aug ISM non-manufacturing	53.9	55.1		slowed sharply in Jul across all major components.
	Federal Reserve's Beige book	-	-	-	Conditions across the districts.
	Fedspeak	-	-	-	Kaplan speaks to Dallas business club.
Thu 7	and a second				all a share and a second s
Aus	Jul retail trade	0.3%	0.2%	0.2%	Rebound from weather disruptions fading.
	Jul trade balance, AUDbn	0.9	0.9		Exports +0.8%, prices (iron ore) & vols (coal), imports –1%.
Chn	Aug foreign reserves \$bn	3080.7	-	-	Have been very stable since January.
Eur	ECB policy decision	-0.40%	-0.40%		Revised forecasts due. Clarity on 2018 tapering desired.
JK	Aug Halifax house prices	2.1%		-	Uncertainty continuing to dampen house price growth.
US	Initial jobless claims	236k		_	Very low.
	Q2 non-farm productivity (final)	0.9%		_	Productivity remains sluggish.
	Fedspeak	0.070	-	_	Mester on economic outlook and monetary policy.
Fri 8					
NZ	Q2 manufacturing activity	2.8%	_	-	Manufacturers' confidence high throughout the quarter.
∿∠ Aus	Jul housing finance	0.5%			Owner occupier loans firm – investors the main focus.
-43	RBA Deputy Governor	0.3%	1.0%		Guy Debelle, FINSIA Regulators panel, Sydney, 12:30pm.
	RBA Governor Philip Lowe	-	-		Bank of China, Dinner, Sydney, 6:30pm.
hn	Aug trade balance USDbn				
Chn	Aug trade balance USDbn Aug foreign direct investment %yr	46.7			Widened for a fifth month in July.
	0 0 ,	2.3%		-	Up modestly over the year- tentative date.
JK	Jul trade balance £bn	-4564		-	Remains in deficit.
	Jul industrial production	0.5%			Lower sterling helping to support demand.
	Jul construction output	-0.1%			Softness in both commercial and residential activity.
JS	Jul consumer credit \$bn	12.4			Auto and student loans still the focus.
	Jul wholesale inventories	0.4%	0.4%		Were broadly stable in Q2.
	Fedspeak	-	-	-	Dudley, George, Bostic on economy. Harker on cons. credit.
Sat 9					
Chn	Aug CPI %yr	1.4%			Inflation remains weak.
	Aug PPI %yr	5.5%	5.4%	-	Commodity prices continue to aid producer price inflation.

New Zealand forecasts

Economic Forecasts		20	017		Calendar years			
% change	Mar (a)	Jun	Sep	Dec	2015	2016	2017f	2018f
GDP (Production) ann avg	0.5	0.8	0.9	0.7	2.5	3.1	2.6	3.0
Employment	1.1	-0.1	1.3	0.5	1.4	5.8	2.8	1.8
Unemployment Rate % s.a.	4.9	4.8	4.5	4.5	4.9	5.2	4.5	4.5
CPI	1.0	0.0	0.5	0.4	0.1	1.3	1.9	1.5
Current Account Balance % of GDP	-3.1	-2.9	-2.9	-3.0	-3.4	-2.8	-3.0	-3.3

Financial Forecasts	Sep-17	Dec-17	Mar-18	Jun-18	Sep-18	Dec-18
Cash	1.75	1.75	1.75	1.75	1.75	1.75
90 Day bill	1.95	1.95	1.95	1.95	1.95	1.95
2 Year Swap	2.10	2.10	2.15	2.20	2.30	2.40
5 Year Swap	2.65	2.70	2.80	2.90	3.00	3.10
10 Year Bond	2.90	2.95	3.10	3.20	3.30	3.40
NZD/USD	0.72	0.70	0.69	0.68	0.67	0.66
NZD/AUD	0.92	0.92	0.92	0.92	0.93	0.94
NZD/JPY	79.2	77.7	77.3	76.8	76.4	75.9
NZD/EUR	0.62	0.60	0.59	0.59	0.59	0.58
NZD/GBP	0.57	0.56	0.56	0.55	0.55	0.55
TWI	76.4	75.0	74.3	73.8	73.4	72.9



NZ interest rates as at market open on Monday 4 September 2017

Interest Rates	Current	Two weeks ago	One month ago
Cash	ash 1.75%		1.75%
30 Days	1.85%	1.84%	1.86%
60 Days	1.90%	1.89%	1.90%
90 Days	1.96%	1.95%	1.95%
2 Year Swap	2.17%	2.17%	2.19%
5 Year Swap	2.63%	2.64%	2.69%

NZD/USD and NZD/AUD



NZ foreign currency mid-rates as at Monday 4 September 2017

Exchange Rates	Current	Two weeks ago	One month ago		
NZD/USD	ZD/USD 0.7150		0.7404		
NZD/EUR	0.6016	0.6220	0.6289		
NZD/GBP	0.5517	0.5686	0.5677		
NZD/JPY	78.26	79.98	82.01		
NZD/AUD	0.8999	0.9223	0.9344		
тwi	74.98	77.29	78.27		

International forecasts

Economic Forecasts (Calendar Years)	2013	2014	2015	2016	2017f	2018f
Australia						
Real GDP % yr	2.1	2.8	2.4	2.5	2.3	3.0
CPI inflation % annual	2.7	1.7	1.7	1.5	2.0	2.5
Unemployment %	5.8	6.2	5.8	5.7	5.7	6.1
Current Account % GDP	-3.4	-3.0	-4.7	-2.7	-1.2	-2.1
United States						
Real GDP %yr	1.5	2.4	2.9	1.5	2.1	2.1
Consumer Prices %yr	1.5	1.6	0.1	1.3	2.0	1.8
Unemployment Rate %	7.4	6.2	5.3	4.9	4.4	4.3
Current Account %GDP	-2.3	-2.3	-2.3	-2.6	-2.7	-2.8
Japan						
Real GDP %yr	1.4	0.0	0.5	0.6	1.1	1.0
Euroland						
Real GDP %yr	-0.3	0.9	1.6	1.7	1.9	1.5
United Kingdom						
Real GDP %yr	2.2	2.9	2.2	2.0	1.8	1.6
China						
Real GDP %yr	7.7	7.3	6.9	6.7	6.7	6.2
East Asia ex China						
Real GDP %yr	4.2	4.1	3.7	3.7	3.7	3.8
World						
Real GDP %yr	3.3	3.4	3.2	3.2	3.5	3.5
Forecasts finalised 11 August 2017						

Interest Rate Forecasts	Latest	Sep-17	Dec-17	Mar-18	Jun-18	Sep-18	Dec-18	Mar-19
Australia								
Cash	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
90 Day Bill	1.74	1.80	1.80	1.80	1.80	1.80	1.80	1.80
10 Year Bond	2.69	2.75	2.80	2.90	2.95	2.95	3.00	3.00
International								
Fed Funds	1.125	1.125	1.375	1.375	1.625	1.625	1.875	1.875
US 10 Year Bond	2.13	2.40	2.50	2.75	2.85	2.90	3.00	3.00
ECB Deposit Rate	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40	-0.30

Exchange Rate Forecasts	Latest	Sep-17	Dec-17	Mar-18	Jun-18	Sep-18	Dec-18	Mar-19
AUD/USD	0.7946	0.78	0.76	0.75	0.74	0.72	0.70	0.70
USD/JPY	110.10	110	111	112	113	114	115	115
EUR/USD	1.1907	1.17	1.17	1.16	1.15	1.14	1.13	1.13
AUD/NZD	1.1069	1.08	1.09	1.09	1.09	1.07	1.06	1.06

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 Shyamal Maharaj, 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 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. BRO0106), 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. 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.