Weekly Commentary

28 May 2018

New Zealand's economy aging gracefully

New Zealand's economic expansion has entered a more 'mature' phase. While GDP growth isn't weak, it has slowed from the rates of 3.5% to 4% p.a. that we saw in recent years as earlier drivers of demand have cooled. As we discuss in our latest Economic Overview[1], we expect a further moderation over the next few years.

Among the more notable developments has been the slowing in migration led population growth. While net migration remains elevated, it has actually been easing back for around a year now. In fact, the net inflow of 67,000 people in the year to April was the lowest it's been in two years. We expect that net migration will continue to slow as many of those who arrived in recent years on temporary visas depart.

At the same time, the heat has come out of the housing market. After a brief resurgence, house prices have started to fall again in Auckland and Christchurch, and the pace of increase has slowed sharply in Wellington. With a range of significant government policy changes targeting the housing market being introduced (such as the extension of the 'bright line' test for taxing capital gains which came into effect at the end of March), we expect house prices will lose further ground over the remainder of this year.

The slowdown in the housing market will dampen households' spending appetites. In fact, we've already seen softness in the retail sector in the early part of 2018: core retail spending only rose by 0.6% in the March quarter, and electronic card transactions for April point to a soft path for spending.

With the housing market cooling, we could see the RBNZ easing lending restrictions again later this year. We'll be watching the upcoming May Financial Stability Report (due for release at 9.00am on Wednesday 30 May) to see how the RBNZ's thinking in this area is evolving.

Finally, as we discuss below, the construction sector is also taking a breather, with activity set to rise only gradually despite strong demand.

Helping to offset the above headwinds are some positive factors. Along with low interest rates, the terms of trade are strong and government spending is stimulatory. This mixture suggests the economic expansion will age gracefully rather than expire suddenly, with GDP growth of a little below 3% p.a. expected over the next few years.

We expect headline inflation will push higher over the coming year and will briefly reach the 2% mid-point of the RBNZ's target band. That could cause the RBNZ to become a little more hawkish later this year. However, the near-term lift in inflation that is occurring is a result of the recent drop in the NZ dollar and the sharp rise in oil prices. Those factors are only providing a temporary boost to inflation. Under the surface, the factors that have contributed to New Zealand's 'lowflation' environment have not gone away. As a result, core inflation is likely to remain below the RBNZ's 2% target band for some time. Consequently, we still expect that the OCR will only begin rising at the end of 2019, and we are pleased to see that financial markets have largely come around to that view.

[1] Available here: https://www.westpac.co.nz/assets/Business/Economic-Updates/2018/Bulletins-2018/Westpac-QEO-May_2018_Email.pdf

New Zealand's economy... continued

Can we build it? Yeah...Nah.

There's been a lot of debate recently around how much residential construction we'll see over the next few years, and what role the Government's flagship KiwiBuild program will play. KiwiBuild aims to provide funding to support the construction of 100,000 affordable homes over the next decade. In the May Budget, the Treasury changed some of its assumptions regarding how this would play out, and it now forecasts that the boost to construction will occur later than they had previously assumed. In fact, their forecast for the additional nominal residential investment that KiwiBuild will generate by 2022 is now around half of what they forecast back in December, with the bulk of activity expected to occur beyond that date. This forecast change stemmed from updates in the assumed timing of capital expenditure on KiwiBuild. In addition, the Treasury has continued to stress that capacity constraints mean that KiwiBuild spending and private demand could crowd each other out. That means that the overall increase in total home building will be smaller than the number of KiwiBuild homes implies.

In contrast, the Ministry of Business, Innovation and Employment (MBIE) expects a much faster lift in KiwiBuild related building. In fact, a recent MBIE report suggest that between 2018 and 2022 additions to residential building as a result of KiwiBuild could be around two to four times as large as the Treasury assumed in the May Budget. MBIE's report highlights a range of financial constraints that KiwiBuild funding could help alleviate to support building.

Crucially, however, MBIE's report noted that: "our estimates did not discount for capacity constraints or substitution." To put that differently, MBIE's forecasts provide an indication of how many homes might be built under the KiwiBuild banner. But they don't really give us an indication of what the overall level of construction activity will look like, or how much private sector activity KiwiBuild might displace. In contrast, the softer forecasts from the Treasury explicitly allow for such constraints, and assume that they will be even more of a drag on home building over the next few years.

Capacity constraints are really what is at the heart of the outlook for construction. After large increases in recent years, the sector is encountering some strong headwinds, including rising costs and shortages of skilled labour. That means the KiwiBuild program will be one more buyer in an already constrained market. Even allowing for an increase in the size of the labour force over the coming years and a shift to smaller, higher density homes, the building sector is going to be wrestling with constrained capacity for some time yet. This means that, even if KiwiBuild related construction does pick up (and we have our doubts), this would likely result in private sector construction being crowded out.

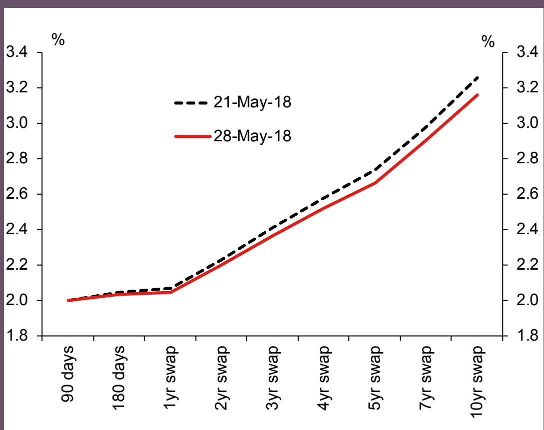
We expect that KiwiBuild will help to offset some of the financial headwinds in the construction sector over the next few years. And longer term, KiwiBuild related efforts to increase construction sector capacity could also increase building activity. Nevertheless, it will be a slow grind higher, and more gradual than even the Treasury's forecasts assume.

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 Apr residential building consents

May 30, Last: 14.7%, WBC f/c: –10%

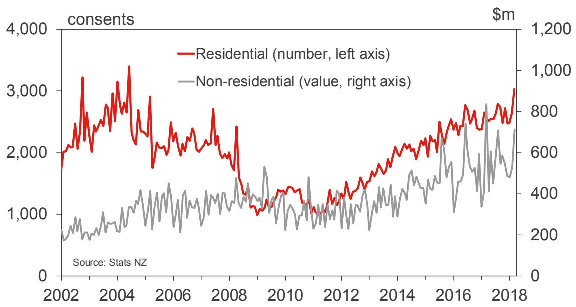
- Residential building consents surged higher in March. This was underpinned by a sharp rise in multiple consents (such as apartment buildings) in Auckland and elsewhere.
- Multiple consents tend to be lumpy on a month-to-month basis, and we expect to see a reversal in April. That would pull overall consent issuance down by 10%.
- Smoothing through the volatility associated with multiple consents, construction activity has flattened off in recent months. Construction firms are highlighting shortages of skilled labour and difficulties with financing as important brakes on the pace of building.

NZ RBNZ Financial Stability Report

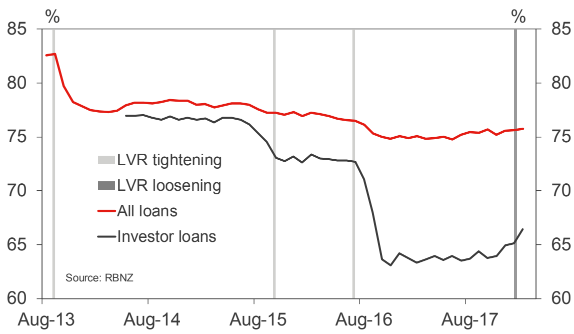
May 30

- The RBNZ's six-monthly review of the financial system provides a window of opportunity to review the loan-to-value restrictions on mortgage lending. Last November the RBNZ eased the LVR restrictions, albeit only slightly, and indicated the criteria for a further easing. House price and credit growth would need to slow to more sustainable rates, and the RBNZ would need to be satisfied that an easing wouldn't lead to a resurgence in the housing market.
- House price inflation is running at or below household income growth, and credit growth has slowed. A range of new Government policies aimed at cooling the housing market are in progress.
- Our forecasts assume some further easing of the LVR restrictions over this year. It's quite possible that the RBNZ will move as early as this month, even if it's just an incremental move along the way.

NZ building consents



Average LVR of new loan commitments



NZ May ANZ business confidence

May 31, Last: -23.4

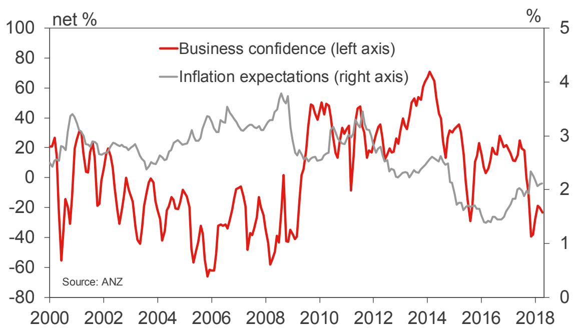
- Business confidence fell in April, led by a weaker outlook by firms in the construction sector.
- The extent of the deterioration in confidence in construction was surprising given the Government's promotion of its Kiwibuild programme and significant housing shortages in the Auckland region. However, it is consistent with other indicators, such as consents, which suggest a lull in building activity in the coming months. It will be interesting to see if the pessimistic outlook of construction firms was maintained in May.
- Inflation expectations were little changed last month despite CPI falling sharply in Q1.

NZ Q1 terms of trade

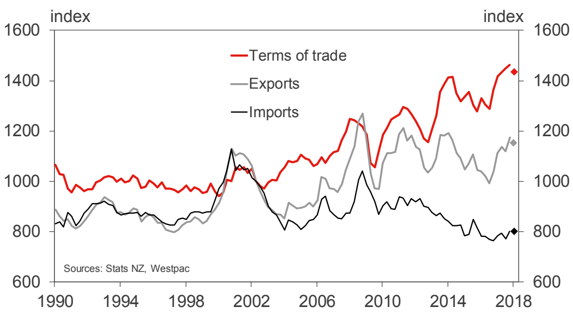
Jun 1, Last: 0.8%, WBC f/c: –2.0%, Mkt f/c: -1.5%

- The terms of trade reached a new all-time high in 2017. Export commodity prices have held up well, while prices for imported manufactured goods have been trending lower for some time.
- We expect the terms of trade to start the new year with a 2% decline, led by a fall in export prices. Prices for dairy, meat and wool were all lower in the March quarter, though we think these declines will be temporary.
- We expect import prices to be flat for the quarter. Oil prices rose, but manufactured goods prices are likely to have fallen further, helped by a stronger exchange rate.

NZ business confidence and inflation expectations



NZ terms of trade



The week ahead

Aus Apr dwelling approvals

May 30, Last: 2.6%, WBC f/c: –3.0%
Mkt f/c: -3.0%, Range: -7.0% to 7.3%

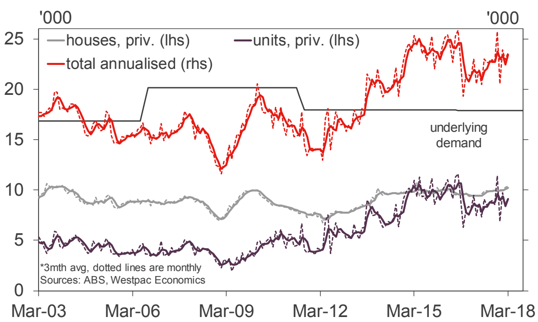
- Dwelling approvals firmed in March, rising 2.6% to be up 14.5%yr (albeit with the annual gain exaggerated by monthly volatility affecting the base period). The March rise was led by a solid +6.1% rebound in units, led by high rise, and a reasonably firm 1.1%mth gain for private detached houses. Lead indicators continue to point to softening approvals in the months ahead. As we have highlighted for some time, a sharp fall in site purchases last year suggests the pipeline of new high rise projects is set to take another leg lower. Meanwhile, a fall off in construction-related housing finance approvals – which had firmed through the six months to March – is also pointing to a move lower for non high rise approvals.

Aus Q1 business capex

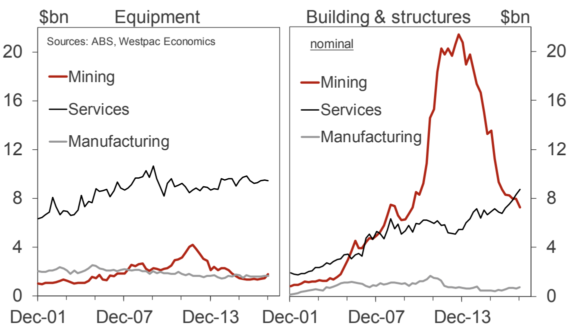
May 31, Last: -0.2%, WBC f/c: -0.8%
Mkt f/c: 1.0%, Range: -1.0% to 3.0%

- Business capex spending turned the corner in 2017 with the mining investment wind-down largely complete and with the emergence of an upswing in investment by the non-mining economy. Capex rose 4% in 2017 after four years of decline. Despite this, we anticipate a small pull-back in Q1, forecasting a decline of 0.8%. Building & structures capex is expected to fall by almost 1.5%. Building activity surprisingly fell, a reported -4.2% (Construction survey), which is likely to be promptly reversed given the strength of approvals. Infrastructure activity edged higher, +0.4% (Construction survey). Equipment spending is expected to consolidate, with a flat result.

Dwelling approvals



CAPEX: by industry by asset

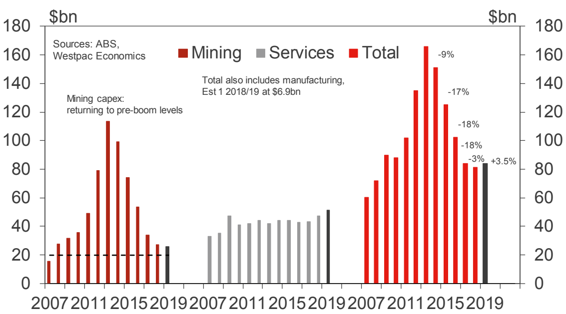


Aus capex plans

May 31, Last (Est 1 for 2018/19): $84.0bn, +3.5%

- This survey, conducted during April and May, includes the 2nd estimate of capex spending plans for 2018/19. A word of caution, estimates 1 and 2 can be unreliable. In the previous survey, Est 1 for 2018/19 was $84bn, some 3.5% above Est 1 a year ago. This is the first positive 'Est 1 on Est 1' comparison since 2012/13.
- For mining, Est 1 on Est 1 is only a modest negative, at -5%, with the investment wind-down nearing its end.
- For services, Est 1 vs Est 1 is +8%, evidence that the investment upswing is set to continue, with strength in buildings reflecting the lift in commercial building activity. This update is likely to confirm the broad themes evident in the capex survey 3 months earlier. Potentially, Est 2 will be around $90bn, a 7% upgrade on Est 1, which would have Est 2 on Est 2 at +4%.

Capex plans, by industry: Estimate 1

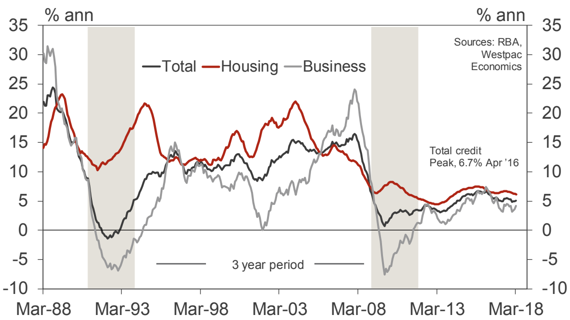


Aus Apr private credit

May 31, Last: 0.5%, WBC f/c: 0.4%
Mkt f/c: 0.4%, Range: 0.3% to 0.6%

- Private sector credit is expanding at a modest pace as the housing sector cools. In 2017, credit grew by 4.9%, slowing from 5.6% for 2016. For April, we expect a rise of 0.4%, in line with the recent average but a tick down on the March outcome of 0.5%.
- Housing credit, at this late stage of the cycle, is slowing in response to tighter lending conditions. In March, housing credit expanded by 0.45%, which is a 5.6% annualised pace, well down from the 6.8% annualised pace of last May.
- Business credit, 4.2% above the level of a year ago, is volatile around a modest uptrend as businesses increase investment in the real economy. The segment hit a soft spot at the turn of the year, up only 0.1% in the 3 months to February. This was followed by a 0.8% jump in March, suggesting that the upward trend has resumed.

Credit growth



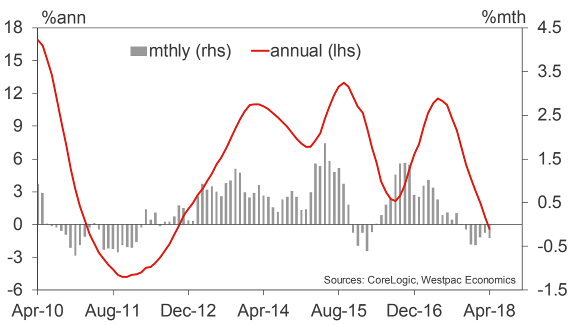
The week ahead

Aus May CoreLogic home value index

Jun 1, Last: –0.3%, WBC f/c: –0.2%

- The CoreLogic home value index, covering the eight major capital cities, dipped 0.3% in April marking the sixth successive monthly decline. Prices nationally are down 0.3%yr, the first annual fall since Oct 2012. The most disaggregated price data shows about a third of properties nationally are experiencing annual price declines – a more widespread correction than in 2015-16 but a much lower incidence than seen during the bigger price corrections in 2011-12, 2008-09, the mid 2000s and the mid-1990s.
- The daily index points to further 0.1% decline in May that will take the annual rate of decline to –1.1%yr nationally. Auction clearance rates have tracked lower in recent months and are now marginally below long run averages in both Sydney and Melbourne.

Australian dwelling prices

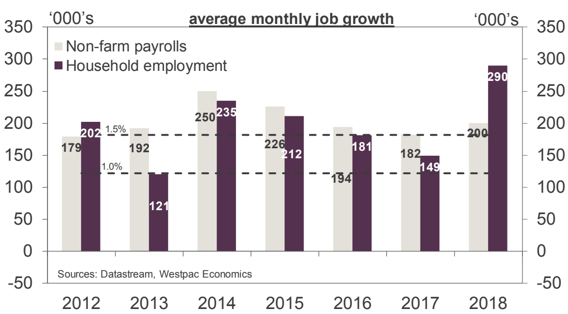


US May employment report

Jun 1, nonfarm payrolls, last 164k, WBC 180k
Jun 1, unemployment rate, last 3.9%, WBC 3.9%

- Employment growth remains strong in the US, the year-to-date average being ahead of 2017 and materially above population growth. In coming months, a slight softening is anticipated, bringing 2018 into line with 2017 and 2016. Still well ahead of population growth, this outcome will see the unemployment rate push lower in coming months from the already historically low 3.9% of April. Importantly, underemployment is also continuing to trend lower, signalling a further taking up of slack in the labour market.
- A key reason why this decline in labour market slack has not translated into higher wages growth is because prime-aged individuals outside the labour market continue to return. This is expected to persist over the coming year.

US job creation still strong

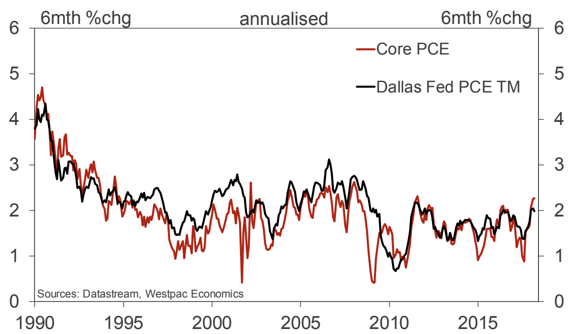


US Apr PCE report

May 31, personal income, last 0.3%, WBC 0.3%
May 31, personal spending, last 0.4%, WBC 0.5%
May 31, core deflator, last 1.9%yr, WBC 1.8%yr

- Indicators of wage inflation have been mixed of late, with a clear uptrend yet to be established. We expect some firming over the coming year, but for the employment cost index and other measures to only stabilise around 3.0%yr. A lack of a material uplift in wages growth and a low savings rate mean that the US consumer is likely to remain constrained. Solid retail sales in the month and further support from services should bring about a decent outcome. Inflation remains a focus for all in markets. In contrast to the headline CPI at 2.5%yr, measures of PCE inflation remain at or below the 2.0%yr medium-term target. The FOMC expect this trend to persist, and consequently have shown caution towards the pace and extent of rate hikes from here.

Core inflation near target; to remain there



Data calendar

		Last	Market median	Westpac forecast	Risk/Comment
Mon 28					
UK	May Nationwide house prices	0.2%	0.2%	–	Tentative date. Prices growth levelled, but remains subdued.
US	Memorial Day	–	–	–	Public holiday.
Tue 29					
Eur	Apr M3 money supply %yr	3.7%	–	–	Credit data also due; its support for g'th dissipating.
	ECB speak	–	–	–	Bank of Italy Governor Visco presents annual report.
US	Mar S&P/CS home price index %yr	6.8%	–	–	Continues to show robust momentum.
	May consumer confidence index	128.7	127.9	–	Remains very positive.
	May Dallas Fed index	21.8	–	–	Regional surveys currently mixed.
	Fedspeak	–	–	–	Bullard in Tokyo at global finance seminar.
Wed 30					
NZ	RBNZ Financial Stability Report	–	–	–	Subdued housing may allow further easing of LVR restrictions.
	Apr building consents	14.7%	–	-10.0%	Earlier strength in apartment consents to reverse.
Aus	Apr dwelling approvals	2.6%	-3.0%	-3.0%	Indicators suggest high rise and non high rise to soften.
Eur	May economic confidence	112.7	–	–	Growth still above potential; political uncertainty up.
	May business climate indicator	1.35	–	–	Will businesses be spooked by softer growth?
	May consumer confidence final	0.2	–	–	Labour market the key for confidence.
US	May ADP employment change	204k	195k	185k	Risks likely to downside in May.
	Q1 GDP 2nd estimate %annualised	2.3%	2.3%	2.3%	Revisions (if any) will be minor.
	Apr wholesale inventories	0.3%	–	–	Key swing variable for growth.
	Federal Reserve's Beige book	–	–	–	Conditions across the regions.
	Fed Volcker Rule meeting	–	–	–	Board meeting to discuss changes.
Thu 31					
NZ	May ANZ business confidence	–23.4	–	–	Firms remained nervous on outlook, esp. in construction.
Aus	Q1 private new capital expenditure	–0.2%	1.0%	–0.8%	Dented by surprise drop in building activity.
	2018/19 Capex plans, $bn	84.0	90.5	–	Est 1 +3.5% vs yr ago, services up, diminished mining drag.
	Apr private sector credit	0.5%	0.4%	0.4%	Housing cooling, business volatile around modest uptrend.
Chn	May non–manufacturing PMI	54.8	54.8	–	Conditions across manufacturing and...
	May manufacturing PMI	51.4	51.4	–	... services remain robust.
Eur	Apr unemployment rate	8.5%	8.5%	8.5%	Decline in unemployment likely to slow.
	May CPI %yr advance	1.2%	1.6%	–	Core inflation still stuck around 1.0%yr.
UK	May GfK consumer confidence	–9	–	–	Confidence stabilised, but down on pre–referendum level.
	Apr net lending sec. on dwellings, $b	4.0	–	–	Credit growth dampened by softness in housing market.
US	Initial jobless claims	234k	–	–	Very low.
	Apr personal income	0.3%	0.3%	0.3%	Measures of wage growth have been mixed.
	Apr personal spending	0.4%	0.4%	0.5%	Consumer remains constrained on real basis.
	Apr core PCE deflator	1.9%	1.8%	1.8%	FOMC not confident of 2.0% pace being sustained.
	May Chicago PMI	57.6	58.1	–	Regional surveys currently mixed.
	Apr pending home sales	0.4%	1.0%	–	Housing data softening?
	Fedspeak	–	–	–	Bullard in MNI roundtable in Tokyo.
Fri 01					
NZ	May ANZ consumer confidence	–5.9	–	–	Confidence eased back as conditions have softened.
	Q1 terms of trade	0.8%	–1.5%	–2.0%	Export commodity prices were down a little in early 2018.
Aus	May CoreLogic home value index	–0.3%	–	–0.2%	Annual price growth dipped into negative in April.
	May AiG PMI	58.3	–	–	Manuf'g expanding, construction upswing & lower AUD.
Chn	May Caixin China PMI	51.2	51.1	–	Targets smaller manufacturers than NBS.
Eur	May Markit manufacturing PMI final	55.5	–	–	Flash pointed to further deceleration.
UK	May Markit manufacturing PMI (final)	53.9	53.5	–	Manufacturing conditions have cooled.
US	May non–farm payrolls	164k	190k	180k	Employment growth likely to soften a touch.
	May unemployment rate	3.9%	3.9%	3.9%	Slow downtrend for unemployment to continue in time.
	May Markit manufacturing PMI final	56.6	–	–	US uptrend stark contrast to other majors.
	Apr construction spending	-1.7%	1.0%	–	Mixed outcomes across sectors.
	May ISM manufacturing	57.3	58.1	–	US dollar supportive for big manufacturers.
	Fedspeak	–	–	–	Bostic in Q&A and Brainard on the economy and policy.
Int	G7 finance ministers & central bankers	–	–	–	Meeting in Whistler from 31st to the 3rd.

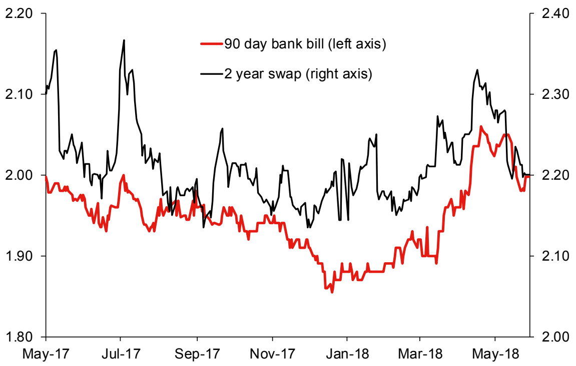
New Zealand forecasts

Economic Forecasts	Quarterly				Annual			
	2017	2018			Calendar years			
% change	Dec(a)	Mar	Jun	Sep	2016	2017	2018f	2019f
GDP (Production)	0.6	0.5	0.7	0.8	4.0	2.9	2.6	3.2
Employment	0.4	0.6	0.2	0.3	5.8	3.7	1.4	1.4
Unemployment Rate % s.a.	4.5	4.4	4.4	4.5	5.3	4.5	4.6	4.6
CPI	0.1	0.5	0.6	0.7	1.3	1.6	2.1	1.4
Current Account Balance % of GDP	-2.7	-2.7	-3.1	-3.5	-2.2	-2.7	-3.6	-3.7

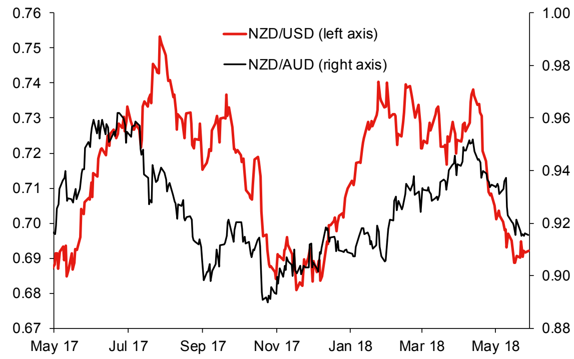
[1] Annual average % change

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	2.00	2.00	2.00	2.00	2.00	2.10
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	0.69	0.68	0.67	0.65	0.65	0.64
NZD/AUD	0.92	0.91	0.91	0.90	0.90	0.91
NZD/JPY	75.9	75.5	75.0	74.1	73.5	71.7
NZD/EUR	0.58	0.57	0.57	0.56	0.55	0.53
NZD/GBP	0.51	0.52	0.53	0.53	0.53	0.52
TWI	72.1	71.4	70.9	69.5	69.6	68.9

2 Year Swap and 90 Day Bank Bills



NZD/USD and NZD/AUD



NZ interest rates as at market open on 28 May 2018

Interest Rates	Current	Two weeks ago	One month ago
Cash	1.75%	1.75%	1.75%
30 Days	1.89%	1.88%	1.88%
60 Days	1.93%	1.96%	1.95%
90 Days	2.00%	2.05%	2.03%
2 Year Swap	2.20%	2.21%	2.29%
5 Year Swap	2.66%	2.67%	2.76%

NZ foreign currency mid-rates as at 28 May 2018

Exchange Rates	Current	Two weeks ago	One month ago
NZD/USD	0.6920	0.6966	0.7083
NZD/EUR	0.5922	0.5830	0.5843
NZD/GBP	0.5196	0.5142	0.5144
NZD/JPY	75.89	76.15	77.24
NZD/AUD	0.9156	0.9240	0.9348
TWI	72.87	72.93	73.75

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	-2.7	-3.8
United States						
Real GDP %yr	2.6	2.9	1.5	2.3	2.8	2.5
Consumer Prices %yr	1.6	0.1	1.3	2.1	2.6	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	0.4	1.4	0.9	1.7	1.3	1.0
Euroland						
Real GDP %yr	1.3	2.1	1.8	2.3	2.1	1.6
United Kingdom						
Real GDP %yr	3.1	2.3	1.9	1.8	1.2	1.5
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	3.5	3.2	3.8	3.8	3.7
Forecasts finalised 4 May 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	1.94	1.98	1.98	1.94	1.90	1.88	1.86	1.85
10 Year Bond	2.79	2.80	2.90	3.05	3.20	3.10	3.10	3.00
International								
Fed Funds	1.625	1.875	2.125	2.125	2.375	2.625	2.625	2.625
US 10 Year Bond	2.99	3.00	3.10	3.35	3.50	3.50	3.40	3.20
ECB Deposit Rate	−0.40	−0.40	−0.40	−0.40	−0.40	−0.30	−0.30	−0.20

Exchange Rate Forecasts	Latest	Jun-18	Sep-18	Dec-18	Mar-18	Jun-19	Sep-19	Dec-19
AUD/USD	0.7564	0.75	0.75	0.74	0.72	0.72	0.70	0.70
USD/JPY	109.55	110	111	112	114	113	112	110
EUR/USD	1.1710	1.17	1.17	1.16	1.15	1.16	1.18	1.20
AUD/NZD	1.0923	1.09	1.10	1.10	1.11	1.11	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

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.