Weekly Commentary

17 December 2018

New Zealand Bush Giant Dragonfly (Kapokapowai)

Trundling along

Recent data suggests that the New Zealand economy is continuing to trundle along slowly but steadily, a view that should be supported by this week's GDP figures. We expect a modest pickup in growth over the next couple of years, supported by a lift in fiscal spending that will be even larger than the Government is currently signalling.

Last week the Government released its Half-Year Economic and Fiscal Update (HYEFU). At face value, the change in the outlook since the May Budget might appear to be negative – lower GDP growth and smaller operating surpluses for the next few years. But digging into the details reveals a less concerning picture.

The Treasury was previously forecasting a sharp acceleration in GDP growth over the next couple of years, an assumption that we described at the time as 'heroic'. The updated forecasts now see growth picking up modestly to around 3% per annum – much in line with our view and within the range of market forecasts.

While the forecasts of real GDP growth have been revised down, the Treasury has also raised its inflation forecasts. At the May Budget, inflation was forecast to remain below 2% for several more years, despite strong domestic growth. Now the Treasury is essentially expecting the Reserve Bank to meet the 2% midpoint of its inflation target consistently over the coming years. Again, this brings the Treasury more in line with market forecasts.

Consequently, the forecasts for nominal GDP – which is what matters for the tax take – were little changed from the Budget. Indeed, the tax revenue projections were actually slightly higher than in the Budget, to reflect the fact that the tax take has been persistently stronger than expected in recent times.

The lower surplus forecasts were largely the result of some reallocation. The surplus in the June 2018 fiscal year was $2.2bn larger than expected, most of which was due to an unintended shortfall in spending towards the end of the year. That underspend is likely to be caught up this year, resulting in a $2bn reduction in the forecast surplus for June 2019. Lower surplus forecasts in the following two years were mostly due to a reclassification of some transport spending from capital to operational, with no impact on the funding requirement.

The bottom line of the HYEFU was that there is still plenty in the tin for more fiscal spending. The Government has overachieved on its self-imposed Fiscal Responsibility Rules: net debt is set to fall below 20% GDP sooner than expected,

Happy holidays!

This is the last Weekly Commentary for 2018. The Weekly Commentary will resume on 14 January 2019.

Trundling along continued

and forecast operational spending is well below the cap of 30% of GDP. Despite that, the Government did not signal an increase in its spending plans – the allowance for new spending in future Budgets remains at $2.4bn per year.

We doubt that the Government's hands will stay off the piggy bank forever. The New Zealand public tends to ask for a slice of the action when it sees a large surplus. And the current Government faces the added pressure of having to satisfy the interests represented by three political parties. We suspect that the Government will announce an increase in spending plans closer to the time of the next election.

This week sees the release of the balance of payments and GDP, rounding out the picture of how the economy performed up to the September quarter. We expect the current account deficit (Wednesday) to widen from 3.3% to 3.6% of GDP, which would be the largest deficit in five years. The trade balance has been hindered by lower dairy production and rising oil prices over the last couple of years, but these factors are starting to reverse. The current account is still on a path that we would consider to be sustainable over the longer term.

We're expecting a modest 0.5% rise in GDP (Thursday), following a 1% jump in the June quarter that benefited from one-offs in certain industries. Milk production was significantly above trend in the June quarter; it was only modestly above trend in the September quarter. Electricity demand fell in the September quarter, and lower hydro lake levels meant a greater reliance on higher-cost methods of generation. On the positive side, the mining sector appears to have rebounded from the shutdowns that affected the June quarter. And, as noted above, government spending fell short in the June quarter but has been catching up in recent months.

Other recent data releases suggest that the economy has continued to trundle along since September. Electronic card spending was down 0.4% in November, but this was influenced by a sharp fall in petrol prices during the month. Spending in the core retail sectors was up 0.5%, suggesting continued modest growth in consumer spending.

November house sales fell 8% in seasonally adjusted terms, unwinding much of the 13% spike in October. House prices eked out small gains across most regions. We're expecting the housing market to be a bit livelier over summer, due to the sharp fall in mortgage rates in recent months and the loosening of the Reserve Bank's loan-to-value restrictions. However, we still expect this boost to be temporary, with other Government polices likely to temper house price gains.

Finally, we note that last week the Reserve Bank released a consultation paper on bank capital requirements. Higher bank capital provides a greater buffer against losses during downturns (and provides more confidence that those losses will be borne by shareholders rather than taxpayers). The flipside is that capital is a more expensive form of funding for banks, resulting in higher interest rates for borrowers and more constrained credit growth. The Reserve Bank is proposing a substantial increase in banks' capital from current levels, though the final requirement will be determined next year after a consultation period.

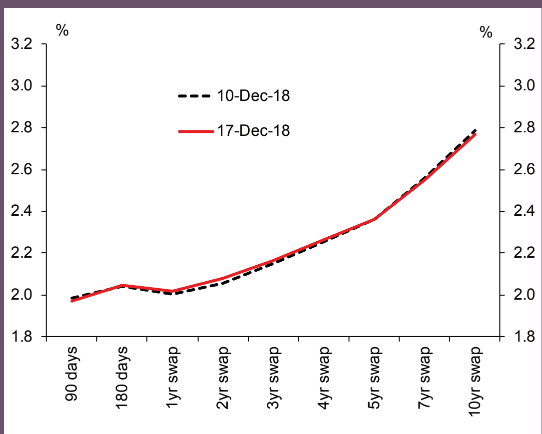
Fixed vs Floating for mortgages

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

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

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

NZ interest rates



The week ahead

NZ Dec business confidence

Dec 18, Last: –37.1

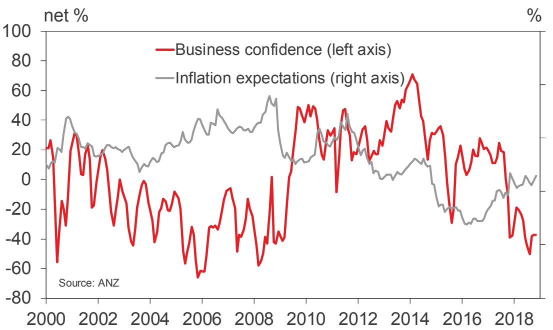
- Business sentiment was unchanged at a low level in November.
- It's a relatively short interval between the release of the November and December surveys and there have been few economic developments in the interim.
- That said, there have been recent announcements of concessions made in order for the Government to get its Employment Relations Bill over the line. With changes to employment law one factor that has likely been weighing on sentiment, this could be viewed as a positive development by firms.

NZ Q4 Westpac McDermott Miller Consumer Confidence

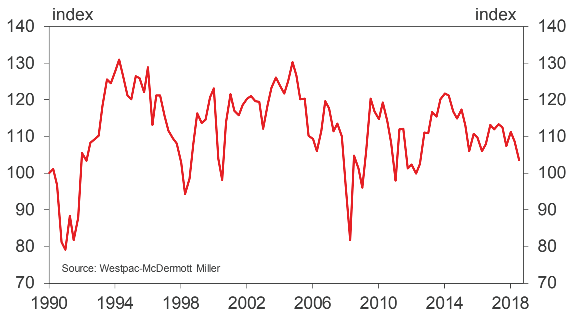
Dec 19, Last: 103.5

- Consumer confidence fell sharply in September, dropping to its lowest in six years.
- That fall occurred against a backdrop of rising petrol prices and a cooling in the housing market. Those developments saw households highlighting increased concerns about the outlook for their own finances and the economy more generally over the next year.
- Since the time of the last survey, we've seen falls in interest rates and petrol prices, a resurgence in the housing market, and positive news on the labour market.

NZ business confidence and inflation expectations



Westpac-McDermott Miller consumer confidence



NZ Q3 current account, % of GDP

Dec 19, Last: -3.3%, Westpac f/c: -3.6%, Mkt f/c: -3.6%

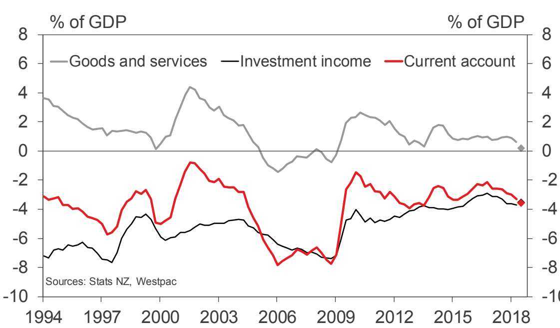
- We expect the annual deficit to widen from 3.3% to 3.6% of GDP. While the quarterly balance for September should improve compared to June, it remains wider compared to the same time last year.
- In seasonally adjusted terms the goods trade balance improved in the September quarter, with a strong lift in export volumes and a drop in import volumes. This was partly offset by a fall in services exports, as tourist spending reversed a sharp jump in the June quarter. We expect investment income flows to be little changed.
- Lower milk production and rising oil prices have played a part in the widening of the deficit over the last couple of years, but these factors are starting to reverse their course. The current account remains on a path that we would consider to be sustainable over the longer term.

NZ Q3 GDP

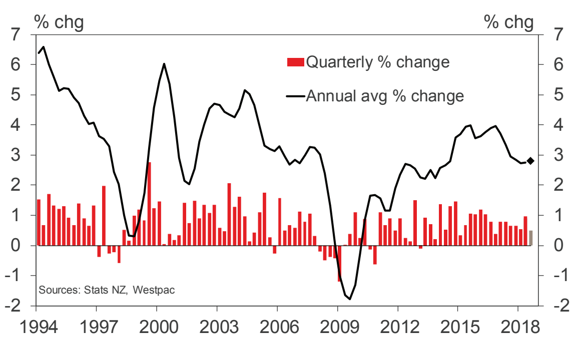
Dec 20, Last: 1.0%, Westpac f/c: 0.5%, Mkt f/c: 0.6%

- The June quarter GDP result reflected some large one-off moves across several sectors that, on balance, provided a substantial boost to growth. We expect growth to drop back to a more modest 0.5% in the September quarter as some of those one-offs are unwound.
- The underlying story is of an economy that continues to trundle along. Consumer spending growth has remained modest, as a boost to household incomes from government transfers has been offset by rising fuel prices and a subdued housing market.
- The September quarter release will include the annual round of data revisions, which can alter the picture of how the economy has been performing in recent times.

Annual current account balance



Production-based GDP



The week ahead

Aus Federal budget, 2018/19 mid-year update, AUDbn

Dec 17, Last: –14.5(pr), WBC f/c: –4.5

- The Federal Government's Mid-Year Economic and Fiscal Outlook (MYEFO) will see upgrades to the budget position as a stronger (nominal) economy boosts revenues.
- National income has surprised to the high side, on higher commodity prices, and jobs growth has outperformed.
- Nominal GDP growth for 2018/19 will be upgraded (5.0% from 3.75%). Real GDP growth for this year will be rounded down (2.75% from 3.0%) but out years are likely to remain at 3% - although the housing downturn is a downside risk.
- On our figuring, the forecast budget position for this year and next is: -$4.5bn (a $10bn upgrade) and +$7.2bn (a $5bn upgrade). This factors in modest new spending, in the order of $1bn this year and $2bn in 2019/20.

Key fiscal numbers, $bn

	'18/19	'19/20	'20/21	'21/22
Budget				
Cash balance, underlying	–14.5	2.2	11.0	16.6
% of GDP	–0.8	0.1	0.5	0.8
Net public debt	350	344	334	319
% of GDP	18.4	17.3	16.1	14.7
MYEFO*				
Change in cash balance	+10	+5	+5	+5
Cash balance, underlying	–4.5	+7.2	+16.0	+21.6
% of GDP	–0.2	0.4	0.8	1.0
Net public debt	341	330	315	295
% of GDP	17.6	16.3	14.9	13.4

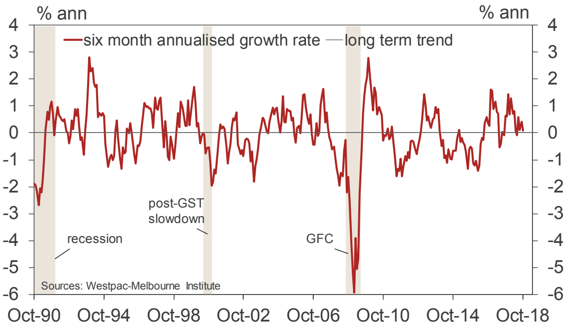
* Westpac's expectation of MYEFO forecasts

Aus Nov Westpac–MI Leading Index

Dec 19, Last: 0.08%

- The six month annualised growth rate in the Westpac–Melbourne Institute Leading Index, which indicates the likely pace of economic activity relative to trend three to nine months into the future, slowed to +0.08% in October, down materially from the 0.89% averaged over the six months to April. That moderation is consistent broadly with the moderation seen in the Q3 national accounts and suggests the slowdown will extend into late 2018 and early 2019.
- The Nov index looks likely to be soft again with component updates on: the ASX200 (down -2.8% vs -6.1% last month); the Westpac-MI Consumer Expectations Index (down -0.7% vs +4.7% last month); commodity prices (down -1.2% in AUD terms vs +4.4% last month); dwelling approvals (down -1.5% vs +5.5% last month).

Westpac-MI Leading Index

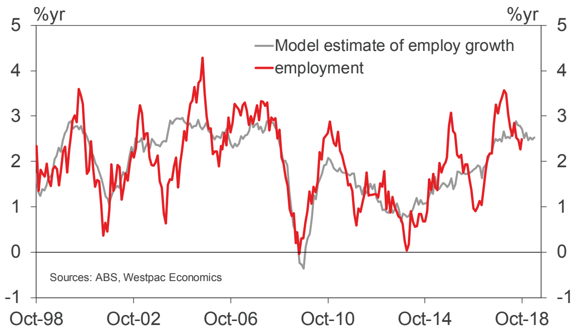


Aus Nov Labour Force Survey - Employment '000

Dec 20, Last: 32.8k, WBC f/c: 20k
Mkt f/c: 20k, Range: 10k to 35k

- The expected bounce in employment appeared in the October Labour Force Survey with a 32.8k rise. The mix was also positive with a 42.3k rise in full-time and a small 9.5k decline in part-time employment. In addition hours worked rose 0.3%.
- November is a slightly positive seasonal month and the original data suggests that a sound gain in November is possible. The business surveys, while moderating, are not pointing to a meaningful slowdown in employment growth.
- The ABS released the preliminary re-benchmarking based on the 2016 census. October employment is now +31.8k and Westpac is forecasting a 20k gain in November. Risks are balanced as the outgoing sample group has the same employment to population group as the sample average.

Jobs Index model of employment

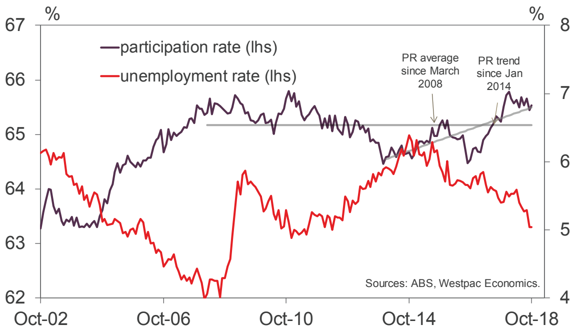


Aus Nov Labour Force Survey - Unemployment %

Dec 20, Last: 5.0%, WBC f/c: 5.0%
Mkt f/c: 5.0%, Range: 4.9% to 5.1%

- Unemployment was flat at 5.0% in October, but this is a good result seeing the September outturn was due to a large drop in participation. As such, there was always a risk participation would bounce in October. Participation did lift but the 0.1ppt rise to 65.6% still left it under the 65.7% print in August.
- Holding participation flat at 65.6%, a 20k gain in employment is enough to hold the unemployment rate flat at 5.0%. In terms of risk, the ABS notes that in November, the sample group rolling out of the survey has a higher unemployment rate than the sample average so rolling that group out will lower the average. All else held equal, this presents downside risk to our unemployment forecast for November.

Unemployment and participation rates



The week ahead

UK Bank of England Bank Rate

20 Dec, Last: 0.75%, WBC f/c: 0.75%, Mkt f/c: 0.75%

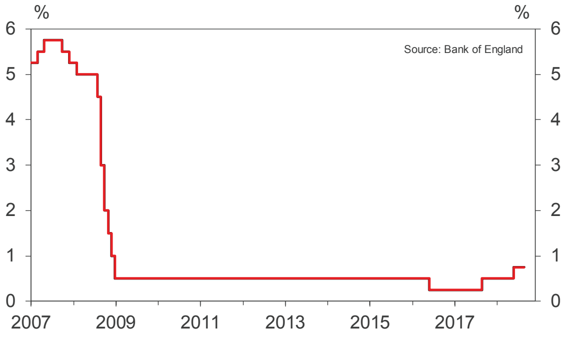
- The Bank of England left the Bank rate at 0.75% at its November policy meeting. And with Brexit negotiations and the UK's economic outlook mired in uncertainty, there's no chance of a rate hike at the December interest rate decision.
- The real focus will be on the BOE's rhetoric and its description of the risks around the outlook. In November, the BOE maintained a very modest tightening bias, noting that future increases were likely to be "at a gradual pace and to a limited extent". However, the Bank's assessment was contingent on a smooth Brexit transition, and they noted that this was a key risk for the outlook. Now, with Brexit in turmoil and likely flow-on impacts for confidence, the Bank is likely to emphasise the conditionality of its forecasts even more strongly. That could also be reflected in a softer bias statement.

US Dec FOMC meeting

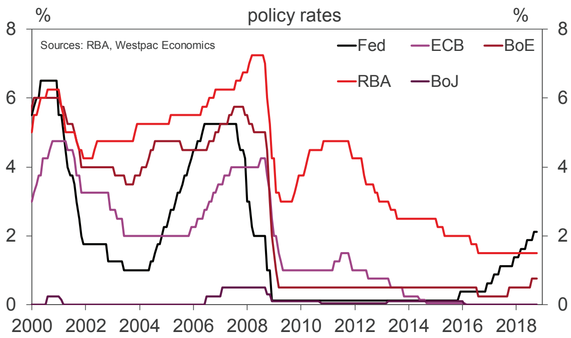
Dec 18–19, federal funds rate, last 2.125%, WBC 2.375%

- In recent weeks, the market has materially reduced their expectations for rate hikes over the coming year. However, pricing for the December meeting itself has remained firm.
- The basis for this view is sound, with the US economy in strong form, and the FOMC remaining of the view that, while there are risks, underlying momentum should remain above trend.
- Given the tension between the FOMC's 2019 view on rates and that of the market, the quarterly revision to forecasts and the tone of Chair Powell's press conference will be assessed very carefully. While we believe that these communications are likely to acknowledge the risks and the data-dependent nature of policy, we foresee the Committee continuing to forecast multiple rate hikes through 2019. We anticipate one per quarter to 3.125% at September 2019.

Bank of England Bank Rate



FOMC to continue normalisation in 2019

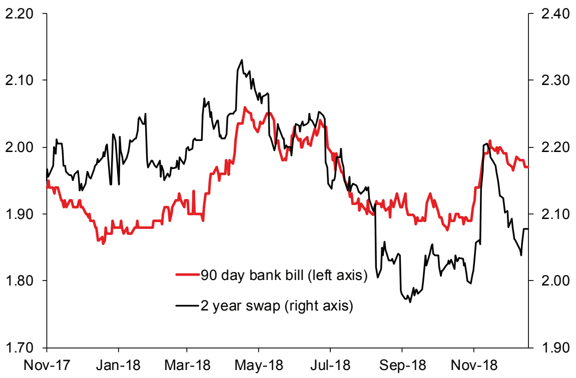


New Zealand forecasts

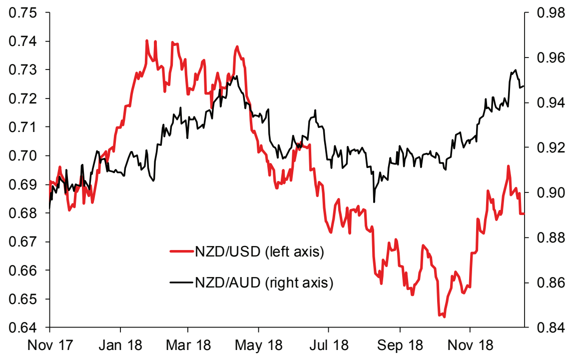
Economic Forecasts	Quarterly				Annual			
	2018			2019				
% change	Jun (a)	Sep	Dec	Mar	2017	2018f	2019f	2020f
GDP (Production)	1.0	0.5	0.8	0.7	2.8	2.8	3.1	3.1
Employment	0.6	1.1	0.0	0.2	3.7	2.3	1.3	1.7
Unemployment Rate % s.a.	4.4	3.9	4.3	4.4	4.5	4.3	4.2	4.0
CPI	0.4	0.9	0.3	0.3	1.6	2.1	1.9	2.1
Current Account Balance % of GDP	-3.3	-3.6	-3.7	-3.5	-2.9	-3.7	-3.5	-3.0

Financial Forecasts	Mar-19	Jun-19	Sep-19	Dec-19	Mar-20	Jun-20
Cash	1.75	1.75	1.75	1.75	1.75	1.75
90 Day bill	1.90	1.90	1.90	1.90	1.90	1.95
2 Year Swap	2.10	2.10	2.15	2.20	2.25	2.30
5 Year Swap	2.45	2.50	2.55	2.60	2.65	2.70
10 Year Bond	2.60	2.70	2.80	2.85	2.85	2.90
NZD/USD	0.66	0.64	0.62	0.62	0.64	0.65
NZD/AUD	0.93	0.91	0.91	0.90	0.90	0.89
NZD/JPY	75.2	73.0	71.3	70.7	71.7	71.5
NZD/EUR	0.59	0.58	0.57	0.56	0.58	0.57
NZD/GBP	0.53	0.52	0.50	0.49	0.50	0.50
TWI	73.0	71.2	69.5	68.9	70.2	70.3

2 Year Swap and 90 Day Bank Bills



NZD/USD and NZD/AUD



NZ interest rates as at market open on 17 December 2018

Interest Rates	Current	Two weeks ago	One month ago
Cash	1.75%	1.75%	1.75%
30 Days	1.89%	1.91%	1.90%
60 Days	1.93%	1.95%	1.95%
90 Days	1.97%	1.98%	2.00%
2 Year Swap	2.08%	2.08%	2.18%
5 Year Swap	2.36%	2.43%	2.57%

NZ foreign currency mid-rates as at 17 December 2018

Exchange Rates	Current	Two weeks ago	One month ago
NZD/USD	0.6797	0.6872	0.6862
NZD/EUR	0.6013	0.6066	0.6015
NZD/GBP	0.5398	0.5395	0.5349
NZD/JPY	77.01	78.47	77.45
NZD/AUD	0.9474	0.9314	0.9382
TWI	74.75	75.33	75.04

Data calendar

		Last	Market median	Westpac forecast	Risk/Comment
Mon 17					
NZ	Nov BusinessNZ PSI	55.4	–	–	Businesses continue to signal moderate growth.
Aus	Federal budget mid–yr update, $bn	–14.5(pr)	–	–4.5	2018/19 budget deficit f/c to be cut sharply.
Eur	Oct trade balance €bn	13.4	–	–	External demand softened through 2018.
	Nov CPI %yr final	2.2%	2.0%	–	Cooling on lower energy prices.
UK	Dec Rightmove house prices	–1.7%	–	–	Economic concerns mounting, weighing on price growth.
US	Dec Fed Empire state index	23.3	20.2	–	Off highs, but still robust.
	Dec NAHB housing market index	60	61	–	Is lagging housing data.
Tue 18					
NZ	Dec ANZBO business confidence	–37.1	–	–	Confidence lingering at low levels.
Aus	RBA minutes	–	–	–	Further colour on the Board's opinion.
UK	Dec GfK consumer confidence	–13	–	–	Date TBC. Brexit turmoil likely to whack sentiment.
US	Oct total net TIC flows $bn	–29.1	–	–	Long–term financial flows.
	Nov housing starts	1.5%	0.4%	–	Pipeline looking much more fragile...
	Nov building permits	–0.4%	0.4%	–	... as institution investors pull back.
Wed 19					
NZ	GlobalDairyTrade auction	2.2%	–	–	Strong NZ milk production continues to keep a lid on prices.
	Q4 WBC MM consumer confidence	103.5	–	–	Financial concerns weighing on household sentiment.
	Q3 current acct balance (% of GDP)	–3.3%	–	–3.6%	Goods balance firmer, services balance to fall.
Aus	Nov Westpac–MI Leading Index	0.08%	–	–	Growth pulse has clearly slowed over the course of 2018.
UK	Nov CPI	0.1%	–	–	Oil weighing on headline, weak activity dampening core.
	Oct house price index	3.5%	–	–	Expected to ease, other measures softened in October.
US	Nov existing home sales	1.4%	–0.4%		Supply still the major issue for existing market.
	FOMC policy decision, midpoint	2.125%	2.375%	2.375%	Hike a definite; Powell's tone in press conference the focus.
Thu 20					
NZ	Q3 GDP	1.0%	0.6%	0.5%	Moderation in qtrly growth as earlier positive factors reverse.
	Nov merchandise trade balance, $m	–1,295	–	–1,000	Imports expected to drop back from Oct spike.
Aus	Nov employment	32.8k	20k	20k	Leading indicators have slowed but still positive hence trend...
	Nov unemployment rate	5.0%	5.0%	5.0%	... employment fcs but unemployment risks to the downside.
UK	Nov retail sales	–0.5%	–	–	Spending growth has been cooling.
	Bank of England Bank rate	0.75%	0.75%	0.75%	No chance of a hike, watch for comments on Brexit risks.
US	Dec Phily Fed index	12.9	15.0	–	Continues to point to robust growth.
	Initial jobless claims	206k	–	–	Very low.
	Nov leading index	0.1%	0.0%	–	Pointing to at–trend growth.
Fri 21					
NZ	Dec ANZ consumer confidence	118.6	–	–	Has taken a step down over the past year, at moderate levels.
Eur	Dec consumer confidence	–3.9	–4.4	–	Eased off in line with slower growth outcomes.
UK	Nov net public sector borrowing, £b	8.0	–	–	Govt borrowing tended to be lower than expected over 2018.
	Q3 GDP	0.6%	–	0.6%	Boosted by base effects; growth actually slowed through Q3.
US	Q3 GDP 3rd estimate	3.5%	3.5%	3.5%	No revision in second estimate.
	Nov personal income	0.5%	0.3%	0.4%	Wages growth slowly building...
	Nov personal spending	0.6%	0.3%	0.4%	... supporting continued strength for consumption.
	Nov PCE deflator	0.2%	0.0%	0.0%	Energy decline to offset modest core inflation.
	Dec Uni. of Michigan sentiment	97.5	97.5	–	Above average.
	Nov durable goods orders	–4.3%	2.0%	–	Underlying trend weak.
	Dec Kansas City Fed index	15	–	–	Off highs, but still robust.

International forecasts

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

Interest Rate Forecasts	Latest	Dec-18	Mar-19	Jun-19	Sep-19	Dec-19	Jun-20	Dec-20
Australia								
Cash	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
90 Day BBSW	2.02	1.93	1.91	1.90	1.90	1.87	1.85	1.83
10 Year Bond	2.45	2.50	2.60	2.80	2.70	2.60	2.60	2.50
International								
Fed Funds	2.125	2.625	2.875	3.125	3.125	3.125	3.125	3.125
US 10 Year Bond	2.90	3.00	3.20	3.40	3.10	3.00	2.90	2.80
ECB Deposit Rate	−0.40	−0.40	−0.40	−0.40	−0.30	−0.20	0.00	0.20

Exchange Rate Forecasts	Latest	Dec-18	Mar-19	Jun-19	Sep-19	Dec-19	Jun-20	Dec-20
AUD/USD	0.7190	0.71	0.70	0.68	0.69	0.71	0.73	0.74
USD/JPY	113.48	114	114	115	114	112	110	106
EUR/USD	1.1360	1.11	1.10	1.09	1.10	1.11	1.14	1.20
AUD/NZD	1.0581	1.08	1.09	1.10	1.11	1.11	1.12	1.11

Contact the Westpac economics team

Dominick Stephens, Chief Economist +64 9 336 5671

Michael Gordon, Senior Economist +64 9 336 5670

Satish Ranchhod, Senior Economist +64 9 336 5668

Anne Boniface, Senior Economist +64 9 336 5669

Paul Clark, Industry Economist +64 9 336 5656

Any questions email: economics@westpac.co.nz

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

Disclaimer

Things you should know

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

Disclaimer

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

Country disclosures

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

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

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

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

Disclaimer continued

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

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

Investment Recommendations Disclosure

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

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

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

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

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

Westpac does not permit any issuer to see or comment on any investment recommendation prior to its completion and distribution.

Individuals who produce investment recommendations are not permitted to undertake any transactions in any financial instruments or derivatives in relation to the issuers covered by the investment recommendations they produce.

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

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

(i) Chinese Wall/Cell arrangements;

(ii) physical separation of various Business/Support Units;

(iii) and well defined wall/cell crossing procedures;

(iv) a "need to know" policy;

(v) documented and well defined procedures for dealing with conflicts of interest;

(vi) steps by Compliance to ensure that the Chinese Wall/Cell arrangements remain effective and that such arrangements are adequately monitored.

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

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

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