

Nelson Lakes National Park, New Zealand

Weekly Economic Commentary.

Up..up..but away.

The New Zealand economy is continuing to grapple with the closure of our borders and downturn in the global economy. But while such headwinds have been a significant drag on GDP, we're actually seeing greater than expected resilience in domestic economic conditions. Since the outbreak of the virus, Westpac's forecasts have consistently been at the less bearish end of the spectrum, and recent developments have been firmer than even we expected. But while this resilience in domestic activity is welcome news, we're still left with an economy that is operating below trend, and that's left inflation lingering at uncomfortably low levels.

Resilience in domestic economic conditions has been seen on several key fronts. It's been particularly evident in the household sector, with retail spending tracking around pre-Covid levels in recent months (save for a modest dip in August when health restrictions were reimposed). But while overall spending is holding up, what we're buying has changed. With overseas holidays off the menu and many families spending more time around the house, New Zealanders have been spending up on appliances, recreational items and household renovations. That's offset reduced spending on entertainment activities and travel.

Reinforcing the resilience in households' spending appetites has been the roaring strength of the housing market. There

was a brief drop in prices during the lockdown in March and April, but since then house prices have been rising rapidly and are up by 11% over the past year. Those gains have been widespread and have been underpinned by the dramatic fall in mortgage interest rates in recent months. We're forecasting a further 8% rise in house prices over 2021, with the risks to that forecast skewed firmly to the upside.

Westpac has long highlighted the close link between house prices and interest rates. And while the pickup in the housing market has exceeded even our forecasts, the strength in the housing market has come as a much bigger surprise to other forecasters and the Government. Importantly, as New Zealanders hold a large proportion of their wealth in



housing assets, this acceleration in the housing market is likely to underpin continued firmness in spending appetites as we head into the new year.

The labour market has also been resilient. Last week's Employment Indicators report showed that the number of filled jobs rose by 0.7% in September quarter, and has now retraced most of the lockdown-related fall that we saw earlier in the year. As businesses are still reluctant to take on new staff, jobs growth has still lagged increases in the working-age population. As a result, unemployment is likely to have risen – we're expecting that the upcoming HLFS (out this Wednesday) will show that the unemployment rate rose to 5.5% in the September quarter. There's also likely to be some further job losses over the coming months as the Government's job support programmes roll off. Nevertheless, the downturn in the jobs market looks like it will be much less severe than had been feared when Covid first arrived on our shores.

Turning to the business sector, a number of recent surveys point to a post-Covid bounce in domestic economic activity, with businesses reporting a rise in trading activity back to levels that we saw at the start of the year. But as with households spending, conditions across the business sector have been varied. At the head of the pack, those businesses linked to the building industry are reporting strong demand. We've also seen lifts in manufacturing activity and gains in the retail sector. In contrast, there continues to be weakness in parts of the services sector, particularly among those businesses who are reliant on international tourist flows. That's unlikely to change in the near-term, with the opening of our borders still some way off.

Putting this altogether, economic activity still remains below the levels that prevailed prior to the outbreak of Covid-19, mainly due to the loss of international tourist spending. However, the recovery in domestic economic conditions is well on track. Furthermore, it looks like there is a good deal of momentum in domestic demand as we head into the new year.

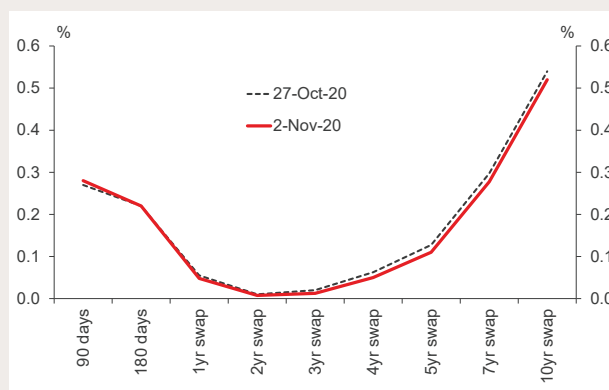
While domestic demand has been picking up, inflation has remained stubbornly low. Annual inflation fell to 1.4% in the September quarter, below our own forecast and the Reserve Bank's estimate. Furthermore, with a full recovery in economic conditions still some way off, we expect that inflation will drop to just 0.2% next year, and there is a real risk of deflation.

The Reserve Bank has pulled out all the stops to boost demand and prevent deflation. However, reducing interest rates in this way tends to increase asset prices, especially in the housing market. We expect that the danger of deflation will remain present for years, so monetary stimulus will be required for some time yet. And that means house prices are also likely to continue charging higher for some time. The circuit breaker will be a lift in inflation. When that happens, the RBNZ will have to lift interest rates, and that is likely to produce a period of declining house prices.

Fixed vs Floating for mortgages.

Fixed mortgage rates in the New Zealand banking system could fall in the near future. Term deposit rates are currently dropping, and that is often a pre-cursor to mortgage rate declines. The Reserve Bank is expected to introduce a Funding for Lending Programme in early November, which could put downward pressure on both fixed and floating mortgage rates. How far interest rates fall will depend on the details of the Reserve Bank's programme, which are not known at this stage.

NZ interest rates



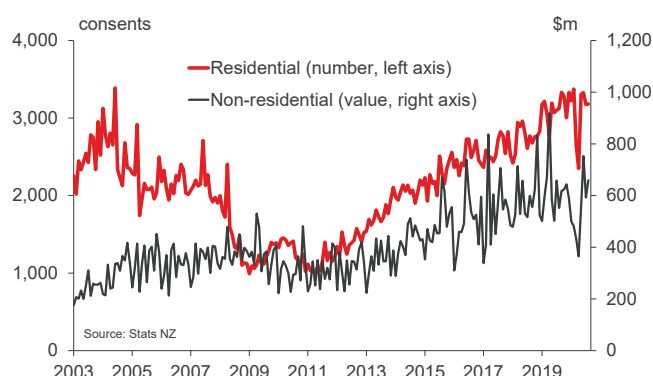
The week ahead.

NZ Sep residential building consents

Nov 2, Last: +0.3%, Westpac f/c: Flat

- The number of residential dwelling consents rose by 0.3% in August. Consent issuance has shown continued resilience in the wake of Covid-19. In fact, except for a brief drop during the Level 4 lockdown, monthly consent issuance has held up at the very strong levels that prevailed prior to the outbreak.
- We expect that the level of consent issuance will remain elevated in September. Strong house price growth and tightness in many regions are supporting demand. Those factors have offset earlier uncertainty around the economic outlook.

NZ building consents

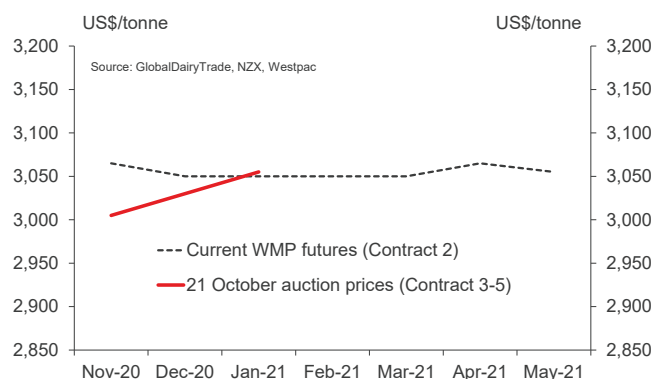


NZ GlobalDairyTrade auction, whole milk powder prices

Nov 4, Last: +0.3% chg, Westpac: Flat

- We expect whole milk powder prices will be largely unchanged at this auction, thus consolidating earlier gains. Prices have risen a cumulative 5% or so over the last two auctions.
- We are marginally more bearish than the dairy futures market. It is pointing to a slightly larger price lift of up to 2% as at the time of writing.
- Global dairy prices continue to prove resilient as evidenced by our 2020/21 milk price forecast upgrade to \$7.00/kg following the previous auction. The strength or otherwise of New Zealand production, though, remains a swing factor.

Whole milk powder prices



NZ Q3 Household Labour Force Survey

**Nov 4, Employment last: -0.3%, WBC f/c: -0.6%,
Mkt f/c: -0.6%
Unemployment rate last: 4.0%, WBC f/c: 5.5%,
Mkt f/c: 5.5%**

- We expect the unemployment rate to rise to 5.5% for the September quarter, following a surprise drop to 4.0% in the June quarter.
- The previous quarter was understated as the Covid-19 lockdown during April made it impractical for people to actively look for work. More detailed analysis showed that unemployment rose over the course of the quarter.
- Jobseeker benefit numbers continued to rise over the September quarter, albeit more gradually. The rapid elimination of community spread of Covid-19 and extensive government support meant that the impact on the labour market has been much less than initially feared.

Household Labour Force Survey



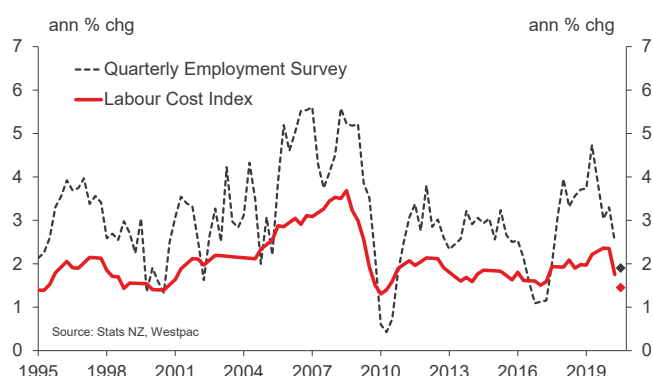
The week ahead.

NZ Q3 Labour Cost Index

**Nov 4, Private sector last: 0.2%, WBC f/c: 0.3%,
Mkt f/c: 0.2%**

- We expect the wage measures in both the Labour Cost Index (LCI) and the Quarterly Employment Survey (QES) to be subdued again, with the annual rate of growth slowing sharply.
- Wage increases will have been hard to come by in the post-Covid environment, other than previously agreed increases such as the next stage of the primary school teachers' pay settlement.

LCI and QES salary and wages, all sectors

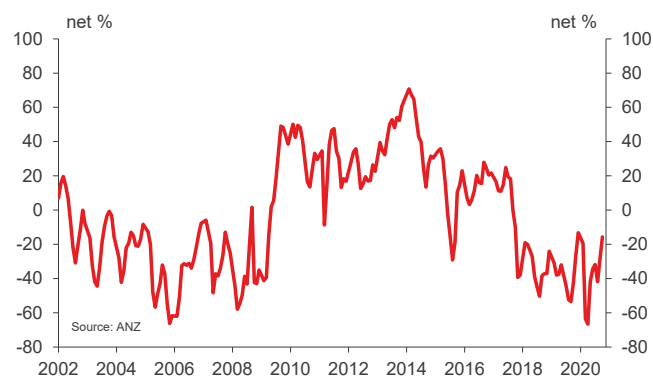


NZ Nov ANZBO business confidence (flash)

Nov 5, Last: -15.7

- October saw a continued rise in business confidence back to pre-Covid levels. Gauges of business confidence and activity are not at historically strong levels, and businesses are continuing to wrestle with a number of challenges. Nevertheless, a growing number of indicators point to the economy recovering from the outbreak much faster than had been expected.
- Developments over the past few weeks indicate that economic activity is continuing to firm, particularly in sectors that are linked to the housing market. That's likely to be reflected in the November confidence survey.
- While activity is picking up, inflation expectations have remained stubbornly low - a result that will be of particular interest to the RBNZ.

NZ business confidence

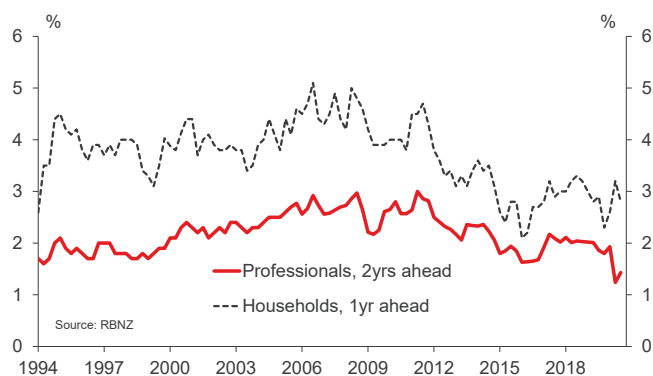


NZ Q4 RBNZ survey of expectations

Nov 6, Inflation expectations - 2 years ahead, last: 1.43%

- Inflation expectations fell sharply in the wake of Covid-19. And while there was a modest bounce last quarter, most measures remain at low levels. Notably, the RBNZ's closely watched two years ahead measure has been sitting at 1.4% - well below the mid-point of the RBNZ's target band.
- While activity gauges have been picking up since health restrictions have been eased, pricing gauges have generally remained at low levels. We've also seen CPI inflation surprising to the downside.
- We expect that inflation expectations will remain below 2% in the November survey. Such ongoing softness in inflation expectations will be a key concern for the RBNZ ahead of the November policy meeting.

RBNZ survey of inflation expectations



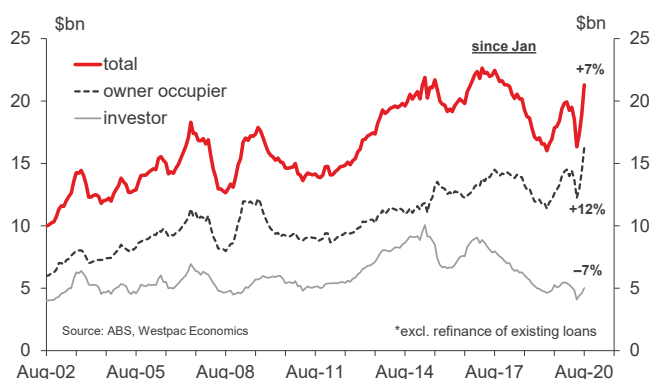
The week ahead.

Aus Sep housing finance approvals

Nov 2, Last: 12.6%, WBC f/c: -2%

- Housing finance approvals surged 12.6% in Aug to be up over 30% in just three months. That followed a 16.3% decline in March-May, quite a mild COVID shock in the scheme of things. Somewhat remarkably, the rebound means the total value of loan approvals is now 9% above its pre-COVID levels.
- Notably, there was not much impact from Vic's 'second wave' lockdown in Aug - Vic approvals instead surging 13.9%. This will undoubtedly show through in Sep although the exact timing and scale of the impact is uncertain and will likely be offset by continued gains elsewhere, the HomeBuilder scheme also providing some support.
- On balance, we expect the total value of approvals to decline 2.0% but clearly there are many moving parts.

New finance approvals*

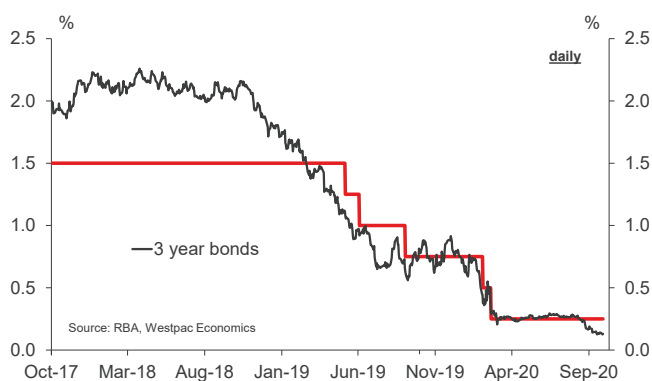


Aus RBA policy decision

**Nov 3, Last: 0.25, WBC f/c: 0.10
Mkt f/c: 0.10, Range: 0.10 to 0.25**

- The Reserve Bank is set to unveil additional stimulus at the November Board meeting.
- Recall that in March the RBA cut rates and introduced a package of measures as an initial response to the pandemic and the resulting recession. In September, the Bank boosted the Term Funding Facility.
- In November, another package of measures will be unveiled.
- As we indicated in September, we expect the RBA to lower rates, cutting both the cash rate target and the 3 year government bond target from 0.25% to 0.10%. In addition, the Bank will announce an expanded bond buying program, QE, with the aim of lowering rates across the curve, including 5 years to 10 years.

RBA cash rate and 3 year bonds

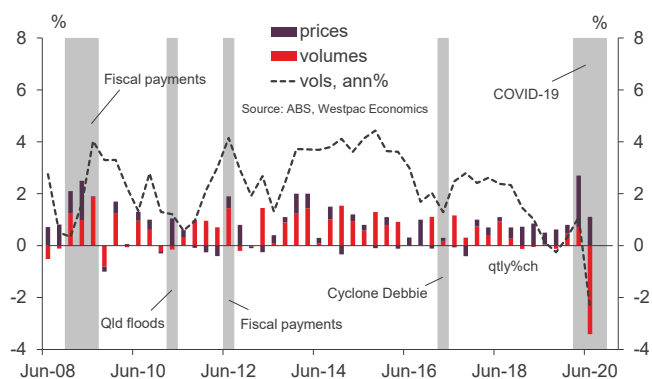


Aus Q3 real retail sales

**Nov 4, Last: -3.4%, WBC f/c: 6.0%
Mkt f/c: 6.0%, Range: 2.1% to 6.6%**

- The pandemic and lock-downs have generated considerable volatility in the economy - particularly for retail.
- In Q1, the value of retail jumped by 2.7% including a 1.9% surge in prices and a modest 0.7% rise in real sales, with panic buying and hoarding the story of the day.
- In Q2, the value of retail sales fell by 2.3%, including yet another jump in prices, +1.2%, and a 3.4% plunge in turnover with the nation in a partial lock-down.
- For Q3, sales more than recovered - with the value of retailing surging by 6.8%. We anticipate a 0.8% rise in prices and a 6.0% rise in real sales. The end of the lock-down (outside of Victoria) and a redirection of spending away from overseas travel to hardware stores etc is the key theme.

Quarterly retail volumes and prices



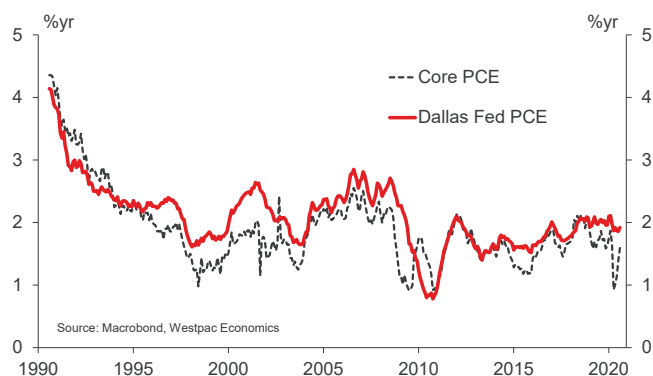
The week ahead.

US Nov FOMC meeting

Nov 4-5

- The November FOMC meeting will occur with the knowledge that GDP rebounded strongly in Q3 following the recession of the first half, but likely before the results of the Presidential and Congressional elections are fully known, and as COVID-19 risks for the US and world continue to mount.
- Our expectation is then that the November meeting communications will focus more on the immense uncertainty before the US and global economy than the gains to date.
- From the inflation and labour market data to hand, there is already a case for additional easing. If the US' own case count continues to rise further into winter, putting at risk the recovery, and/or Europe's prospects deteriorate further, this will become all the more the case between the November and December meetings.

US inflation

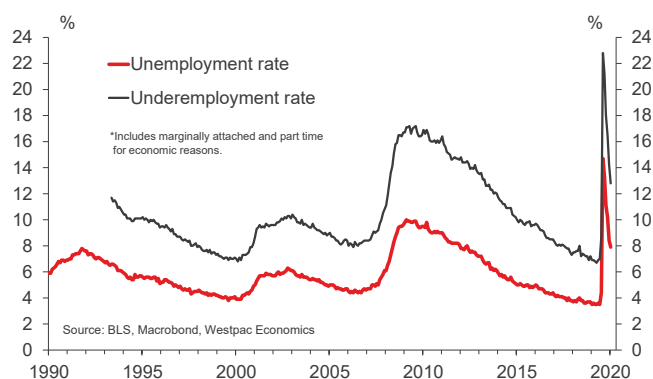


US Oct employment report

Nov 6, nonfarm payrolls, last: 661k, WBC: 570k Nov 6, unemployment rate, last 7.9%, WBC 7.8%

- Employment growth slowed dramatically in September, while still remaining very strong versus history. An additional step down is anticipated in October, as initial claims continue to point to significant churn in the labour market; support from fiscal policy ebbs; and COVID-19 risks mount yet again.
- Softer momentum in employment, combined with a likely rise in participation, is anticipated to more or less stabilise the unemployment rate at 7.8% in October, though there are clear risks in both directions.
- The historic scale of labour market slack will weigh on hourly earnings in October, and likely for many years to come. A second successive gain of 0.1% is expected in the month.

US unemployment and underemployment

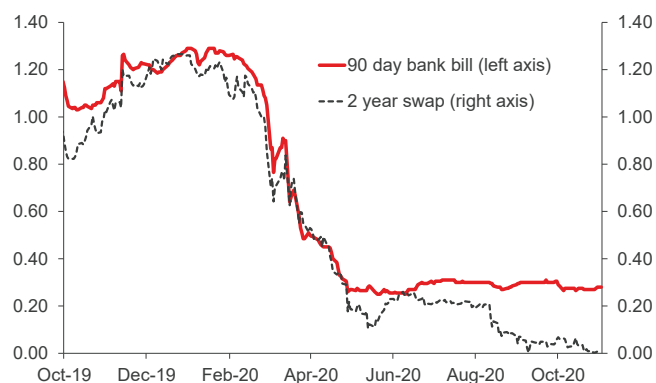


New Zealand forecasts.

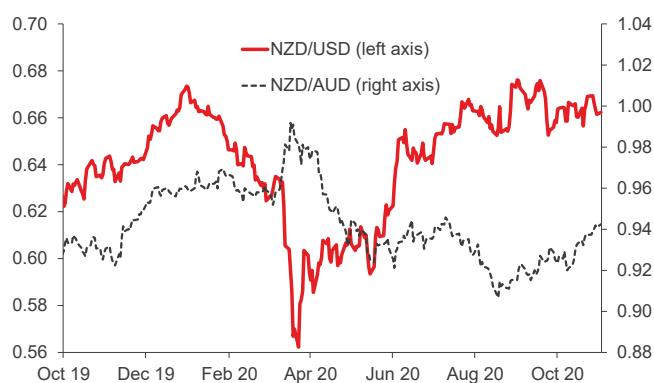
Economic forecasts	Quarterly				Annual			
	2020	2021			2019	2020f	2021f	2022f
% change	Jun (a)	Sep	Dec	Mar				
GDP (Production)	-12.2	8.5	3.7	0.5	2.3	-5.1	6.0	5.1
Employment	-0.3	-0.6	-0.7	-0.3	1.2	-0.5	1.4	3.5
Unemployment Rate % s.a.	4.0	5.5	6.2	6.4	4.1	6.2	6.2	5.4
CPI	-0.5	0.7	0.0	0.1	1.9	1.0	0.5	1.1
Current Account Balance % of GDP	-1.9	-1.2	-1.1	-1.6	-3.4	-1.1	-3.5	-2.9

Financial forecasts	Dec-20	Mar-21	Jun-21	Sep-21	Dec-21	Jun-22
Cash	0.25	0.25	-0.50	-0.50	-0.50	-0.50
90 Day bill	0.25	-0.20	-0.40	-0.40	-0.40	-0.30
2 Year Swap	0.00	-0.10	-0.20	-0.20	-0.20	-0.10
5 Year Swap	0.10	0.10	0.10	0.10	0.15	0.30
10 Year Bond	0.50	0.45	0.45	0.50	0.55	0.80
NZD/USD	0.67	0.66	0.66	0.68	0.70	0.70
NZD/AUD	0.89	0.87	0.87	0.87	0.88	0.88
NZD/JPY	70.4	69.3	70.0	72.1	74.2	74.9
NZD/EUR	0.55	0.54	0.54	0.55	0.56	0.56
NZD/GBP	0.51	0.49	0.49	0.50	0.50	0.50
TWI	71.5	69.9	69.5	70.7	72.0	71.7

2 year swap and 90 day bank bills



NZD/USD and NZD/AUD



NZ interest rates as at market open on 2 November 2020

Interest rates	Current	Two weeks ago	One month ago
Cash	0.25%	0.25%	0.25%
30 Days	0.27%	0.27%	0.28%
60 Days	0.28%	0.27%	0.26%
90 Days	0.28%	0.28%	0.29%
2 Year Swap	0.01%	0.03%	0.06%
5 Year Swap	0.11%	0.10%	0.14%

NZ foreign currency mid-rates as at 2 November 2020

Exchange rates	Current	Two weeks ago	One month ago
NZD/USD	0.6623	0.6610	0.6630
NZD/EUR	0.5683	0.5636	0.5665
NZD/GBP	0.5124	0.5114	0.5131
NZD/JPY	69.23	69.59	69.83
NZD/AUD	0.9424	0.9329	0.9258
TWI	71.49	71.33	71.73

Data calendar.

		Last	Market median	Westpac forecast	Risk/Comment
Mon 02					
NZ	Sep building permits	0.3%	-	0.0%	Consent issuance expected to remain at firm levels.
Aus	Oct CoreLogic home value index	-0.2%	-	0.2%	Melb prices still falling; Sydney flat; others firming.
	Sep dwelling approvals	-1.6%	1.5%	-3.0%	Vic's second lockdown partially offset by gains elsewhere.
	Sep housing finance approvals	12.6%	-	-2.0%	Aug finance approvals well above pre-COVID level...
	Sep owner occ. finance approvals	13.6%	-	-2.0%	... with additional support from HomeBuilder scheme...
	Sep investor finance approvals	9.3%	-	-2.0%	... but Vic's lockdown impact set to hit in Sep.
	Oct AiG PMI (manufacturing)	46.7	-	-	Down 2.6pts in Sep. To rebound as economy reopens.
	Oct MI inflation gauge, %yr	1.3%	-	-	Remains subdued, below the target band.
	Oct ANZ job ads	7.8%	-	-	Employment rebounding from lows supported by reopening.
Chn	Oct Caixin manufacturing PMI	53	52.8	-	Small retreat due to Golden Week.
Eur	Oct Markit manufacturing PMI	54.4	54.4	-	Business activity and confidence to deteriorate.
UK	Oct Markit manufacturing PMI	54.1	53.3	-	Summer's recovery proving fleeting.
US	Oct Markit manufacturing PMI	53.3	53.3	-	Business optimistic despite rising new case count...
	Oct ISM manufacturing	55.4	55.6	- domestic demand the primary support.
	Sep construction spending	1.4%	1.0%	-	Residential construction in strong upturn.
Tue 03					
Aus	RBA policy decision	0.25%	0.10%	0.10%	Rates to be lowered as part of another stimulus package.
US	Sep factory orders	0.7%	0.5%	-	Rebound moderating as transport and electronics ease.
	2020 US Presidential Election	-	-	-	Results expected in AEST afternoon.
Wed 04					
NZ	GlobalDairyTrade auction	0.3%	-	0.0%	Prices consolidating after recent gains.
	Q3 unemployment rate	4.0%	5.5%	5.5%	Understated in Q2 as lockdown hindered job seekers...
	Q3 employment change	-0.3%	-0.6%	-0.6%	...but overall Covid impact has been less than feared.
	Q3 wage inflation (pvt, ord. time)	0.2%	0.2%	0.3%	Wage increases will be hard to come by.
	Oct ANZ commodity prices	-0.2%	-	-	Dairy prices ticked up over October.
Aus	Sep retail sales	-4.0%	-1.5%	-1.5%	Prelim. est's showed soft finish to Q3 but nominal sales still...
	Q3 real retail sales	-3.4%	6.0%	6.0%	... up very strongly, pointing to 6% rebound in vols to >Q1.
	Oct AiG PCI	45.2	-	-	In Sep, up 7.3pts, improved in all states except Victoria.
	Oct 17 Weekly Payrolls, % month	-0.4%	-	-	Victoria was still locked down, other states were stalling.
Chn	Oct Caixin China PMI services	54.8	55	-	Exports and domestic demand remain robust.
Eur	Oct Markit services PMI	46.2	46.2	-	Gov't lockdowns and curfews to hit activity hard.
UK	Oct Markit services PMI	56.1	52.3	-	Customer demand and business expectations to weaken.
US	Oct ADP employment change	749k	738k	-	Service jobs gaining, led by trade and hospitality.
	Sep trade balance US\$bn	-67.1	-64.3	-	Largest deficit since '06 seen.
	Oct Markit service PMI	56	-	-	Hope of fiscal stimulus supporting.
	Oct ISM non-manufacturing	57.8	57.5	-	Continues to point to robust growth in services.
Thu 05					
NZ	Nov ANZ business confidence	-15.7	-	-	Domestic activity indicators have been picking up.
Aus	Sep trade balance \$bn	2.6	3.8	5.2	To widen, imports pull-back and exports advance.
Eur	Sep retail sales	4.4%	-0.5%	-	Containment measures to halt consumer rebound.
UK	BoE policy decision	0.10%	0.10%	0.10%	Risks continue to mount for UK. BoE to take careful note.
US	Initial jobless claims	751k	-	-	Persistent churn in labour market being seen.
	Q3 productivity	10.1%	3.3%	-	Rose at fastest pace in 11yrs due to strength in output.
	FOMC policy decision, midpoint	0.25%	0.25%	0.25%	Likely to focus on risks instead of rebound to date.
Fri 06					
NZ	Q4 RBNZ inflation expectations	1.4%	-	-	Low actual inflation points to continued softness.
Aus	RBA Statement on Monetary Policy	-	-	-	Growth forecasts to be upgraded.
	Oct AiG PSI	36.2	-	-	In Sep, -6.3pts crunched by Melbourne lock-down.
US	Oct non-farm payrolls	661k	610k	570k	Hospitality and retail posting gains...
	Oct unemployment rate	7.9%	7.7%	7.8%	... but only half of jobs lost in Mar/Apr have been recovered.
	Sep wholesale inventories	-0.1%	-	-	Inventories to be rebuilt as demand dictates.

International forecasts.

Economic forecasts (Calendar years)	2017	2018	2019	2020f	2021f	2022f
Australia						
Real GDP % yr	2.4	2.8	1.8	-3.3	2.5	3.4
CPI inflation % annual	1.9	1.8	1.8	0.1	1.9	2.1
Unemployment %	5.5	5.0	5.2	7.7	7.5	6.7
Current Account % GDP	-2.6	-2.1	0.6	2.6	0.1	-2.0
United States						
Real GDP %yr	2.4	2.9	2.3	-4.7	3.4	2.7
Consumer Prices %yr	2.1	2.4	1.9	1.1	1.8	1.9
Unemployment Rate %	4.4	3.9	3.7	8.4	6.8	5.8
Current Account %GDP	-2.3	-2.3	-2.6	-2.5	-2.4	-2.4
Japan						
Real GDP %yr	2.2	0.3	0.7	-5.3	2.2	1.7
Euro zone						
Real GDP %yr	2.5	1.9	1.2	-7.8	5.4	2.7
United Kingdom						
Real GDP %yr	1.9	1.3	1.4	-11.0	7.0	4.0
China						
Real GDP %yr	6.9	6.8	6.1	2.5	10.5	5.6
East Asia ex China						
Real GDP %yr	4.6	4.4	3.7	-2.6	5.2	4.7
World						
Real GDP %yr	3.9	3.6	2.8	-4.0	6.0	3.8

Forecasts finalised 13 October 2020

Interest rate forecasts	Latest	Dec-20	Mar-21	Jun-21	Sep-21	Dec-21	Jun-22	Dec-22
Australia								
Cash	0.25	0.10	0.10	0.10	0.10	0.10	0.10	0.10
90 Day BBSW	0.06	0.04	0.04	0.04	0.04	0.04	0.10	0.15
10 Year Bond	0.84	0.75	0.75	0.75	0.80	0.85	1.00	1.30
International								
Fed Funds	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125
US 10 Year Bond	0.86	0.70	0.65	0.65	0.70	0.75	0.90	1.10

Exchange rate forecasts	Latest	Dec-20	Mar-21	Jun-21	Sep-21	Dec-21	Jun-22	Dec-22
AUD/USD	0.7035	0.75	0.76	0.76	0.78	0.80	0.80	0.78
USD/JPY	104.53	105	105	106	106	106	107	107
EUR/USD	1.1674	1.21	1.22	1.23	1.24	1.25	1.25	1.24
GBP/USD	1.2927	1.32	1.34	1.35	1.37	1.39	1.40	1.40
USD/CNY	6.7150	6.70	6.65	6.60	6.55	6.50	6.40	6.30
AUD/NZD	1.0616	1.12	1.15	1.15	1.15	1.14	1.14	1.12

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

Nathan Penny, Senior Agri Economist

+64 9 348 9114

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 QF Group Financial Advisers Act 2008 Disclosure Statement at www.westpac.co.nz.

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

- (i) Chinese Wall/Cell arrangements;
- (ii) physical separation of various Business/Support Units;
- (iii) and well defined wall/cell crossing procedures;
- (iv) a "need to know" policy;
- (v) documented and well defined procedures for dealing with conflicts of interest;
- (vi) steps by Compliance to ensure that the Chinese Wall/Cell arrangements remain effective and that such arrangements are adequately monitored.

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

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

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