AUSTRALIAN MARKETS WEEKLY

The inflation debate: up, down, or unchanged?

National Australia Bank

In this issue

Analysis: the inflation debate: up, down, or unchanged?

- Core inflation has been below the RBA's 2-3% target since 2014, and for many central banks around the world, inflation has been well below target for at least a decade (see chart of the week). It is not clear why inflation has undershot central bank targets for so long – the main arguments advanced have been technology, globalisation, excess capacity and demographics, which have allowed unemployment to fall much lower than prior full employment estimates.
- The current pandemic has added uncertainty to the outlook with additional QE and supply chain disruptions needing to be weighed against the fundamentals of elevated unemployment and underemployment, which are expected to keep wages growth well below average levels for some years. A subdued outlook for rents also adds to low inflationary pressure in the near term. Amid the uncertainty, the RBA has signalled that it will be more re-active to inflation, rather than pro-active.

Victoria "on the move" again after lockdown, mobility picks up strongly

- Mobility indicators show a sharp lift in economic activity occurring in Victoria after the easing of restrictions last week. Apple searches for driving are largely tracking the recovery seen out of the first lockdown back in April, while there has been a sharp pick-up in restaurant bookings. Anecdotes amongst retailers are also encouraging.

RBA to cut rates and launch QE in the 5-10yr part of the curve on Tuesday

- The RBA meets tomorrow and we continue to expect the RBA to cut the cash rate to 0.10%, along with the 3-year yield target (YCC) and the TFF rate. We also expect the RBA to announce outright QE purchases in the 5-10 year area of the curve. Markets are well priced for this outcome with the 3yr yield trading at 0.12%, while a recent Reuter's survey has economists centred on a $100bn QE program over 12 months.

The week ahead

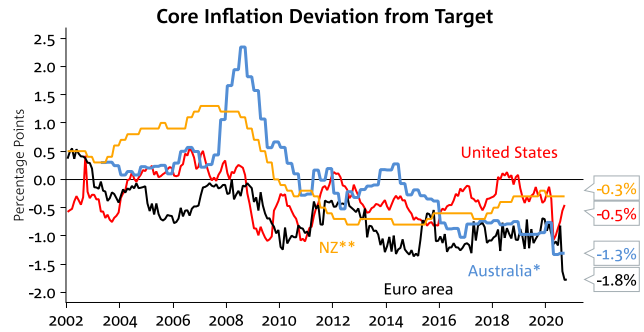
- **Australia:** The RBA meets on Tuesday and is widely expected to ease policy further. On Friday, the RBA also publishes its updated forecasts on the economy in the Statement on Monetary Policy, where it should lower its expected peak in the unemployment rate to 8% from 10% but continue to forecast only a gradual recovery in the labour market. On the data front, payrolls are on Tuesday with focus on whether the tapering of JobKeeper is affecting jobs, while real retail sales on Wednesday should show a sharp 6% rise.
- **International: US:** all focus on the US Presidential election on Tuesday (results from 11am Wednesday AEDT), where polls and betting odds point to a Biden victory and the Democrats winning the Senate. There is a lot of uncertainty given the surprise in 2016, while it is unclear whether a clear winner will emerge on the night given the high degree of pre-polling. Outside of the election the Fed meets on Thursday and Payrolls are on Friday. **EU/UK:** UK-EU trade negotiations continue, while the BoE also meets.

Key markets over the past week

	Last	% chg week		Last	bp/% chg week
AUD	0.7009	-1.6	RBA cash	0.13	0.0
AUD/CNY	4.69	-1.7	3y swap	0.10	0.0
AUD/JPY	73.4	-1.7	ASX 200	5951	-3.3
AUD/EUR	0.602	-0.1	Iron ore	117.3	4.2
AUD/NZD	1.061	-0.5	Brent oil	36.5	-10.5

Source: Bloomberg

Chart of the week: Inflation well below target



* Mid-point of the 2-3% inflation target
** Mid-point of the 1-3% inflation target, core inflation from the sectoral factor model
Source: National Australia Bank, Macrobond

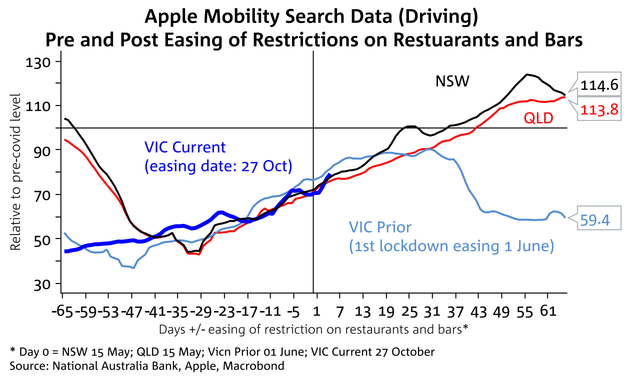
Tapas Strickland, Director, Market Economics

Victoria "on the move" again

Good news. Victorians are back "on the move" coming out of lockdown, with a sharp pickup in mobility indicators since the easing of restrictions mid last week (Chart 1). The tentative pick-up in mobility is on par with that seen in Victoria after coming out of the first lockdown and importantly broadly tracks the recovery seen in NSW and QLD. There also appears to be less scarring amongst consumers than initially feared (as hinted by consumer confidence figures) with restaurant bookings up strongly (Chart 2). How quickly Victoria bounces back is important for the national outlook given Victoria comprises 23% of GDP, with the first signs encouraging.

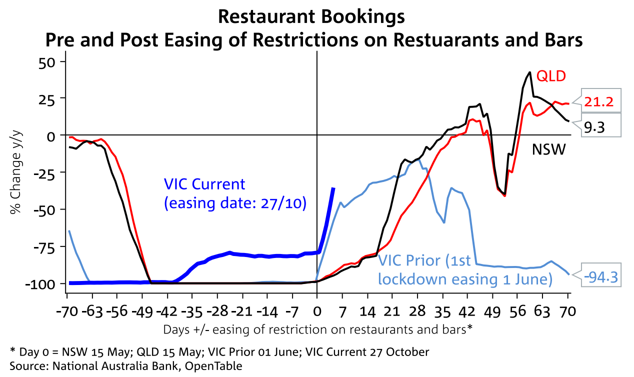
We also think it will be important to examine national figures excluding Victoria, so as to gauge any drag on the economy coming from the wind back of JobKeeper and JobSeeker.

Chart 1: Mobility bounce tracking what occured in NSW



* Day 0 = NSW 15 May; QLD 15 May; Vicn Prior 01 June; VIC Current 27 October
Source: National Australia Bank, Apple, Macrobond

Chart 2: Victorians willing to go back into restaurants



* Day 0 = NSW 15 May; QLD 15 May; VIC Prior 01 June; VIC Current 27 October
Source: National Australia Bank, OpenTable

RBA to cut rates and launch QE tomorrow

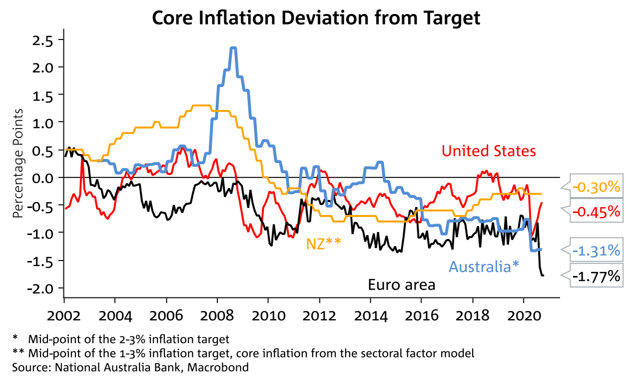
The RBA meets tomorrow and is expected to cut rates by 15bps to 0.10% for the cash rate, the 3-year yield curve target, and the term funding facility (TFF). We also expect the RBA to announce a QE programme of outright bond purchases in the 5-10 year part of the curve. While we don't think the RBA will announce a specific size for the program, our analysis suggests bond purchases of around $143bn would be needed to get unemployment down to 5%, where full employment is now thought to be. This assumes the fiscal stimulus in the budget and the 6% budget unemployment forecast is correct.

The market is well priced in assuming this further easing. The 3yr yield is currently 0.12%, against the current YCC target of 0.25%. As for what markets are pricing regarding a QE program, a recent Reuter's survey has economists centred on a $100bn 12m program. Our rates strategy team estimate that the markets are priced for a larger $150-200bn program (see AMW: *How big will the RBA's QE program have to be?*).

Analysis: inflation: up, down, or unchanged? And implications for policy

Core inflation has been below the RBA's 2-3% target since 2014, and for many central banks around the world inflation has been well below target for at least a decade (Chart 3). It is not clear why inflation has undershot central bank targets for so long – the main arguments advanced have been technology, globalisation, excess capacity and demographics, which have allowed unemployment to fall much lower than prior full employment estimates. The current pandemic is also adding another layer of uncertainty to the current inflation debate with supply chain disruptions and additional QE needing to be weighed against the fundamentals of elevated unemployment and underemployment, which seem set to keep wages growth at below average levels for some years. In addition, subdued rents – an important sub-component of core inflation in Australia are likely to be subdued in the near term, also.

Chart 3: Inflation well below target since at least 2014



* Mid-point of the 2-3% inflation target
** Mid-point of the 1-3% inflation target, core inflation from the sectoral factor model
Source: National Australia Bank, Macrobond

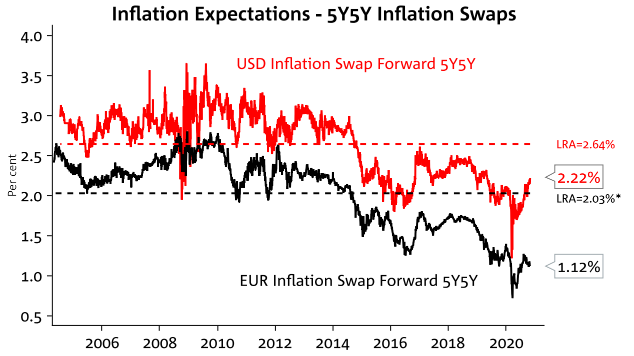
There are also some thoughts within markets that inflation may start to lift on the back of the unprecedented monetary and fiscal stimulus that has been undertaken during the pandemic and from supply chain changes. This debate is particularly focused in the US, where the prospect of a Democratic Clean Sweep (Presidency, House and Senate) is seen as allowing a ramp up in fiscal spending that would fuel higher growth and lead to inflation.[1]

In this week's *Weekly* we look at the current trends in inflation and what this may mean for the trajectory for inflation in Australia and offshore. Given the uncertainty over the trajectory for inflation and the inability to achieve let alone explain below target inflation prior to

[1] At this stage it is unclear whether the Democrats will gain sufficient numbers to gain a Senate majority (note 50 to 51 seats are needed). In addition filibuster provisions may limit the ability to quickly pass bills (unless Democrats gain more than 60 seats), with Democrats perhaps needing to rely on the budget reconciliation process instead.

the pandemic, central banks are also re-interpreting inflation fighting mandates to being more reactive than pro-active, the Fed having moved to Average Inflation Targeting (allowing inflation to run above target for a time) and the RBA's new forward guidance ruling out interest rate increases until inflation was sustainably within the 2-3% target, not just forecast to be sustainably within the target.The latter would require unemployment to be back at full employment and wages growth to be picking up.

Chart 4: Inflation expectations lifting higher

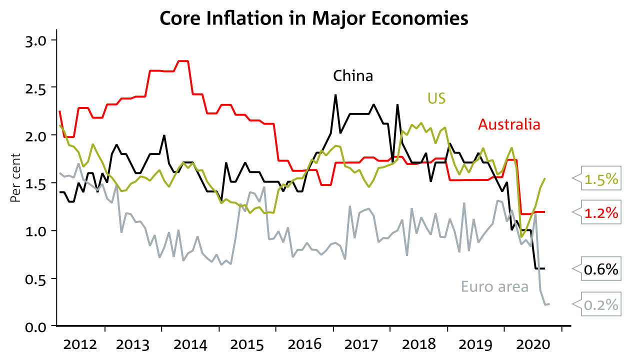


Source: National Australia Bank, Macrobond

Inflation since the pandemic

Global core inflation has fallen since the pandemic with core inflation in Europe falling to just 0.2% y/y and in China to 0.6% y/y. Australia has largely followed this trend lower with the RBA's preferred trimmed mean measure at 1.2% y/y in Q3. One contrast to the subdued inflationary environment is the apparent lift in US inflation that is being driven by a range of one-off price increases associated with the pandemic including used car prices. Elsewhere, inflation in both Australia and globally appears to be subdued.

Chart 5: Inflation subdued, but US inflation diverging

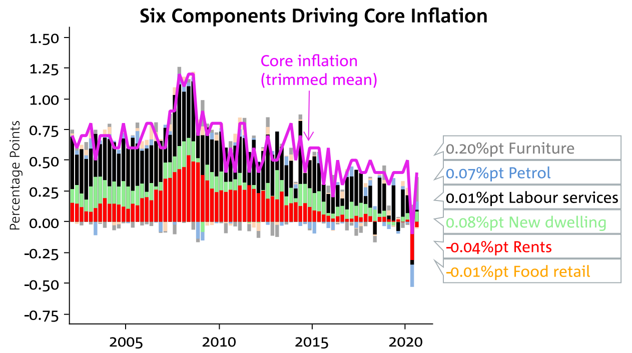


Source: National Australia Bank, Macrobond

Australian inflation experience

Our prior analysis of inflation in Australia through a principal component analysis has illustrated the important role played by rents and new dwelling costs, as well as labour services (i.e. wages growth). Together these components can explain most of the variation in core inflation over the past two decades and may provide greater insight into the outlook for inflation (Chart 6).

Chart 6: rents are very important in tracking inflation



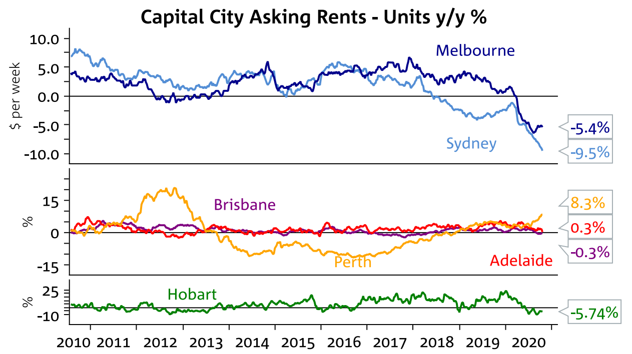
Source: National Australia Bank, ABS

The high explanatory power of rents, which together with new dwelling costs can explain around half of the variation in core inflation, is well above their share of the CPI basket at around 15%. That is because rents are likely to proxy a number of other variables indicative of the degree of spare capacity in the economy.

Rental growth in Australia is currently very subdued, driven by both unemployment/income losses associated with the pandemic, as well as increased vacancy rates associated with sharply lower population growth due to closed international borders. Rental growth is now sharply negative in Sydney, Melbourne and Hobart, while it is starting to lift in Perth as the housing market in WA tightens after a period of very little new building following the end of the mining boom.

The subdued rental environment in Sydney and Melbourne is likely to persist for as long as international borders remain closed. The latest government guidance on this is that borders should gradually start to re-open towards the end of 2021 with migration expected to rapidly rise back to pre-COVID levels in 2023. Accordingly the trends in rental inflation may persist for some time, but could be subject to a sharp reversal once migration starts to rebound.

Chart 7: Rents are very subdued in SYD and MEL

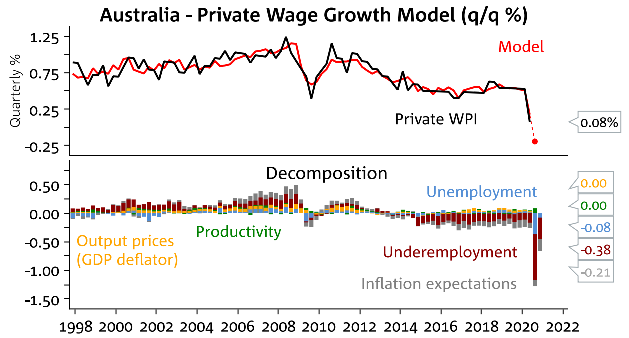


Source: National Australia Bank, SQM

The other major driver of inflation is labour services, and here it is likely that labour market spare capacity should keep wages growth low for a prolonged period of time (Chart 8). Our prior analysis of wages growth emphasised the role played by underemployment, and it is likely we will need to see a decline in both unemployment and underemployment to see wages growth lift in a sustained manner.

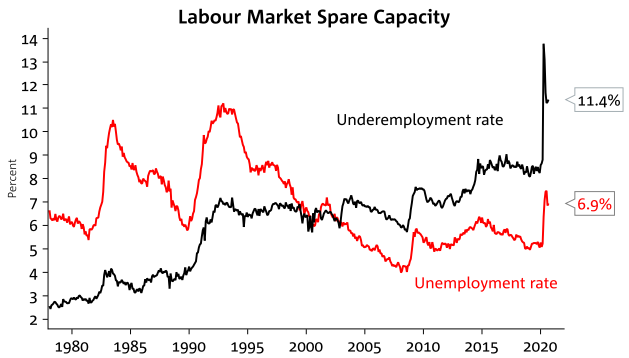
The RBA and Treasury's assessment of the full employment level of unemployment is currently around 4½-5%, though it could be lower or higher than this – international experience prior to the pandemic suggests it could still be lower with NAIRU not necessarily lifting after a deep recession as the US GFC experience showed with unemployment subsequently falling to record lows, but with no real sustained pick-up in wages/inflation.

Chart 8: Underemployment important for wages



* Decomposition excludes the constant term
Source: National Australia Bank, ABS, IMF

Chart 9: Labour market spare capacity remains high

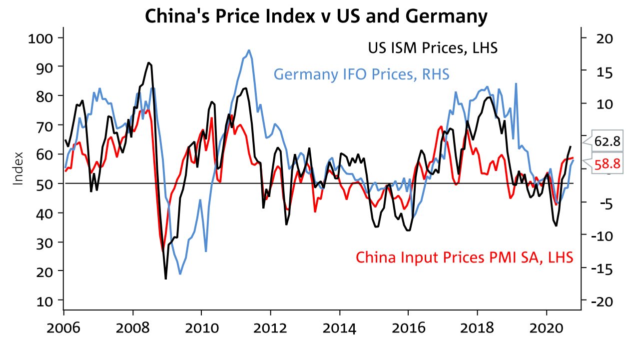


Source: National Australia Bank, ABS, Macrobond

Factory prices lifting, but unlikely to be sustained

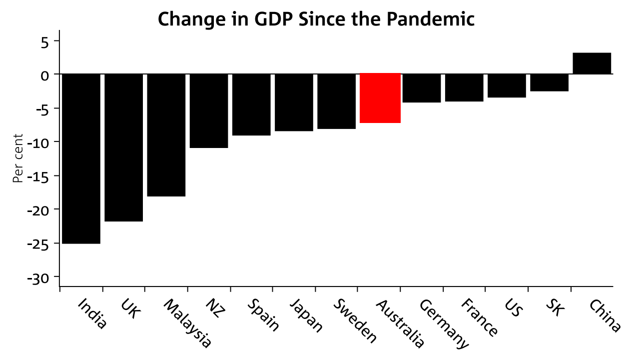
Given the likely path for rents and wages in Australia we do not see a near-term lift in fundamental inflationary pressures. Where we do see some lift in prices occurring though is in the manufacturing sector, where a number of manufacturing surveys are reporting input and output prices lifting during the pandemic due to supply chain disruptions, as well as due to higher costs in doing business in a pandemic environment. We view these price changes more as one-offs than being a persistent source of inflationary pressure.

Chart 10: Factory prices lift, but unlikely to be sustained



* Seasonally Adjusted by NAB
Source: National Australia Bank, Macrobond

Chart 11: GDP is still well below pre-pandemic levels



Source: National Australia Bank, Macrobond

As for whether inflation could lift on the back of significantly higher fiscal spending, it is possible, though that fiscal spending is occurring at a time of elevated labour market spare capacity with no clear constraint on output given most economies are still below pre-pandemic levels of output. Accordingly we do not see increased fiscal spending as inherently inflationary in this environment.

It is also not clear why inflation undershot central bank targets for so long prior to the pandemic with many of the arguments of technology, globalisation, excess capacity and demographics, still potentially being persistent forces on inflation. For example more consumption is pivoting online where the marginal cost is virtually zero (e.g. Netflix v. cinemas), technology is continuing to disrupt pricing power, while demographic ageing is likely seeing people reassess longevity risk and continuing to acquire financial assets to offset that risk. De-globalisation is a potential inflationary source, though it is unclear whether this is actually occurring, or whether production is pivoting to other low cost areas (e.g. from China to Vietnam, Bangladesh and India).

Central banks no-longer pre-emptive

The uncertainty over the trajectory for inflation has recently seen the RBA Board change its forward guidance, placing "*more weight on actual, not forecast, inflation in its decision-making*" (RBA October Minutes). That change in approach was a recognition of increased "*uncertainty about inflation dynamics*", presumably in the pandemic, but no doubt also about where full employment lies. In essence you only know where full employment is once inflation starts to lift on a sustained basis.

While the RBA Board cited the subtle change in approach was in recognition of heightened uncertainty associated with the pandemic, the argument is also equally applicable to the pre-pandemic period when inflation failed to lift despite unemployment coming close to prior estimates of full employment.

A speech by Assistant Governor Luci Ellis in mid-2019 recognised this uncertainty, noting: "*over the past five years wages growth has been slower than would have been expected based on past behaviour. We have therefore gradually revised down the estimate of the prevailing NAIRU from 5¼ per cent a few years ago to 4½ per cent now…with a 95% chance it is between 3½ per cent and 5½ per cent*" (see Watching the Invisibles).

A central bank that tightens policy on pre-conceived notions of where full employment is, thus potentially leaves more people unemployed then otherwise, as well as increasing the chances that inflation remains below target. For the US Fed, this criticism was part of their adoption of average inflation targeting with Governor Brainard noting that "*the longstanding presumption that accommodation should be reduced pre-emptively when the unemployment rate nears the neutral rate in anticipation of high inflation that is unlikely to materialize risks an unwarranted loss of opportunity for many Americans*" (see Bringing the Statement on Longer-Run Goals and Monetary Policy Strategy into Alignment with Longer-Run Changes in the Economy).

The RBA is signalling that it is also likely to become more reactive to inflation, rather than pro-active. Or in the RBA's words: "*members indicated that they would also like to see more than just progress towards full employment before considering an increase in the cash rate*". In assessing where the RBA is likely to ease further or tighten, the emphasis on more than full employment suggests we should focus on the degree of labour market tightness, particularly wages growth, rather than any temporary increase in inflation.

Our prior modelling of wages growth presented earlier emphasised the role of underemployment in explaining wages growth. Elevated underemployment prior to the pandemic was putting downward pressure on wages according to this model, despite unemployment being close to what was then considered to be full employment (Chart 8). Accordingly, we would suggest continuing to pay close attention to underemployment as an indicator for whether wages start growth starts to lift earnestly. The overall level of unemployment is of course also relevant.

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CALENDAR OF ECONOMIC RELEASES

Country	Economic Indicator	Period	Forecast	Consensus	Actual	Previous	GMT	AEDT
Monday 02 November 2020								
EC	Markit Eurozone Manufacturing PMI	Oct F		54.4		54.4	9.00	20.00
US	ISM Manufacturing	Oct		55.6		55.4	15.00	2.00
US	Construction Spending MoM	Sep		1		1.4	15.00	2.00
Tuesday 03 November 2020								
US	Presidential election			--		--		4 Nov
AU	RBA Cash Rate Target	Nov 3	0.1	0.1		0.25	3.30	14.30
US	Durable Goods Orders	Sep F		--		1.9	15.00	2.00
US	Factory Orders	Sep		0.5		0.7	15.00	2.00
Wednesday 04 November 2020								
AU	AiG Perf of Construction Index	Oct		--		45.2	21.30	8.30
NZ	Unemployment Rate	3Q	6.1	5.5		4	21.45	8.45
NZ	Employment Change QoQ	3Q	-1.2	-0.8		-0.4	21.45	8.45
NZ	Average Hourly Earnings QoQ	3Q		0.3		0.4	21.45	8.45
NZ	ANZ Commodity Price	Oct		--		-0.2	0.00	11.00
AU	Retail Sales Ex Inflation QoQ	3Q	6	6		-3.4	0.30	11.30
CH	Caixin China PMI Services	Oct		55		54.8	1.45	12.45
AU	Retail Sales MoM	Sep		-1.5		-4	3.30	14.30
US	ADP Employment Change	Oct		737.5		749	13.15	0.15
US	ISM Non-Manufacturing Index	Oct		57.5		57.8	15.00	2.00
Thursday 05 November 2020								
NZ	ANZ Business Confidence	Nov P		--		-15.7	0.00	11.00
AU	Weekly Payrolls	17-Oct		--		--	0.30	11.30
AU	Trade Balance	Sep	5200	3800		2643	0.30	11.30
EC	Retail Sales MoM	Sep		-0.5		4.4	10.00	21.00
UK	Bank of England Bank Rate	Nov 5	0.1	0.1		0.1	12.00	23.00
US	Initial Jobless Claims	Oct 31		--		751	13.30	0.30
US	FOMC Rate Decision	Nov 5	0/0.25	0/0.25		0/0.25	19.00	6.00
Friday 06 November 2020								
AU	AiG Perf of Services Index	Oct		--		36.2	21.30	8.30
AU	RBA Statement on Monetary Policy	Nov		--		--	0.30	11.30
NZ	2Yr Inflation Expectation	4Q		--		1.43	2.00	13.00
CH	Trade Balance	Oct		--		37	13.00	0.00
CH	Imports YoY	Oct		--		13.2	13.00	0.00
CH	Exports YoY	Oct		--		9.9	13.00	0.00
US	Change in Nonfarm Payrolls	Oct		610		661	13.30	0.30
US	Unemployment Rate	Oct		7.7		7.9	13.30	0.30
US	Average Hourly Earnings YoY	Oct		4.6		4.7	13.30	0.30
CA	Unemployment Rate	Oct		--		9	13.30	0.30
CA	Net Change in Employment	Oct		--		378.2	13.30	0.30
US	Wholesale Inventories MoM	Sep F		--		-0.1	15.00	2.00
Upcoming Central Bank Interest Rate Announcements								
Australia, RBA		Nov 3	0.25	0.25		0.25		
UK, BOE		Nov 5	0.10	0.10		0.10		
US, Federal Reserve		Nov 5	0/0.25	0/0.25		0/0.25		
New Zealand, RBNZ		Nov 11	0.25	0.25		0.25		
Canada, BoC		Dec 9	0.25	0.25		0.25		
Europe, ECB		Dec 10	-0.50	-0.50		-0.50		
Japan, BoJ		Dec 18	-0.10	-0.10		-0.10		

GMT: Greenwich Mean Time; AEDT: Australian Eastern Daylight Time

FORECASTS

Economic Forecasts

	Annual % change				Quarterly % change															
					2019				2020				2021				2022			
Australia Forecasts	**2019**	**2020**	**2021**	**2022**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**
Household Consumption	1.5	-8.6	4.7	4.4	0.4	0.3	0.1	0.4	-1.2	-12.1	2.2	0.9	3.0	2.7	1.9	1.3	0.6	0.8	0.7	0.7
Underlying Business Investment	-1.5	-8.7	-10.4	6.3	0.6	0.0	-1.7	-0.6	-1.0	-3.1	-5.5	-6.9	-2.2	-0.4	1.3	0.6	2.2	2.1	1.8	1.8
Residential Construction	-6.7	-12.4	-10.1	11.3	-2.5	-2.6	-1.0	-2.7	-1.0	-6.8	-5.7	-3.8	-3.5	-0.8	1.5	2.3	3.2	3.2	4.2	3.3
Underlying Public Spending	5.1	7.3	7.2	3.4	1.1	2.0	1.6	0.7	1.7	2.1	2.8	2.0	2.0	1.2	1.2	0.8	0.8	0.8	0.8	0.8
Net Exports (a)	1.0	0.9	-2.1	-1.0	0.3	0.6	0.2	-0.1	0.4	1.0	-0.4	-0.2	-0.7	-0.6	-0.5	-0.3	-0.3	-0.3	-0.3	-0.2
Inventories (a)	-0.2	0.0	0.4	0.0	0.0	-0.3	0.0	0.2	-0.2	-0.6	1.4	-0.2	0.1	0.0	0.1	-0.1	-0.1	0.0	0.0	0.0
Domestic Demand (q/q %)	--	--	--	--	0.3	0.6	0.4	0.4	-0.4	-7.4	1.1	0.2	1.9	1.8	1.6	1.1	1.0	1.0	1.0	1.0
Dom Demand (y/y %)	1.4	-4.8	3.1	4.6	1.2	1.3	1.3	1.6	0.9	-7.0	-6.4	-6.6	-4.4	5.0	5.6	6.6	5.6	4.8	4.2	4.0
Real GDP (q/q %)	--	--	--	--	0.4	0.8	0.5	0.6	-0.3	-7.0	2.4	0.1	1.3	1.1	1.2	0.7	0.6	0.8	0.7	0.7
Real GDP (y/y %)	1.8	-3.6	2.3	3.2	1.7	1.6	1.8	2.3	1.6	-6.3	-4.5	-5.0	-3.5	5.0	3.8	4.4	3.7	3.4	2.9	2.9
CPI headline (q/q %)	--	--	--	--	0.0	0.6	0.5	0.7	0.3	-1.9	2.0	0.7	0.5	0.4	0.4	0.5	0.3	0.5	0.6	0.6
CPI headline (y/y %)	1.6	1.0	2.1	1.8	1.3	1.6	1.7	1.8	2.2	-0.3	1.1	1.1	1.2	3.6	1.9	1.8	1.6	1.8	2.0	2.0
CPI underlying (q/q %)	--	--	--	--	0.2	0.4	0.4	0.4	0.5	0.0	0.4	0.5	0.5	0.4	0.3	0.3	0.3	0.5	0.5	0.3
CPI underlying (y/y %)	1.4	1.4	1.5	1.5	1.4	1.4	1.4	1.4	1.7	1.3	1.3	1.3	1.3	1.8	1.6	1.5	1.3	1.4	1.6	1.6
Private wages (q/q %)	--	--	--	--	0.5	0.5	0.5	0.5	0.5	0.1	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.5
Private wages (y/y %)	2.2	1.6	1.0	1.6	2.4	2.3	2.2	2.2	2.1	1.7	1.4	1.1	0.8	1.0	1.0	1.0	1.3	1.5	1.8	2.0
Unemployment Rate (%)	5.1	6.7	7.7	6.3	5.1	5.1	5.1	5.2	5.1	7.0	6.9	7.7	8.2	8.0	7.6	7.0	6.7	6.4	6.2	6.0
Terms of trade	5.2	0.7	2.6	1.3	3.2	1.5	0.2	-5.0	3.1	0.2	1.2	1.4	0.1	0.9	0.2	0.2	0.2	0.5	0.5	-0.1
Current Account (% GDP)	0.6	3.1	2.0	0.9	-0.5	0.9	1.5	0.4	1.8	3.8	3.4	3.4	2.7	2.2	1.7	1.4	1.2	1.0	0.8	0.5

Source: NAB Group Economics; (a) Contributions to GDP growth

Exchange Rate Forecasts

	2-Nov	Dec-20	Mar-21	Jun-21	Sep-21	Dec-21
Majors						
AUD/USD	0.701	0.74	0.76	0.77	0.77	0.78
NZD/USD	0.66	0.68	0.69	0.70	0.71	0.72
USD/JPY	104.8	103	103	100	100	100
EUR/USD	1.16	1.22	1.23	1.25	1.26	1.27
GBP/USD	1.29	1.36	1.40	1.40	1.43	1.44
USD/CNY	6.69	6.90	6.85	6.70	6.70	6.60
USD/CAD	1.33	1.34	1.33	1.30	1.23	1.24
USD/CHF	0.92	0.91	0.91	0.91	0.91	0.91
Australian Cross Rates						
AUD/NZD	1.06	1.09	1.10	1.10	1.08	1.08
AUD/JPY	73.4	76	78	77	77	78
AUD/EUR	0.60	0.61	0.62	0.62	0.61	0.61
AUD/GBP	0.54	0.54	0.54	0.55	0.54	0.54
AUD/CNY	4.69	5.11	5.21	5.16	5.16	5.15
AUD/CAD	0.93	0.99	1.01	1.00	0.95	0.97
AUD/CHF	0.64	0.67	0.69	0.70	0.70	0.71

Interest Rate Forecasts

	2-Nov	Dec-20	Mar-21	Jun-21	Sep-21	Dec-21
Australian Rates						
RBA cash rate	0.25	0.10	0.10	0.10	0.10	0.10
3 month bill rate	0.05	0.08	0.08	0.10	0.10	0.10
3 Year Swap Rate	0.10	0.08	0.08	0.08	0.08	0.08
10 Year Swap Rate	0.76	0.68	0.75	0.90	1.00	1.15
Offshore Policy Rates						
US Fed funds	0.25	0.25	0.25	0.25	0.25	0.25
ECB deposit rate	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50
BoE repo rate	0.10	0.10	0.10	0.10	0.10	0.10
BoJ excess reserves rate	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10
RBNZ OCR	0.25	0.25	0.25	-0.25	-0.50	-0.50
10-year Bond Yields						
Australia	0.82	0.75	0.85	1.00	1.10	1.20
United States	0.86	0.70	0.80	0.90	1.00	1.10
New Zealand	0.55	1.03	1.28	1.38	1.63	1.73

Sources: NAB Global Markets Research; Bloomberg; ABS

Global GDP

	2019	2020	2021
Australia	1.8	-3.6	2.3
United States	2.2	-4.1	3.4
Eurozone	1.3	-6.4	5.7
United Kingdom	1.4	-9.2	7.4
Japan	0.7	-5.4	2.8
China	6.1	1.5	9.5
India	4.9	-8.8	13.3
New Zealand	2.3	-5.6	1.8
World	3.0	-4.0	6.3

Commodity prices ($US)

	2-Nov	Dec-20	Mar-21	Jun-21	Sep-21
Brent oil	36.5	49	53	55	55
Gold	1884	2030	2050	2100	2200
Iron ore	117	87	85	90	80
Hard coking coal*	118	120	125	140	135
Thermal coal	60	59	59	61	62
Copper	6708	6000	6250	6500	6750
Aus LNG**	6	7	7	8	8

** FOB quarterly contract prices (thermal coal is JFY contract)*

*** Implied Australian LNG export prices*

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