AUSTRALIAN MARKETS WEEKLY

An experimental high-frequency indicator to track economic recovery

National Australia Bank

In this issue

Analysis – An experimental high-frequency indicator to track economic recovery

- The coronavirus pandemic has renewed interest in tracking partial economic indicators to get a better sense of the hit to the economy and the unfolding recovery. We have constructed an experimental summary index based on the common trend in a range of a mix of daily and weekly private-sector and official statistics, ranging from confidence and web searches through to NAB's balance-sheet data and hard economic indicators.

- The severe common shock of the virus is apparent across nearly all of the series used to construct the index. This common shock is shown in the summary index falling 22% from its pre-virus level to a low in late April. Reflecting rebounds in most of the underlying data, the summary index has gradually recovered over recent weeks and is currently 11% below pre-virus levels.

- At this stage, there is no way of knowing how well the summary index tracks GDP given its ultra-short history. We believe that it has information about the broader economy, but likely struggles to track key spending on services and public demand. Until we can get a better handle on how well it measures activity we plan to track the index more as a directional signal of the economy.

The week ahead – AU trade, NAB data; NZ RBNZ; US durable goods, personal consumption; EZ PMIs

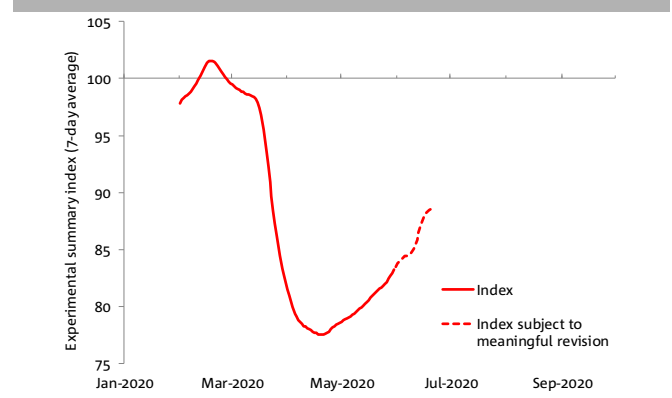- **Australia:** Preliminary merchandise trade on Tuesday should show the goods trade surplus remains broadly unchanged at high levels. The ABS business survey on Wednesday will show how businesses fared in mid June following the easing of social distancing restrictions. NAB updates its consumer spending and business cashflow report. **NZ:** We expect Wednesday's OCR Review to pass without incident. The RBNZ is fully expected to leave its policy settings unchanged, including its cash rate at 0.25%. The Bank will likely acknowledge the not-so-horrible economic indicators post the 13 May Monetary Policy Statement, but in the context of maintained caution from a broader perspective.

- **CH:** The focus is on the new coronavirus outbreak in Beijing, where some containment restrictions have been reimposed. **US:** Durable goods orders for May (Thursday) will show how business spending is faring amid the ongoing rise in unemployment. The May personal income and spending report is expected to see some recovery in spending (up 8.7%) amid a further slowing in core inflation to 0.9% from 1%. **EZ:** The flash June services and manufacturing sector PMIs are released on Tuesday. The consensus looks for a further improvement in services and manufacturing to 40 and 43 points, respectively.

Key markets over the past week

	Last	% chg week		Last	bp/% chg week
AUD	0.6883	-0.5	RBA cash	0.13	-1
AUD/CNY	4.87	0.3	3y swap	0.24	-3
AUD/JPY	73.7	-0.8	ASX 200	5,945	3.9
AUD/EUR	0.614	0.5	Iron ore	99	-1.6
AUD/NZD	1.068	-0.1	Brent oil	42.4	6.6

Source: Bloomberg

Chart of the week: An experimental economic indicator

Kieran Davies

An experimental high-frequency indicator to track economic recovery

- The coronavirus pandemic has renewed interest in tracking partial economic indicators to get a better sense of the hit to the economy and the unfolding recovery. We have constructed an experimental summary index based on the common trend in a range of a mix of daily and weekly private-sector and official statistics, ranging from confidence and web searches through to NAB's balance-sheet data and hard economic indicators.

- The severe common shock of the virus is apparent across nearly all of the series used to construct the index. This common shock is shown in the summary index falling 22% from its pre-virus level to a low in late April. Reflecting rebounds in most of the underlying data, the summary index has gradually recovered over recent weeks and is currently 11% below pre-virus levels.

- At this stage, there is no way of knowing how well the summary index tracks GDP given its ultra-short history. We believe that it has information about the broader economy, but likely struggles to track key spending on services and public demand. Until we can get a better handle on how well it measures activity we plan to track the index more as a directional signal of the economy.

Summary economic indicators generally perform poorly in Australia

We constructed a simple index of activity for Australia based on the common trend in a large range of daily and weekly indicators.

There is a long history of coincident and leading indices in Australia, led by work at the Melbourne Institute. Other institutions have developed their own indices, including the Organisation for Economic Co-operation and Development and the Conference Board. The Reserve Bank has also experimented with factor indices based on very large numbers of indicators.[1] Treasury has also experimented with a factor index to nowcast activity.[2]

These indices have generally been based on a combination of official and private-sector indicators, sometimes augmented by financial indicators. None of them have worked that well at nowcasting activity, even after being overhauled over the years. This is largely due to the lack of data on the services sector, which dominates the economy, and the public sector, although the timeliness and revisions to the underlying data also play a role.

This contrasts with the experience of the US, where coincident and leading indicators and indices based on large numbers of indicators are more commonly used. Such indicators have a mixed performance, but do better than in Australia given that the US has a large range of timely indicators of goods and services activity. Financial indicators also perform better in the US.

Notwithstanding the poor performance of summary indices in Australia, some economic and financial indicators are sometimes used to better effect to estimate the probability of a change in monetary policy or the probability of an increase (or decrease) in unemployment and inflation.

We have constructed a summary index of the economy using daily and weekly data

The coronavirus pandemic has renewed interest in summary indices using high-frequency indicators to obtain a more immediate picture of the impact of the virus on the economy.

We have constructed an experimental summary index based on the common trend in a range of daily and weekly statistics detailed in the appendix. These data are a mix of official and private-sector series ranging from confidence and web searches through to NAB's balance-sheet data and hard economic indicators.

The shortcomings of the summary index are significant.

- **The index has an ultra-short history of a few months.** This reflects the underlying data, where some indicators have only become available in the past couple of months.

- **The lead time on monthly official economic indicators is short.** In a very welcome move, David Gruen, the new Chief Statistician, has brought forward the publication of monthly economic indicators and published some new weekly indicators used in the summary index.

- **The index can be revised, potentially significantly.** Some of the underlying data are revised as better information becomes available. Other indicators are assumed to remain unchanged at their latest value because of a slight delay in publication.

- **The index is potentially highly seasonal.** Some of the underlying indicators, such as the labour market, consumer and housing statistics, are highly seasonal. Most of the other indicators are seasonal as well and some are very volatile. Given the very short history, we cannot seasonally adjust the summary index.

- **The underlying data are constructed differently.** Some indicators are indices, others are smoothed using weekly and monthly averages. Some are expressed as growth versus a year ago, which means that turning points are automatically missed by 6-9 months.

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[1] See the discussion in Adrian Pagan and David Wilcox, *External review – Reserve Bank of Australia Economic Group forecasts and analysis*, 2016.

[2] Angelia Grant, *Nowcasting Australia's Gross Domestic Product*, Treasury Working Paper No. 2018-04, Treasury, November 2018.

Chart 1: High-frequency data offer a short lead on official monthly indicators
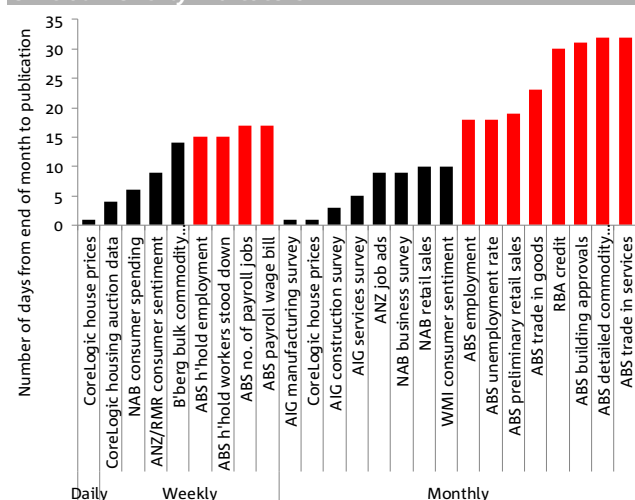
Note: Release times for May 2020 data.
Source: Australian Bureau of Statistics, Bloomberg, National Australia Bank

The severe common shock of the virus is apparent across nearly all of the series used to construct the index, except exports of bulk commodities and house prices, which have been little changed. This common shock is captured in the experimental summary index, which fell by 22% from its pre-virus level to a low in late April. Like most of the underlying data, the summary index has gradually recovered over recent weeks and is currently 11% below pre-virus levels.

While some of the components of the summary index can be used to track official monthly data – for example, the weekly employment and payroll components can be used to track the official monthly measure of employment – there is no way of knowing at this stage how well the summary index tracks GDP given its ultra-short history. We believe that it has information about the broader economy, but likely struggles to track key spending on services and public demand.

Chart 2: An experimental summary index of activity shows the hit from the virus and subsequent recovery

Source: ANZ Bank, Australian Bureau of Statistics, Bloomberg, CoreLogic, Genscape, GlobalPorts, Google Trends, IHS, REA Group, Roy Morgan Research, SEEK, National Australia Bank
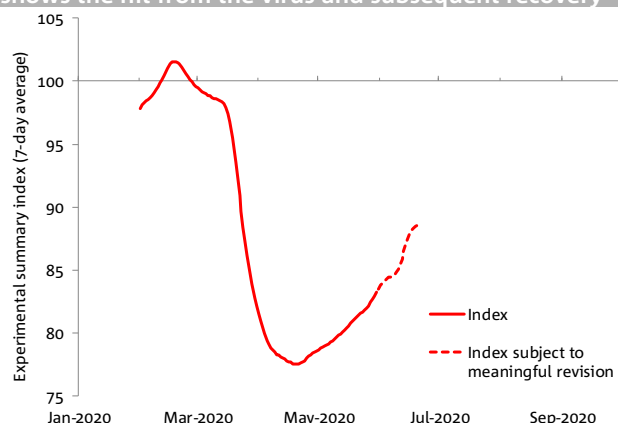
We intend to track the index more as a directional signal of the economy. We will also consider expanding it using some high-frequency indicators on news and website searches and hard traffic data if possible, as well as SQM data on rents.

Kieran Davies

APPENDIX – INDICATORS USED IN THE EXPERIMENTAL SUMMARY INDEX

The detrended indicators used in the summary index are:

1. **Household employment and payrolls**

   The Australian Bureau of Statistics now publishes high-frequency data on a household survey of employment and the number of payroll jobs.

   The household employment survey is closer in construction to the monthly labour survey, which is the source of the official estimates of employment and unemployment. It measures the ratios of total and paid employment to the adult population, while the labour force survey also includes some teenagers. These data are highly seasonal and imprecisely measured given the sample size of 3,000 households.

   The number of payrolls jobs is based on data from the Australian Taxation Office. The statistics cover 99% of employers with 20 or more staff and 80% of smaller employers and exclude self-employed workers. These highly seasonal data can be scaled to track the quarterly estimate of payroll jobs from the labour accounts. They can also be used to estimate monthly employment, mindful that the number of payroll jobs is boosted by some employees holding more than job.

Chart 3: Weekly payroll jobs are highly seasonal
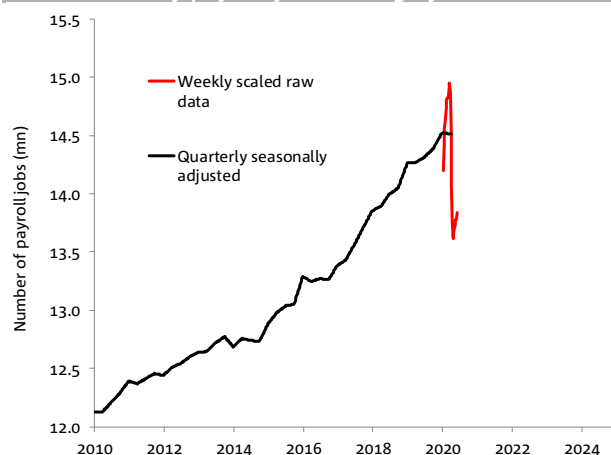
Source: ANZ Bank, Melbourne Institute, Roy Morgan Research, National Australia Bank

2. **NAB consumer spending**

   NAB publishes weekly estimates of consumer spending based on aggregated and de-identified bank transaction records. The data are published every fortnight and include sales by state and territory, the detailed split of spending and spending by industry. NAB also publishes information on payments into NAB merchants split by industry.

   The published data are smoothed using a 4-week average and are seasonal. The figures provide insight into consumer trends at a highly disaggregated level and also help estimate official measures of spending.

Chart 4: The NAB measure of consumer spending is based on aggregated and de-identified bank records
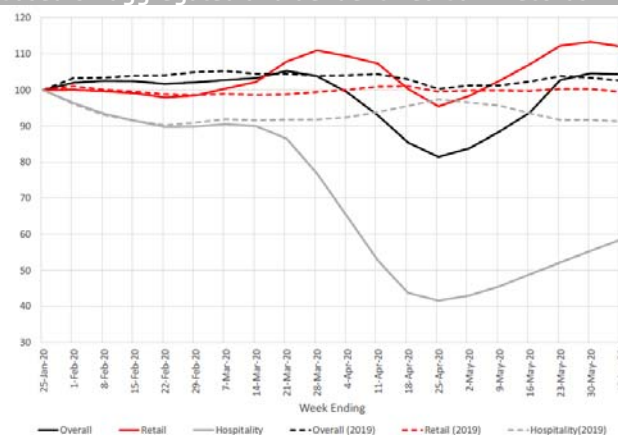

Note: 4-week average index.
Source: National Australia Bank

3. **Exports of bulk commodities**

   Bloomberg publishes daily and weekly port data on export volumes of LNG, coal and iron ore from a number of providers. We used weekly data, which are available with a lag given not every port reports on exports at the same time. These data are both seasonal and volatile and can be used to estimate exports in the current month.

Chart 5: Exports of bulk commodities are seasonal and volatile
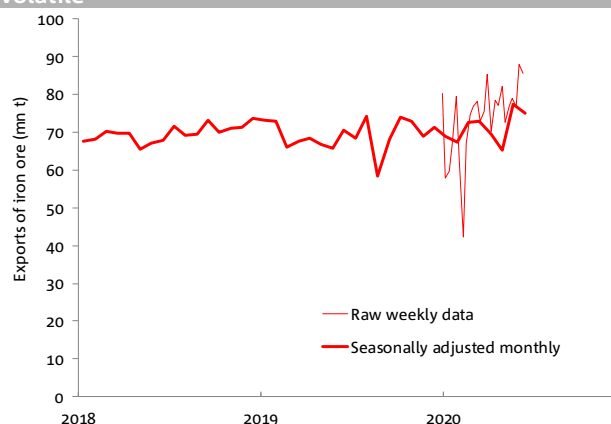
Source: Bloomberg, Department of Foreign Affairs and Trade, GlobalPorts, National Australia Bank

4. **SEEK job ads**

   We used published weekly job ads for the largest states kindly provided by SEEK, which we weighted using labour force shares based on official data. SEEK regularly publishes monthly estimates of job ads, which are a timely estimate of the official measure of job vacancies that is only published quarterly with a long lag.

**Chart 6: SEEK job ads are a timely measure of job vacancies**
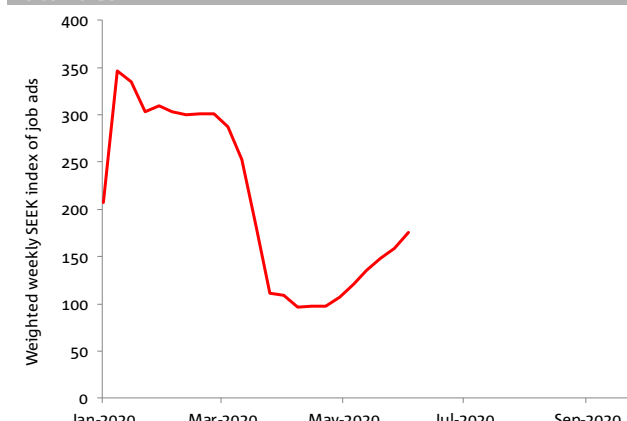
Note: Weighted data for New South Wales, Victoria, Queensland, South Australia and Western Australia. The weights are based on labour force estimates for each state.
Source: Australian Bureau of Statistics, SEEK, National Australia Bank

5. CoreLogic house prices and auction clearance rates

CoreLogic publish daily hedonic house prices for the 5 largest capital cities. The data are also used to compile CoreLogic's widely-used monthly measure of house prices. The data are seasonal.

CoreLogic also publishes weekly weighted capital city clearance rates. Auction clearance rates are volatile and come with data on auction turnover. The data are highly seasonal.

Chart 7: CoreLogic auction clearance rates are highly seasonal
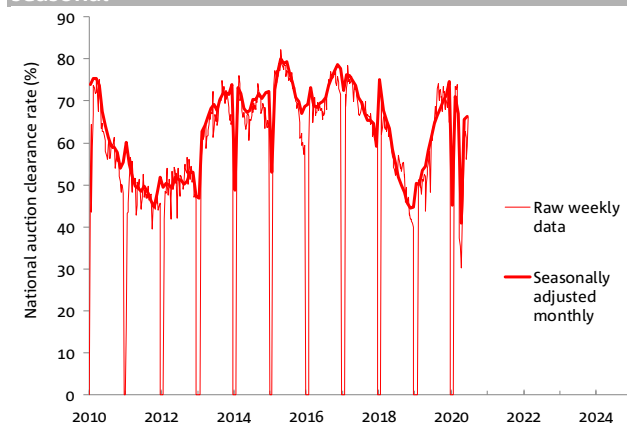
Source: CoreLogic, National Australia Bank

6. OpenTable restaurant bookings

OpenTable publishes daily data on annual growth in online/phone/walk-in reservations for seated diners at a sample of restaurants across its network.

The series broadly tracks the official monthly measure of restaurant sales.

Chart 8: OpenTable report annual growth in restaurant bookings
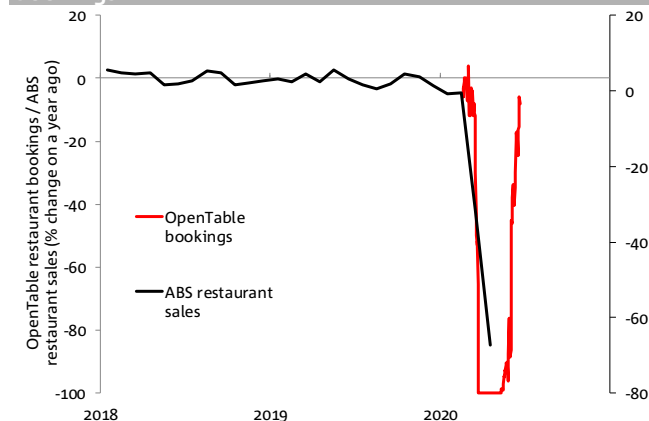
Source: OpenTable, National Australia Bank

7. Google searches for takeaway food, air travel and domestic tourism

Google Trends was used to construct three weekly measures of spending intentions for takeaway food, air travel and domestic tourism.

These indicators are seasonal and prone to revision given the data are drawn from a different sample of Google searches each time they are downloaded. The data are also very sensitive to the underlying search terms, where the popularity of company names included as search terms varies over time.

Chart 9: Google searches have dropped for takeaway food and rebounded for air travel and domestic tourism
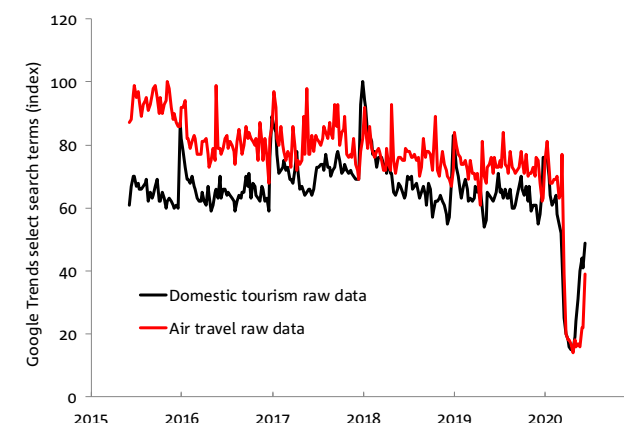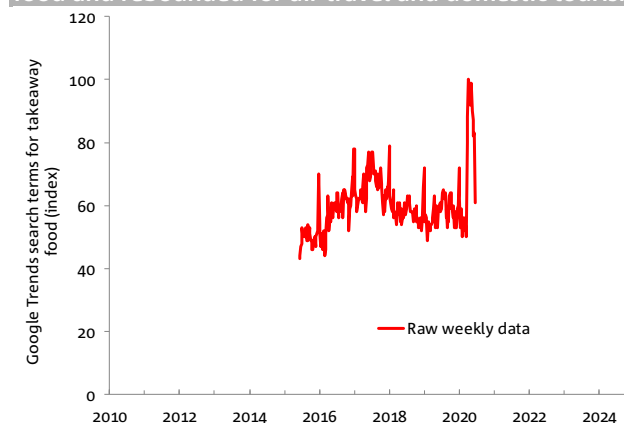
Source: Google Trends, National Australia Bank

8. **Mobility**

Mobility captures the movement of people and was measured using the daily Google "community mobility reports", Apple "mobility trend reports" and the Citymapper Mobility Index.

Google measures location of visits and length of stay for those users who have opted-in for "location history" in their Google account. Google publishes information for: (1) groceries and pharmacies; (2) parks; (3) transit stations; (4) retail and recreation; (5) residential; and (6) workplaces.

Apple measures requests for driving, transit and walking directions in Apple Maps. Similarly, Citymapper measures trips planned in the Citymapper app.

A summary mobility index was constructed by detrending the data and combining the series. Our initial experience suggests that some of these indicators have a mixed relationship to hard data on usage of public transport and traffic.
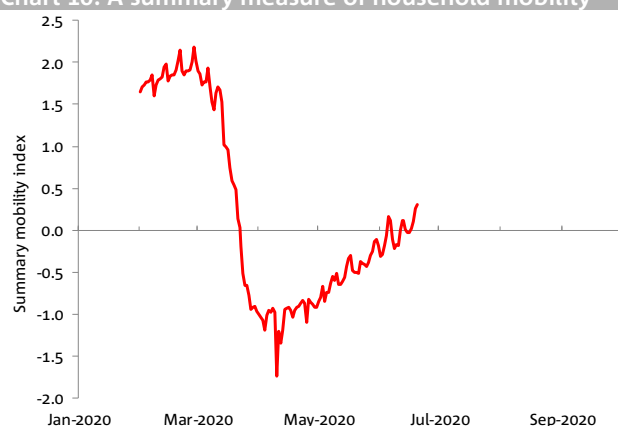
Chart 10: A summary measure of household mobility

Source: Apple mobility trend reports, Citymapper Mobility Index, Google community mobility reports, National Australia Bank

9. **Consumer confidence**

We used the weekly measure of consumer confidence published by the ANZ Bank and Roy Morgan Research, which displays some seasonality. Confidence is also volatile, which is not surprising given that data appear drawn from a sample of only about 250 people.

It is hard to establish any relationship between confidence and consumer spending, although the Reserve Bank Board papers track the finances sub-component, averaging the monthly ANZ-Roy Morgan Research and Westpac-Melbourne Institute series.

Chart 11: Weekly ANZ-Roy Morgan Research confidence is almost back at pre-virus levels ...
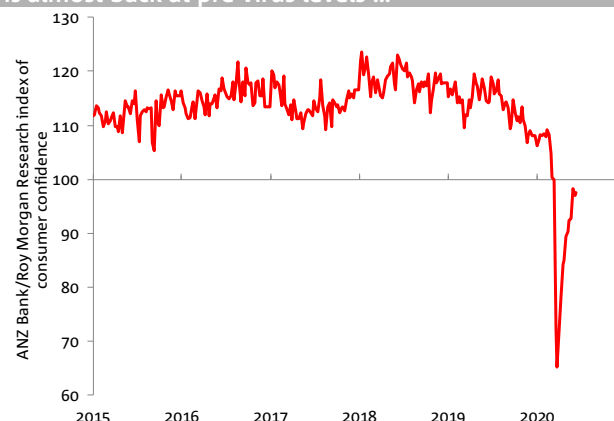
Source: ANZ Bank, Roy Morgan Research, National Australia Bank

Chart 12: ... although the RBA places more weight on the monthly personal finances subcomponent
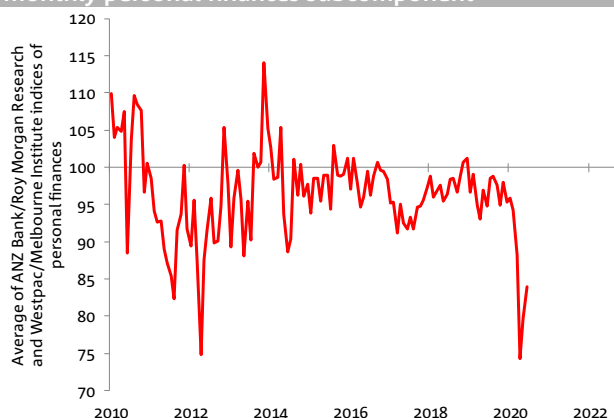
Source: ANZ Bank, Melbourne Institute, Roy Morgan Research, National Australia Bank

10. **REA Group measure of real estate search terms and home sales**

The REA Group – which owns real.estate.com.au – publishes weekly data on annual growth in searches for properties for sale and rent. They also publish a count of the number of advertised properties that have moved from "for sale" to "sold".

The search data are volatile, while the sales data are highly seasonal. At this stage, we are still evaluating these series.

Chart 13: REA Group publishes a range of housing indicators
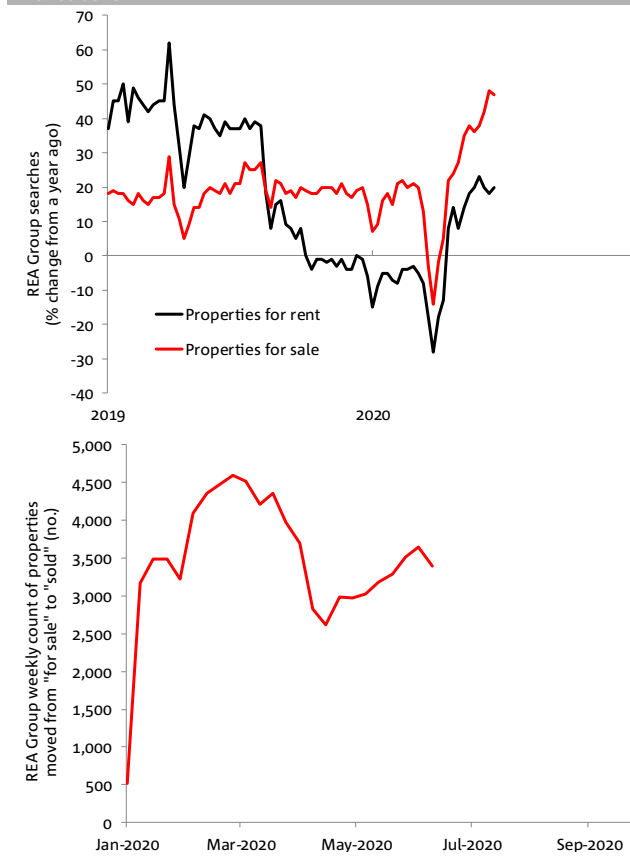
Source: REA group, National Australia Bank

CALENDAR OF ECONOMIC RELEASES

Country	Economic Indicator	Period	Forecast	Consensus	Actual	Previous	GMT	AEST
Monday 22 June 2020								
EC	Consumer Confidence	Jun A		--		-18.8	13.00	0.00
CA	BoC Governor Macklem gives first speech			--		--	14.00	1.00
Tuesday 23 June 2020								
JN	Jibun Bank Japan PMI Mfg	Jun P		--		38.4	23.30	10.30
AU	ABS preliminary merchandise trade	May		--		--	0.30	11.30
GE	Markit/BME Germany Manufacturing PMI	Jun P		42.5		36.6	6.30	17.30
EC	Markit Eurozone Manufacturing PMI	Jun P		43		39.4	7.00	18.00
EC	Markit Eurozone Services PMI	Jun P		40		30.5	7.00	18.00
UK	Markit UK PMI Manufacturing SA	Jun P		--		40.7	7.30	18.30
US	Markit US Manufacturing PMI	Jun P		--		39.8	12.45	23.45
US	New Home Sales	May		630		623	13.00	0.00
Wednesday 24 June 2020								
AU	ABS survey on business impacts COVID-19	Jun 8		--		--	0.30	11.30
NZ	RBNZ Official Cash Rate	Jun 24	0.25	0.25		0.25	1.00	12.00
GE	IFO Business Climate	Jun		--		79.5	7.00	18.00
US	Fed's Evans discusses on economy			--		--	15.30	2.30
US	Fed's Bullard discusses economy and COVID-19			--		--	18.00	5.00
Thursday 25 June 2020								
NZ	Trade Balance NZD	May		--		1267	21.45	8.45
AU	Detailed labour force data	May		--		--	0.30	11.30
JN	All Industry Activity Index MoM	Apr		-6.8		-3.8	3.30	14.30
US	Wholesale Inventories MoM	May P		--		0.3	11.30	22.30
US	Durable Goods Orders	May P		10		-17.7	11.30	22.30
US	GDP Annualized QoQ	1Q T		-5		-5	11.30	22.30
US	Initial jobless claims	Jun 20		--		1508k	11.30	22.30
US	Fed's Bostic discusses economy			--		--	14.00	1.00
US	BoE's Haldane speaks at TEDxGlasgow			--		--	16.00	3.00
Friday 26 June 2020								
NZ	ANZ Consumer Confidence Index	Jun		--		97.3	21.00	8.00
JN	Tokyo CPI YoY	Jun		0.4		0.4	22.30	9.30
EC	M3 Money Supply YoY	May		--		8.3	7.00	18.00
US	Personal spending MoM	May		8.7		-13.6	11.30	22.30
US	PCE Core Deflator MoM / YoY	May		0 / 0.9		-0.4 / 1	11.30	22.30
US	U. of Mich. Expectations	Jun F		--		73.1	13.00	0.00
Upcoming Central Bank Interest Rate Announcements								
New Zealand, RBNZ		Jun 24	0.25	0.25		0.25		
Australia, RBA		Jul 7	0.25	0.25		0.25		
Japan, BoJ		Jul 15	-0.10	-0.10		-0.10		
Europe, ECB		Jul 16	-0.50	-0.50		-0.50		
US, Federal Reserve		Jul 29	0/0.25	0/0.25		0/0.25		
UK, BOE		Jun 18	0.10	0.10		0.10		

GMT: Greenwich Mean Time; AEST: Australian Eastern Standard Time

FORECASTS

Economic Forecasts

Australia Forecasts	Annual % change				Quarterly % change															
					2019				2020				2021				2022			
	2019	2020	2021	2022	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Household Consumption	1.4	-7.8	2.8	3.2	0.4	0.3	0.1	0.5	-1.1	-11.4	1.5	3.2	1.5	1.0	0.6	0.8	0.6	1.0	0.7	0.8
Underlying Business Investment	-1.7	-22.3	-11.6	7.9	0.8	-0.2	-1.7	-1.5	-1.0	-21.2	-7.2	-6.1	-1.8	4.3	2.7	1.7	1.4	2.0	1.3	2.0
Residential Construction	-6.9	-14.4	-4.4	12.8	-1.7	-3.5	-0.7	-4.1	-1.7	-7.6	-5.4	-3.4	-0.5	1.6	2.9	3.6	3.6	3.2	2.5	1.8
Underlying Public Spending	4.9	4.7	3.8	3.1	1.1	1.7	1.8	0.4	1.5	1.1	1.0	1.0	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8
Net Exports (a)	0.9	2.9	-1.1	-0.9	0.2	0.6	0.1	-0.1	0.5	3.6	-0.5	-0.7	-0.3	-0.3	-0.2	-0.3	-0.2	-0.3	-0.2	-0.2
Inventories (a)	-0.2	-0.8	1.3	0.0	0.0	-0.4	0.1	0.2	-0.2	-2.4	1.6	1.3	0.1	0.1	-0.1	0.0	0.0	0.1	-0.1	0.0
Domestic Demand (q/q %)	--	--	--	--	0.3	0.4	0.4	0.2	-0.5	-8.7	0.2	1.4	1.0	1.2	0.9	1.0	0.9	1.1	0.9	0.9
Dom Demand (y/y %)	1.3	-6.2	1.4	4.0	1.2	1.3	1.2	1.3	0.5	-8.6	-8.8	-7.7	-6.3	3.8	4.6	4.2	4.1	4.0	3.9	3.9
Real GDP (q/q %)	--	--	--	--	0.5	0.6	0.6	0.5	-0.3	-8.6	2.1	3.1	0.7	0.9	0.6	0.7	0.6	0.9	0.6	0.7
Real GDP (y/y %)	1.8	-4.3	2.9	2.8	1.7	1.6	1.8	2.2	1.4	-7.9	-6.5	-4.1	-3.1	7.0	5.4	2.9	2.8	2.7	2.8	2.8
CPI headline (q/q %)	--	--	--	--	0.0	0.6	0.5	0.7	0.3	-2.0	1.6	0.7	0.4	0.2	0.3	0.3	0.1	0.2	0.5	0.8
CPI headline (y/y %)	1.6	0.7	1.6	1.2	1.3	1.6	1.7	1.8	2.2	-0.4	0.6	0.5	0.6	2.9	1.6	1.3	1.0	0.9	1.1	1.6
CPI underlying (q/q %)	--	--	--	--	0.2	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.2	0.2	0.1	0.1	0.2	0.4	0.6
CPI underlying (y/y %)	1.4	1.8	1.4	0.8	1.4	1.4	1.5	1.4	1.7	1.7	1.8	1.8	1.8	1.6	1.2	0.9	0.5	0.5	0.7	1.2
Private wages (q/q %)	--	--	--	--	0.5	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.5
Private wages (y/y %)	2.3	1.8	1.2	2.0	2.4	2.3	2.2	2.2	2.1	1.9	1.6	1.3	1.1	1.0	1.3	1.5	1.8	2.0	2.0	2.0
Unemployment Rate (%)	5.1	7.3	7.5	6.4	5.1	5.1	5.2	5.2	5.2	6.8	8.6	8.4	8.3	7.7	7.2	6.9	6.7	6.5	6.3	6.2
Terms of trade	5.1	-2.9	-1.0	0.9	3.3	1.4	0.2	-5.2	2.9	-2.9	0.3	-0.5	-1.3	0.6	1.3	0.6	-0.1	-0.1	-0.1	-0.1
Current Account (% GDP)	0.6	3.7	2.8	1.9	-0.6	1.0	1.4	0.3	1.7	5.2	4.5	3.6	3.0	2.8	2.7	2.6	2.3	2.0	1.8	1.5

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

Exchange Rate Forecasts

	22-Jun	Sep-20	Dec-20	Mar-21	Jun-21	Sep-21
Majors						
AUD/USD	0.688	0.70	0.72	0.74	0.74	0.75
NZD/USD	0.64	0.64	0.66	0.67	0.68	0.69
USD/JPY	107.0	109	109	109	109	108
EUR/USD	1.12	1.13	1.15	1.17	1.18	1.19
GBP/USD	1.24	1.27	1.30	1.32	1.33	1.35
USD/CNY	7.08	7.10	7.05	6.95	6.85	6.80
USD/CAD	1.36	1.41	1.39	1.37	1.35	1.30
USD/CHF	0.95	0.97	0.96	0.96	0.95	0.95
Australian Cross Rates						
AUD/NZD	1.07	1.09	1.09	1.10	1.09	1.09
AUD/JPY	73.6	76	78	81	81	81
AUD/EUR	0.61	0.62	0.63	0.63	0.63	0.63
AUD/GBP	0.55	0.55	0.55	0.56	0.56	0.56
AUD/CNY	4.87	4.97	5.08	5.14	5.07	5.10
AUD/CAD	0.93	0.99	1.00	1.01	1.00	0.98
AUD/CHF	0.65	0.68	0.69	0.71	0.70	0.71

Interest Rate Forecasts

	22-Jun	Sep-20	Dec-20	Mar-21	Jun-21	Sep-21
Australian Rates						
RBA cash rate	0.25	0.25	0.25	0.25	0.25	0.25
3 month bill rate	0.10	0.20	0.25	0.30	0.30	0.35
3 Year Swap Rate	0.24	0.25	0.30	0.30	0.30	0.30
10 Year Swap Rate	0.86	0.90	1.05	1.18	1.28	1.38
Offshore Policy Rates						
US Fed funds	0.25	0.25	0.25	0.25	0.25	0.25
ECB deposit rate	-0.50	-0.60	-0.60	-0.60	-0.60	-0.60
BoE repo rate	0.10	0.25	0.25	0.25	0.25	0.25
BoJ excess reserves rate	-0.10	-0.20	-0.20	-0.20	-0.20	-0.20
RBNZ OCR	0.25	0.25	0.25	0.25	0.25	0.25
10-year Bond Yields						
Australia	0.87	0.95	1.05	1.15	1.25	1.35
United States	0.70	0.70	0.80	0.90	1.00	1.10
New Zealand	0.88	0.88	1.03	1.28	1.38	1.63

Sources: NAB Global Markets Research; Bloomberg; ABS

Global GDP

	2019	2020	2021
Australia	1.8	-4.3	2.9
United States	2.3	-6.8	5.3
Eurozone	1.2	-7.5	5.7
United Kingdom	1.4	-8.4	6.4
Japan	0.7	-6.3	3.2
China	6.1	1.0	9.8
India	5.3	-1.5	8.0
New Zealand	2.3	-8.3	4.2
World	3.0	-3.7	6.2

Commodity prices ($US)

	22-Jun	Sep-20	Dec-20	Mar-21	Jun-21	Sep-21
Brent oil	42.4	45	49	53	55	55
Gold	1749	1725	1725	1750	1775	1800
Iron ore	na	93	87	85	90	80
Hard coking coal*	112	115	120	125	140	135
Thermal coal	53	55	59	59	61	62
Copper	5829	5750	6000	6250	6500	6750
Aus LNG**	10	7	7	8	8	

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

** Implied Australian LNG export prices

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