

MELBOURNE INSTITUTE  
Applied Economic & Social Research

# Melbourne Institute Nowcast of Australian GDP & Dating the Business Cycle

September 2021

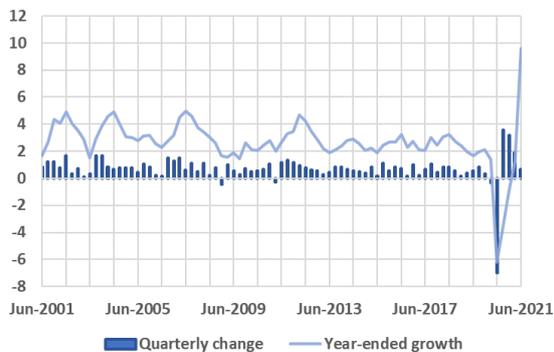
## Melbourne Institute Nowcast of Australian GDP & Dating the Business Cycle

Released September 30, 2021

### ***GDP grew by 0.7 per cent in the June quarter of 2021***

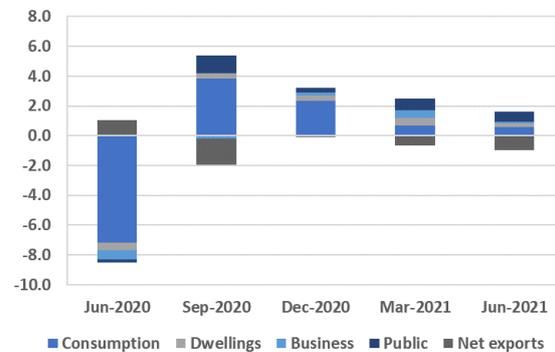
On September 1, the ABS reported that GDP grew by 0.7 per cent in the June quarter of 2021, giving an annual growth rate of 9.6 per cent and showing signs of continued recovery. According to the ABS, household consumption grew by 1.1 per cent in the June quarter, contributing 0.6 percentage points to GDP. Public expenditure, dwellings and business investment all contributed positively to growth, while net exports subtracted approximately 1.0 percentage points from GDP. The next release of the National Accounts, covering the September quarter of 2021, will be on December 1.

**Figure 1: GDP Growth** (chain volume, per cent)



Source: ABS, up to June quarter 2021.

**Figure 2: Contributions to GDP Growth** (ppt)



Source: ABS, up to June quarter 2021.

### ***First nowcast for September quarter GDP***

The first nowcast for the September-2021 quarter projects quarterly GDP growth of -3.6 per cent, giving a year-ended growth rate of 2.0 per cent. Housing market activity is the primary positive contributor to the GDP growth nowcast for Q3-2021. In contrast, retail trade has contributed negatively to the first nowcast for Q3. Uncertainty regarding international economic conditions and COVID-related lockdowns constitute key risk factors for growth in 2021/22. In October, the second nowcast for Q3 will be released.

### ***Economy estimated to have peaked in April***

Despite the 0.7 per cent growth achieved in the June quarter overall, the Monthly Activity Index suggests that Australian economy peaked in April. Using our nowcast, activity in September is estimated to be approximately 1.5 per cent lower than at the peak. Several of the series utilised in the construction of the Index have moved sharply lower; aggregate hours worked in August is a noteworthy example.

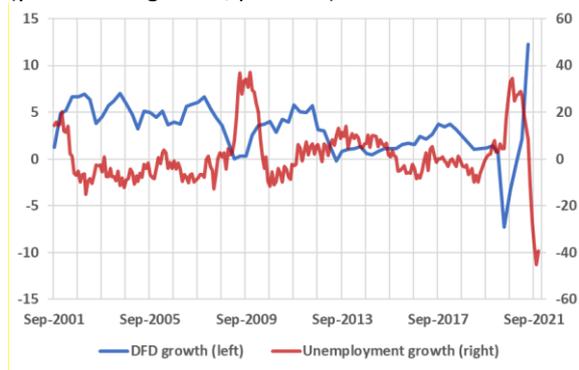
Currently most economic indicators are only available up until August or earlier, so our estimates will be revised once more data become available. One timely indicator that is available is the Westpac-Melbourne Institute of Consumer Sentiment Index. This has fallen by 10.6 per cent since April, with the largest fall in expectations about economic conditions in the next year (16.4 per cent). Interestingly, respondents were more optimistic about their own family finances in the coming year, although it still has declined by more than 7 per cent.

## Hours worked declined in August<sup>1</sup>

The number of unemployed declined by nearly 40 per cent over the year to August. This is the fifth successive decline since an increase of 8.5 per cent in March. However, underemployment also rose to 9.3 per cent in August (from 8.3 per cent in July) suggesting that labour market conditions may be weaker than suggested by unemployment numbers alone. Domestic final demand grew by 1.7 per cent for the June quarter, down from 1.9 per cent growth during the March quarter.

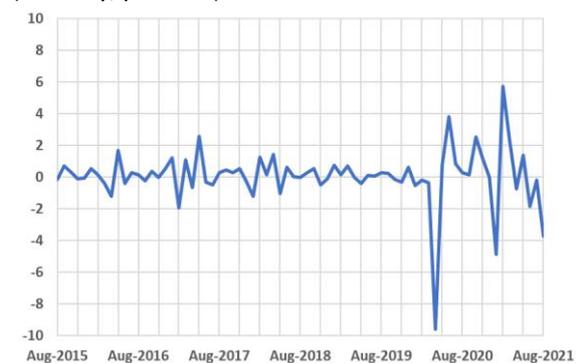
Hours worked fell by 3.7 per cent in August, after 0.2 and 1.8 per cent declines in the preceding two months. The sharp fall in August is likely a reflection of COVID-related lockdowns, with the NSW and Victorian hours worked indices falling by 6.1 and 3.5 points respectively in August.

**Figure 3: Unemployment and DFD**  
(year-ended growth, per cent)



Source: ABS, up to August 2021 (unemployment).

**Figure 4: Growth of hours worked**  
(monthly, per cent)



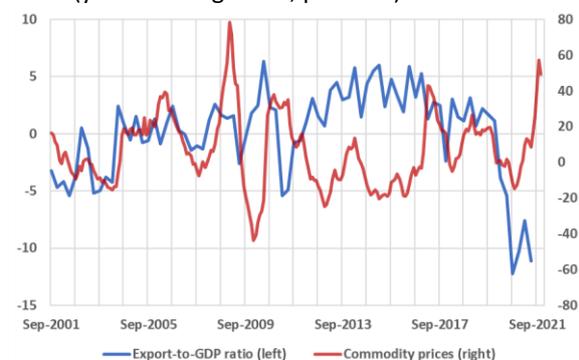
Source: ABS, up to August 2021.

## Net exports continue to grow, commodity prices moderate

The index of commodity prices fell by 4.6 per cent in August, after exhibiting significant growth in the last few months. Notwithstanding August's decline, growth in the commodity price index is still approximately 50 per cent over the year to August. August's index value reflects a sharp correction in iron ore prices partially associated with uncertainty about demand from China.

Net exports rose by 9 per cent in July, after rising by 14 per cent in June. Both exports and imports have risen substantially since the sharp declines observed in 2020, with annual growth in exports reaching 35 per cent in July. Nevertheless, international conditions pose significant downside risks for Australian trade in 2021/22.

**Figure 5: Commodity Prices and Exports-to-GDP Ratio**  
(year-ended growth, per cent)



Sources: ABS and RBA, up to August 2021 (commodity prices).

**Figure 6: Trade balance**  
(\$ billion)



Source: ABS, up to July 2021.

<sup>1</sup> Our nowcast model uses monthly information regarding labour market conditions, housing and business lending, retail sales, housing approvals, consumer expectations, trade conditions and commodity prices to gauge current economic conditions. **We note that the nowcast is currently in the experimental stage.**

**Consumer sentiment declined slightly in September, with non-food retail trade growth also slowing.**

The seasonally adjusted current conditions component of consumer sentiment fell slightly in September (-0.7 points), after a sharper 5.2-point fall in August. The recent declines are likely to reflect uncertainty about economic conditions associated with COVID lockdowns. Overall, the index is close to 100, with the number of optimists only marginally exceeding the number of pessimists.

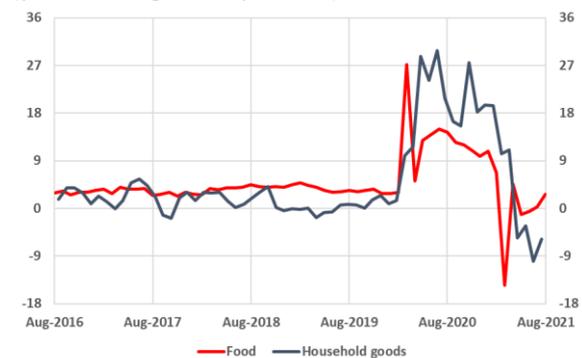
Retail trade data shows that annual growth in non-food related retail trade was nearly negative 10 per cent in July. In the past few months, there appears to be a reversal of the inordinate growth observed in non-food retail trade during 2020. In contrast, food-related retail trade has been relatively stable in the past few months, with annual growth rising from negative 0.5 per cent in June to 0.3 per in July.

**Figure 7: Consumer Sentiment and Consumption**  
(index and year-ended growth, per cent)



Source: ABS and Melbourne Institute, up to September 2021 (consumer sentiment).

**Figure 8: Retail trade**  
(year-ended growth, per cent)



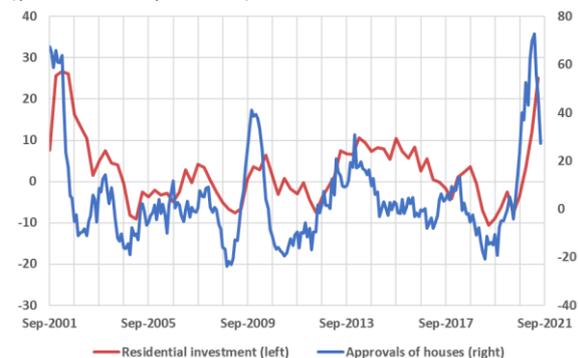
Source: ABS, up to August 2021.

**The housing market continues its strong run, business credit growth turns positive**

Housing approval data in July shows that nearly 12 thousand dwellings were approved. As such, monthly dwelling approvals have exceeded 10 thousand for eleven consecutive months. Annual growth in dwelling approvals, however, fell from 43 per cent in June to 27 per cent in July. This supports the argument that dwelling approvals peaked over the February to April period (with annual growth in dwelling approvals peaking at 73 per cent in April).

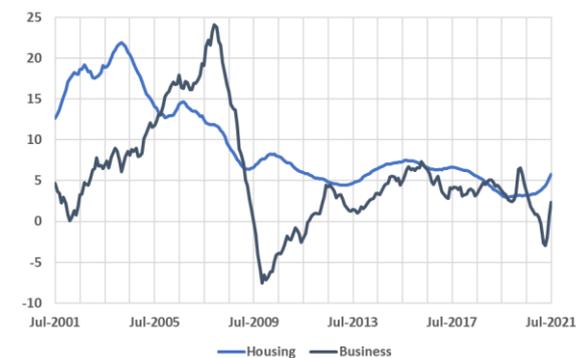
Annual growth in housing-related bank lending rose to 5.8 per cent in July, after growing by 5.3 per cent in June. This is consistent with a combination of higher prices and significant dwelling approval numbers. Moreover, annual growth in business lending was 2.4 per cent in July. Although the latter rate of growth may appear small, it follows a sustained period of declining (and even negative) annual growth in business lending.

**Figure 9: Dwelling Approvals and Residential Investment**  
(year-ended, per cent)



Source: ABS, up to July 2021 (approvals).

**Figure 10: Housing Credit and Business Credit**  
(year-ended growth, per cent)



Source: RBA, up to July 2021.

### **Dating the Australian Business Cycle**

The Melbourne Institute uses a Monthly Activity Index, together with the nowcast and a rule to identify turning points, to date whether the Australian economy may be in a recession.<sup>2</sup>

The Monthly Activity Index is constructed so that, at the quarterly frequency, it coincides with the log of real quarterly GDP to ensure that both data set exhibits similar turning points. Essentially our approach interpolates the quarterly values in history, guided by monthly partial indicators of the state of the economy.<sup>3</sup> Table 1 identifies the turning points (as in peaks and troughs) and the periods of contractions and expansions in business cycle analysis using monthly data.

Business cycles based on quarterly ABS GDP data are shown in Table 2. A better measure of the living standards of Australians is GDP per capita. Expansions and contractions in GDP per capita are shown in Table 3.

The Monthly Activity Index, combined with our nowcast for the September quarter, suggests that the Australian economy peaked in April, and currently is in a recession. Whether this will be borne out by the official GDP and GDP per capita data is uncertain as two quarters of negative growth would also require a fall in the December quarter. Last year the Australian economy rebounded strongly once lockdowns were relaxed. While the timing of some aspects of the reopenings are contingent on vaccination targets being reached, given the current rates of vaccinations it appears likely that the reopenings will occur sufficiently early in the December quarter that a further fall in output may not occur.

**Table 1: Monthly Business Cycle Dates**

Peak	Trough	Contraction	Expansion	Cycle	
		peak to trough (months)	trough to peak (months)	peak to peak (months)	trough to trough (months)
May-1975	Nov-1975	6			
Sep-1981	May-1983	20	70	76	90
Mar-1990	Jun-1991	15	82	102	97
Mar-2020	May-2020	2	345	360	347
Apr-2021		<i>Ongoing</i>			
<b>Averages</b>		<b>10</b>	<b>127</b>	<b>179</b>	<b>178</b>
<b>Standard deviations</b>		<b>7</b>	<b>149</b>	<b>157</b>	<b>146</b>

Note: The average durations are rounded to full months. Includes the ongoing phase. Sample is 1974:09- 2021:09.

<sup>2</sup> The rule is known as Bry-Boschan Quarterly (BBQ). See A. R. Pagan and D. Harding (2002) "Dissecting the cycle: a methodological investigation", *Journal of Monetary Economics*, 49(2), p. 365-381. Also see <http://www.ncer.edu.au/data/data.jsp>. The commonly quoted "two-quarters of negative growth" rule to define a recession is an approximate way of identifying turning points in the level of economic activity.

<sup>3</sup> The data used are: the Westpac-Melbourne Institute Consumer Sentiment Index (time to buy a major household item and family finances versus a year ago); retail trade; the trimmed-mean CPI; the Melbourne Institute Inflation Gauge; monthly imports; the real and nominal trade-weighted exchange rate and aggregate hours worked. We construct the Monthly Activity Index from 1974:09 onwards due to availability of the monthly data. The MI Monthly Activity Index is currently still in development (particularly its open economy aspects).

**Table 2: Real GDP Business Cycle Dates**

Peak	Trough	Contraction	Expansion	Cycle	
		Peak to trough (quarters)	Trough to peak (quarters)	Peak to peak (quarters)	Trough to trough (quarters)
Mar-1961	Sep-1961	2			
Jun-1965	Mar-1966	3	15	17	18
Sep-1971	Mar-1972	2	22	25	24
Jun-1975	Dec-1975	2	13	15	15
Jun-1977	Dec-1977	2	6	8	8
Sep-1981	Jun-1983	7	15	17	22
Jun-1990	Jun-1991	4	28	35	32
Dec-2019	Jun-2020	2	114	118	116
			<i>ongoing</i>		
<b>Average durations</b>		<b>3</b>	<b>25</b>	<b>30</b>	<b>34</b>
<b>Standard deviations</b>		<b>2</b>	<b>34</b>	<b>37</b>	<b>37</b>

Note: The average durations and standard deviations are rounded to full quarter. Includes the ongoing phase. Sample is 1959:Q3 – 2021:Q2.

**Table 3: Cycles in Real GDP per Capita**

Peak	Trough	Contraction	Expansion	Cycle	
		Peak to trough (quarters)	Trough to peak (quarters)	Peak to peak (quarters)	Trough to trough (quarters)
	Jun-1974				
Jun-1975	Dec-1975	2	4		6
Jun-1977	Dec-1977	2	6	8	8
Sep-1981	Jun-1983	7	15	17	22
Sep-1985	Sep-1986	4	9	16	13
Dec-1987	Jun-1988	2	5	9	7
Sep-1989	Dec-1991	9	5	7	14
Jun-2000	Dec-2000	2	34	43	36
Dec-2005	Jun-2006	2	20	22	22
Mar-2008	Dec-2008	3	7	9	10
Sep-2019	Jun-2020	3	43	46	46
			<i>ongoing</i>		
<b>Average durations</b>		<b>4</b>	<b>14</b>	<b>19</b>	<b>17</b>
<b>Standard deviations</b>		<b>2</b>	<b>13</b>	<b>15</b>	<b>13</b>

Note: The average durations and standard deviations are rounded to full quarter. Includes the ongoing phase. Sample is 1973:Q3 – 2021:Q2.

## Melbourne Institute Nowcast of Australian GDP & Dating the Business Cycle

The Melbourne Institute Nowcast of Australian GDP and the Monthly Index used to date the business cycle use monthly information regarding labour market conditions, housing and business lending, retail sales, housing approvals, consumer expectations, trade conditions and commodity prices in order to gauge current economic conditions.

**We note that the nowcast and the dating methodology are currently in the experimental stage.**

Disclaimer: The University of Melbourne and the Melbourne Institute give no representation, make no warranty, nor take any responsibility as to the accuracy or completeness of any information contained herein and will not be liable in contract tort, for negligence or for any loss or damage arising from reliance on any such information. The Melbourne Institute Nowcast of Australian GDP presents the professional analysis and views of the Melbourne Institute.

For information on the data contained in the report contact the Melbourne Institute, The University of Melbourne, on (03) 8344 2196.

© The University of Melbourne, Melbourne Institute: Applied Economic and Social Research.

This report is copyright. Apart from any fair dealing for the purposes of study, research, criticism or review, as permitted under the Copyright Act, no part may be reproduced without written permission.

For more information about the Melbourne Institute, see:

<http://melbourneinstitute.unimelb.edu.au/>

For more information about Macro@MI and other reports see:

<http://melbourneinstitute.unimelb.edu.au/research-programs/macroeconomics>

