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Melbourne Institute Nowcast of Australian GDP & Dating the Business Cycle

December 2021

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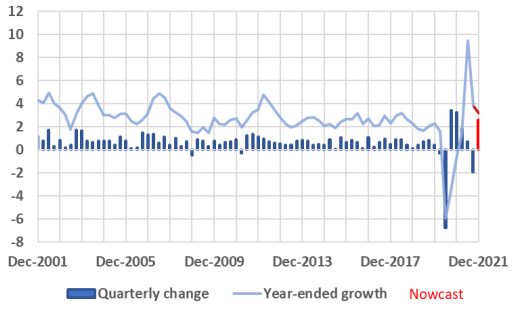
December Quarter GDP – First Nowcast

- The Australian economy contracted sharply in the September quarter (-1.9 per cent, Figure 1), reflecting the Delta COVID-19 outbreak and the associated lockdowns. Despite the fall in the quarter, growth was 3.9 per cent over the year.
- Drawing on timely monthly indicators on the economy, our first nowcast for the December quarter is for GDP growth of 2.6 per cent, taking year-ended growth to 3.2 per cent (Figure 1).
- The official December GDP data will be released by the ABS in early March 2022.
- Our nowcast reflects mainly monthly activity data for October. This aligns with the easing of the sixth lockdown in Victoria. Contributing to the nowcast of year-ended growth are the improvements in commodity prices and unemployment relative to a year ago.
- Data for November/December are limited, but currently it appears that strong growth is likely to have occurred in November. In particular, the recent labour market data were encouraging.
- Looking forward, while the economic recovery is likely to continue, considerable uncertainty surrounds the outlook in 2022. An important source of this uncertainty is the spread of the Omicron variant and the efficacy of booster vaccines to limits its impact. While Australia is highly vaccinated by international standards, our booster vaccination program has only recently commenced.

Lower Consumption Weighed on Output in the September Quarter and Stronger Spending Important for the Near-term Outlook

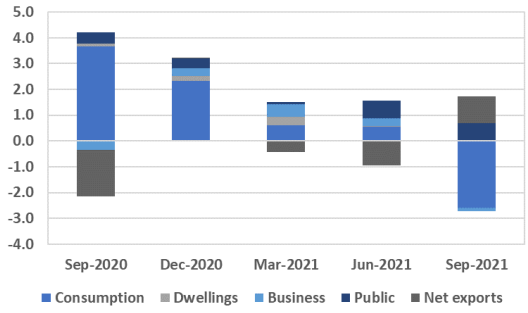
- Declining household consumption was the main factor contributing to the fall in output in the September quarter (-2.6 percentage points), although new business investment also made a slight subtraction (-0.1 percentage points) (Figure 2). The fall in consumption, while severe, was much less than occurred mid last year during the COVID-19 recession, as was the decline in GDP.
- Some offset was provided by the lower domestic demand resulting in a fall in imports (-4 per cent); net exports contributed 1 percentage point to growth in the September quarter. The public sector also provided a buffer, contributing 0.7 percentage points.
- Reflecting both its role in the downturn and size – household consumption accounts for around 60 per cent of GDP – consumption will play an important role in the recovery. Presently the indicators for near-term consumption are mixed, although the strengthening labour market should be supportive. Low real wages growth may weigh on its growth in the medium term.

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



Sources: ABS, up to September quarter 2021, and Melbourne Institute.

Figure 2: Selected Contributions to GDP Growth in the September Quarter (ppt)



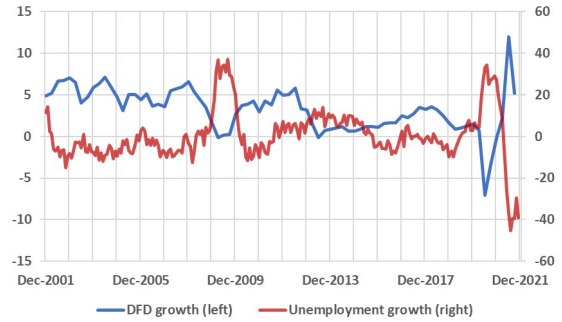
Source: ABS, up to September quarter 2021.

Hours worked grew strongly in November, and the unemployment rate improved[1]

As the re-opening progressed in Victoria and New South Wales, virtually every major labour market indicator posted a sizable improvement in November. For example, the unemployment rate dropped by 0.6 percentage points, to 4.6 per cent, and the underemployment rate plunged 2 percentage points. The participation rate jumped up to be above its pre-COVID levels (66.1 per cent).

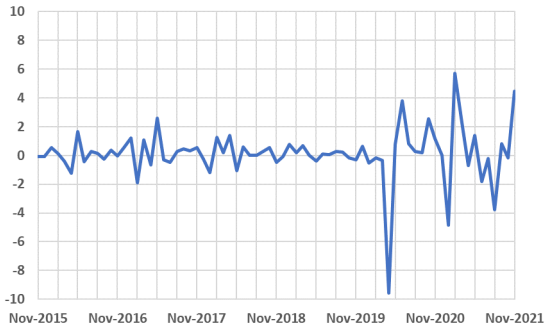
Turning to the labour market indicators included in the nowcasting model, the number of unemployed dropped by nearly 10 per cent (Figure 3), and hours worked grew by a strong 4.5 per cent in November (Figure 4). These signals from the labour market point to strong growth in the December quarter.

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



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

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



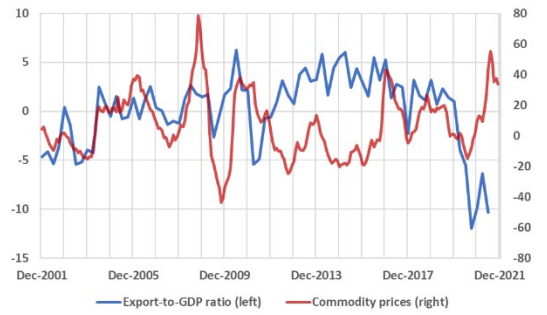
Source: ABS, up to November 2021.

Commodity prices and the trade balance both fall

The RBA Index of Commodity Prices in A$ fell slightly in October (0.6 per cent), although it remains nearly 34 per cent higher than a year ago (Figure 5). The increase over the year primarily reflects higher Liquefied Natural Gas (LNG), coking and thermal coal export prices. In November the spot price for thermal coal, which is used for electricity generation fell markedly, although from a very high level. This fall, if maintained, will feed through to export prices in coming months. Rural export prices rose further in November, whereas prices for base metals and the bulk commodities fell.

The trade balance decreased by $604m in October. Underling this was a 3 per cent fall in both exports and imports (as Australia has been running a trade surplus the former is larger in $, Figure 6). For exports, rural goods improved, whereas non-rural goods exports fell. Service exports declined further, to be 6 per cent lower than year ago (but around 47 per cent lower than two years ago). Turning to imports, the fall was particularly in capital goods; while not encouraging, its relationship with business investment is loose. The re-opening of international borders and arrival of foreign students should support the trade balance in the near term, although the Omicron variant does create uncertainty.

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



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

Figure 6: Trade balance
($ billion)

Source: ABS, up to October 2021.

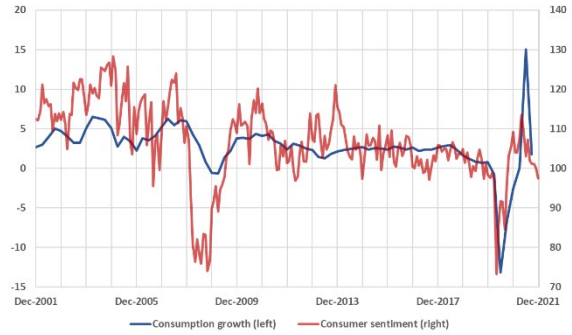
[1] Our nowcast model uses monthly information regarding labour market conditions, housing and business lending, retail sales, housing approvals, consumer expectations, trade conditions and commodity prices to gauge current economic conditions. **We note that the nowcast is currently in the experimental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

Mixed signals for consumption, as non-food retail trade growth increases further while consumer sentiment moderates

The Westpac-Melbourne Current Conditions Index eased further in December, with an improvement in family finances compared to year ago outweighed by respondents becoming less certain that now was a good time to buy major household items (Figure 7). Note that this series is reported as a net balance, where a value of 100 indicates that the proportion of optimists is equal to that of pessimists. Alternatively, less timely data from the retail trade survey showed that value of sales of household goods increased in October (Figure 8).

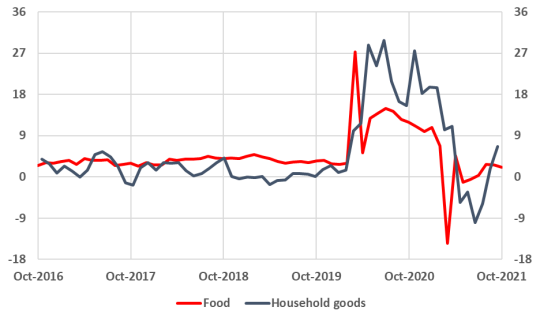
The strengthening labour market will support the outlook for consumption. Indeed, there are reports of labour shortages in some sectors, although not widespread.

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



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

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



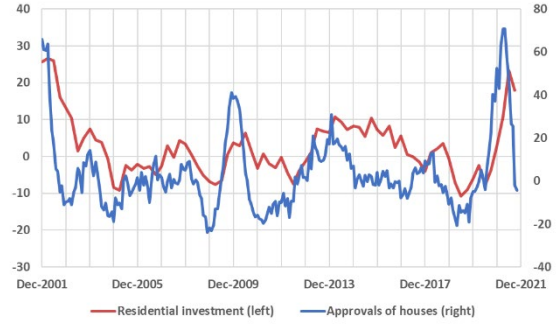
Source: ABS, up to October 2021.

Business credit growth improves further, and the dwelling approval downturn continues

Dwelling approvals posted another sizable fall in October. Year-ended growth of approvals for houses, for example, has fallen from around 70 per cent in March, when the HomeBuilder scheme was in place, to -4.4 per cent (Figure 9). However, given the lags between approvals and construction, residential investment is likely to contribute to growth in the December quarter, before contracting in 2022.

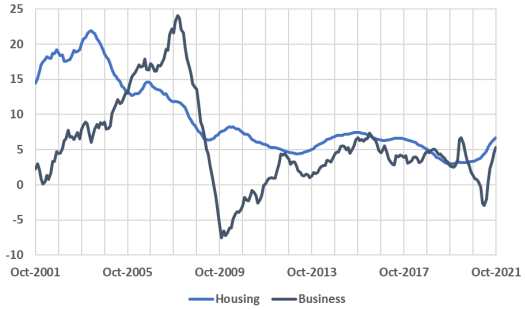
Housing credit growth grew by a solid 0.6 per cent in October, to be 6.7 per cent higher over the year (Figure 9). Housing credit is obviously influenced by developments in house prices, and its relationship to residential construction is not as tight as dwelling approvals. Business credit also posted another increase in October, to be 5.3 per cent higher over the year. Some other indicators of business investment, such as the NAB Business survey, recently have also improved. An upswing in non-mining business investment would provide an important offset to the likely downturn in residential construction.

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



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

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



Source: RBA, up to October 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 is in a recession or expansion.[2] 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, guided by monthly partial indicators.[3]

Table 1 identifies the turning points (peaks and troughs) and the periods of contractions and expansions 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; this is dated in Table 3.

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*
			Ongoing		
Averages		**11**	**105**	**179**	**178**
Standard deviations		**8**	**138**	**157**	**146**

Note: The average durations are rounded to full months. Includes the ongoing phase. Sample is 1974:10- 2021:12.

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*
Dec-1990	Jun-1991	*2*	*30*	*37*	*32*
Dec-2019	Jun-2020	*2*	*114*	*116*	*116*
			ongoing		
Average durations		**3**	**25**	**30**	**34**
Standard deviations		**2**	**34**	**36**	**37**

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

[2] 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.

[3] 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. The MI Monthly Activity Index is currently still in development.

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*
Dec-2019	Jun-2020	*2*	44 *ongoing*	*47*	*46*
Average durations		**3**	**14**	**19**	**17**
Standard deviations		**2**	**13**	**15**	**13**

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

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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.

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

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