AUSTRALIAN MARKETS WEEKLY

High household debt as a drag on spending

National Australia Bank

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Analysis – High household debt as a drag on spending

- Recent RBA research shows that high mortgage debt is a drag on consumer spending, helping explain the weak growth in consumption since the global financial crisis. This echoes earlier BIS work showing that high household debt has a negative effect on GDP growth over the long term, with this effect magnified when debt exceeds 60% of GDP.
- Australia breached the BIS's 60% threshold in the late 1990s, with household debt now a record 128% of GDP (or 201% of income). Gearing has increased across the income distribution and also among older Australians, but has actually fallen for younger households (this partly reflects the difficulty younger households have in securing a deposit on a mortgage). Heavily-indebted households have become more common across both the income and age distributions.
- The RBA analysis likely informed the Governor's recent comments that lower rates are less effective because of high household debt, although they still affect cash flows, the currency and asset prices. While gearing has stabilised over recent years, any decision by households to reduce leverage would raise the risk of a longer period of subpar growth in GDP, something borne out by international experience with deleveraging.

The week ahead – Employment, unemployment and the NAB quarterly business survey

- The RBA is closely monitoring labour market data to determine whether it needs to cut the cash rate further, which makes June's labour force survey on Thursday key. We expect the unemployment rate will hold at 5.2% alongside 20k employment growth, where a rise in unemployment would increase the likelihood of an August rate cut. RBA minutes on Tuesday will likely echo Governor Lowe's recent remarks that the outlook remains "reasonable" with further easing depending on the data. The NAB quarterly survey on Thursday includes updates on employment and investment intentions that are used by the RBA.

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[Ask the FX Strategists]

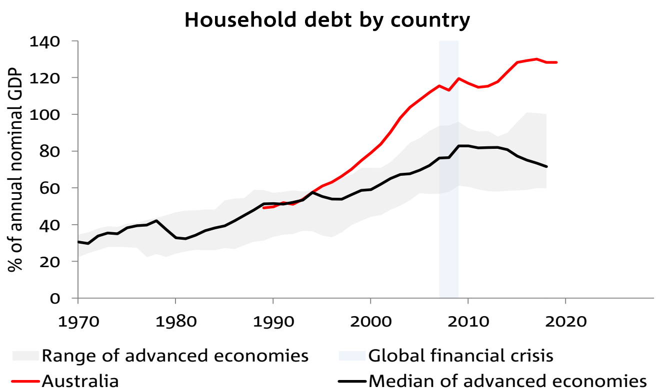
[Ask the Interest Rate Strategists]

Key markets over the past week

	Last	% chg week		Last	bp/% chg week
AUD	0.7033	0.9	RBA cash	1.00	0
AUD/CNY	4.83	0.8	3y swap	1.06	3
AUD/JPY	76.0	0.2	ASX 200	6,661	-0.2
AUD/EUR	0.624	0.4	Iron ore	116	3.3
AUD/NZD	1.047	-0.6	WTI oil	60.0	4.0

Source: Bloomberg

Chart of the week: Australia is a world leader in debt



Kieran Davies

High household debt as a drag on spending

- Recent RBA research shows that high mortgage debt is a drag on consumer spending, helping explain the weak growth in consumption since the global financial crisis. This echoes earlier BIS work showing that high household debt has a negative effect on GDP growth over the long term, with this effect magnified when debt exceeds 60% of GDP.
- Australia breached the BIS's 60% threshold in the late 1990s, with household debt now a record 128% of GDP (or 201% of income). Gearing has increased across the income distribution and also among older Australians, but has actually fallen for younger households (this partly reflects the difficulty younger households have in securing a deposit on a mortgage). Heavily-indebted households have become more common across both the income and age distributions.
- The RBA analysis likely informed the Governor's recent comments that lower rates are less effective because of high household debt, although they still affect cash flows, the currency and asset prices. While gearing has stabilised over recent years, any decision by households to reduce leverage would raise the risk of a longer period of subpar growth in GDP, something borne out by international experience with deleveraging.

Recent RBA research suggests weak post-global financial crisis spending partly reflects high mortgage debt

One of the striking features of the economy over the past ten years is the weakness in consumer spending, where growth on a per capita basis has been the weakest since the 1950s.

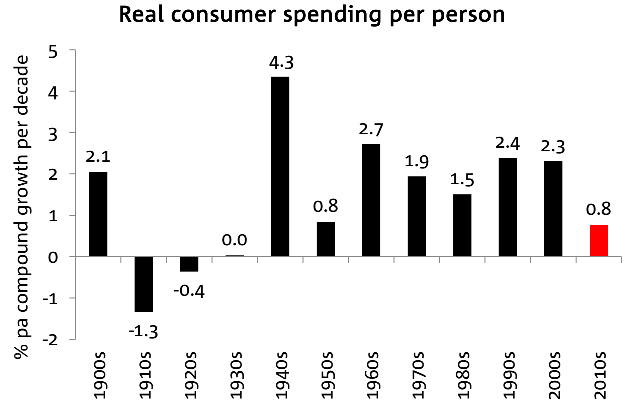
Recent research by Reserve Bank economists found that this "post-crisis 'puzzle' of unusually weak household spending" is partly explained by high levels of owner-occupier mortgage debt.[1]

- Based on an analysis of detailed cross-sectional data on household spending and balance sheets, the research suggests that higher mortgage debt reduced annual growth in total spending by 0.2 to 0.4pp.

Importantly, the negative effect of high mortgage debt on spending held up even when controlling for assets owned by households and cash flows adjusted for mortgage repayments. The work also found that the negative relationship between debt and growth is broadly based and does reflect either financial constraints on households or precautionary saving motives (the latter likely more a factor now given the fall in house prices and job insecurity).

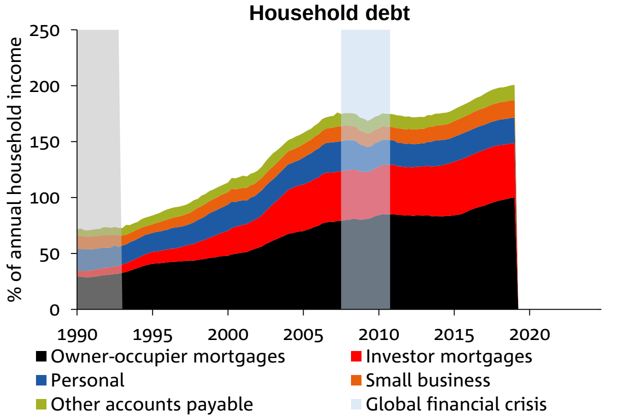
[1] See Fiona Price, Benjamin Beckers and Gianna La Cava, *The effect of mortgage debt on consumer spending: Evidence from household-level data*, Reserve Bank of Australia Research Discussion Paper RDP 2019-06, July 2019.

Chart 1: Consumer spending has been particularly weak over the 2010s to date



Note: Estimates prior to 1959 were constructed by NAB. The 2010s estimate is for the decade to date.
Source: Australian Bureau of Statistics, Reserve Bank of Australia, National Australia Bank

Chart 2: RBA research partly attributes weak spending to high levels of mortgage debt



Note: Owner-occupier and investor mortgages are home loans. Small business debt refers to debt held by unincorporated enterprises.
Source: Australian Bureau of Statistics, Melbourne Institute, Reserve Bank of Australia, National Australia Bank

The RBA research echoes earlier cross-country work by the BIS

The Reserve Bank research echoes earlier cross-country analysis by the Bank for International Settlements.[2] That analysis covered more than 50 countries, including Australia, finding that higher household debt has a positive effect on activity in the short term, but a negative effect over the longer run. The BIS also found that the negative long-term relationship between debt and activity was amplified at higher levels of gearing.

- The bank estimated that a 1pp increase in the ratio of household debt to GDP reduces GDP growth in the long run by 0.1pp. This negative effect intensifies when household debt exceeds 60% of GDP.

Australian household debt is almost 130% of GDP, whereas most other countries have seen deleveraging

In Australia's case, total household debt the 60% of GDP threshold cited by the Bank for International Settlements in the late 1990s, reaching an all-time high of 128% of GDP in Q1 2019 (or 201% of annual household income).

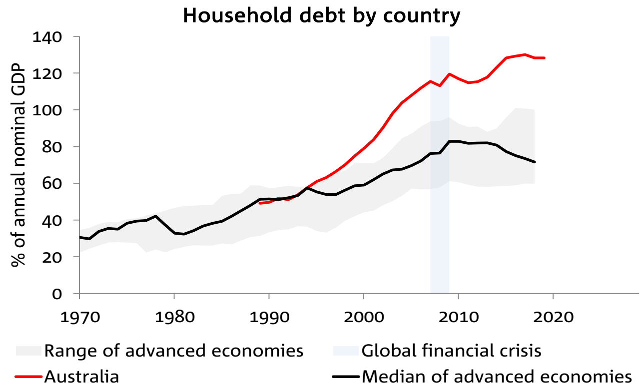
[2] See Marco Lombardi, Madhusudan Mohanty and Ilhyock Shim, *The real effects of household debt in the short and long run*, Bank for International Settlements Working Paper No. 607, January 2017.

- Residential mortgages account for the bulk of household debt, with home loans currently equalling 95% of GDP (or 149% of household income). Owner-occupier mortgages stand at 64% of GDP (100% of income), with investor mortgages at 31% (49% of income).

Australia's debt is also high relative to other advanced economies, where most other countries have seen households reduce their leverage since the global financial crisis.[3]

- The median ratio of household debt to GDP for select advanced economies has declined from a crisis peak of 83% to 72% at the end of 2018. In contrast, leverage in Australia has *increased* from 119% to 128% over the same period.

Chart 3: Household debt is at a record level compared with history and is extremely high relative to other advanced economies



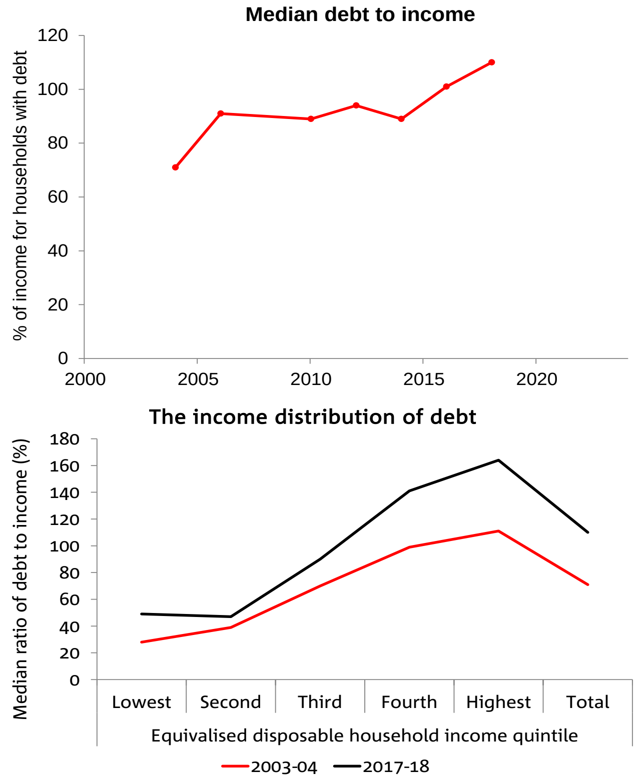
Note: The advanced economies are: Belgium, Canada, Denmark, Finland, France, Germany, Italy, Japan, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, and United States of America.
Source: Australian Bureau of Statistics, Bank for International Settlements, National Australia Bank

High debt has become more pervasive

Exploring debt using cross-sectional data from the survey of income and housing, high debt levels have become more pervasive with gearing increasing across the income distribution.

- The *median* ratio of debt to income for all households with debt has increased from 71% in 2003-04 to 110% in 2017-18 (2003-04 marks the first year for which detailed data are available). Mid- to high-income households have the highest gearing ratios with median ratios of 90 and 164%, respectively, with high-income earners gearing up the most over time, up 42-53pp since 2003-04. However, leverage is up across all income groups over this period.

Chart 4: There has been an increase in gearing across the income distribution



Source: Australian Bureau of Statistics, National Australia Bank

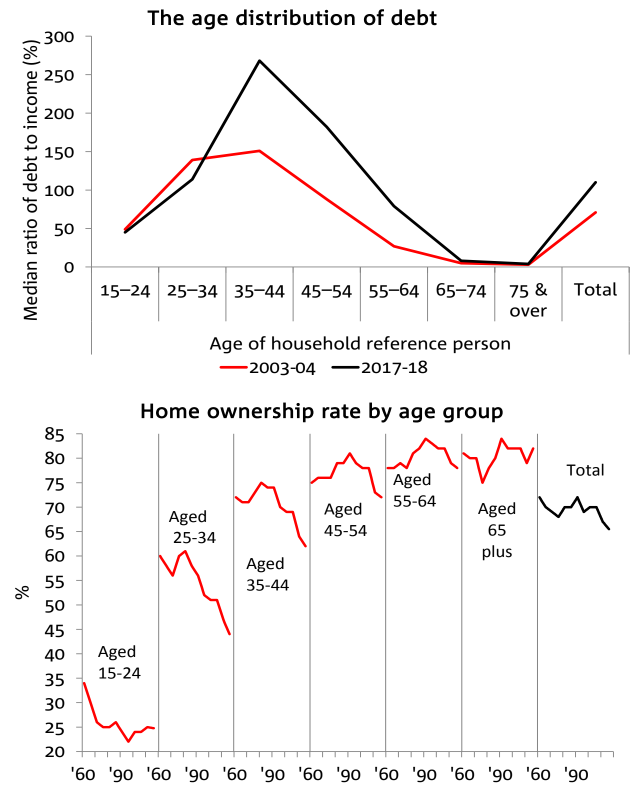
Household debt has become concentrated among older Australians

Gearing has also increased sharply among older Australians, broadly reflecting the changing pattern of home ownership. Home ownership has fallen among younger Australians given the difficulty in raising a deposit, particularly in Sydney, with a corresponding reduction in their leverage.

- Among younger households, the median gearing rate for 15-24 year olds has dropped slightly since 2003-04 to 45% of income, while the ratio for 25-34 year-olds has fallen 25pp over this time to 114%.
- In contrast, the median ratio of debt to income is currently 268% for the 35-44 year-old age group, up almost 120pp from 2003-04. The gearing rate was 182% for the 45-54 year-old cohort, up over 90pp from 2003-04. Households aged 55-64pp have a median ratio of 79%, up more than 50pp over this period.

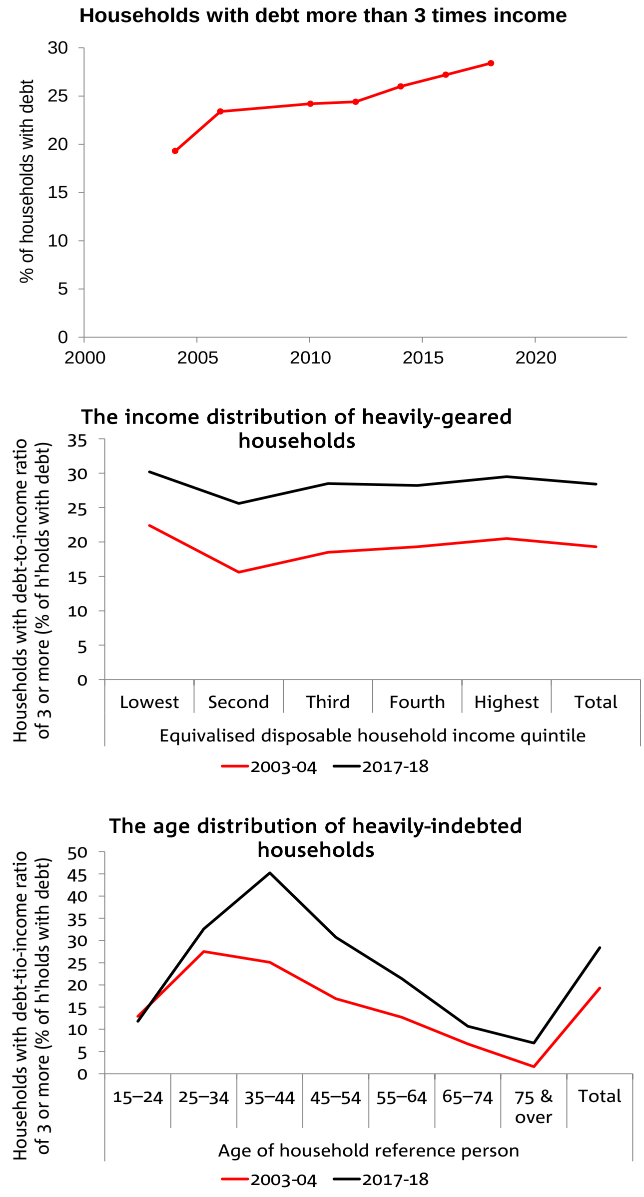
[3] The select advanced economies are listed in the note to Chart 3.

Chart 5: Older Australians have more debt, partly reflecting changing patterns of home ownership



Note: Home ownership rates are as at census dates.
Source: Australian Bureau of Statistics, National Australia Bank

Chart 6: Heavily-indebted households are more common across both the income and age distributions



Source: Australian Bureau of Statistics, National Australia Bank

There are more heavily-geared households across both the income and age distributions

Not only has debt increased across the income distribution, heavily-geared households are more common (these are defined as households with debt of three or more times income).

- Heavily-indebted households currently account for 28% of all households with debt, up from 19% in 2003-04. Across the income distribution, the share of heavily-geared households ranges from 26 to 30%, up almost uniformly from 2003-04 by between 8 and 10pp.

The share of heavily-indebted households has also increased for every age group, except 15-24 year-olds. The increased have been largest for households aged from the mid 30s through to the mid 60s.

- Heavily-indebted households account for 45% of households aged between 35-44 years of age, up 20pp from 2003-04, partly reflecting people buying a home later in life. The share of people aged 45-54 years old has increased by 14pp over this time to 31%, while the share for households aged 55-64 years old has almost doubled from 13% to 21%.

The increase in household debt likely helps explain the RBA's view that lower rates are less effective

Against a backdrop of the very large and widespread increase in household debt, the research by Reserve Bank economists showing that high debt levels curbs spending likely informed Governor Lowe's recent comment that "cuts in interest rates don't have the same effect they used to" because "as a society, … many of us feel we've got too much debt, so when interest rates come down, the first thing we think of isn't to run off to the bank and borrow more, it's to try and pay down our debt more quickly".[4]

[4] See Reserve Bank Governor Lowe, *Transcript from Q&A session*, Adelaide, 20 June 2019.

Lower interest rates can still boost growth via other channels, such as improving household cash flow, reducing the exchange rate and boosting asset prices, but high debt levels mean that the boost is likely a little less than suggested by past econometric modelling showing a near 1:1 effect of rates on activity.

More broadly, while household debt has stabilised over the past few years, any decision by households to reduce leverage would raise the risk of a longer period of slow growth in spending and subpar growth in GDP. In such a scenario, there would also be a strong role for the government to assist in such deleveraging by absorbing debt on to the public-sector's books via additional fiscal stimulus, something that is borne out by overseas experience of households repairing their balance sheets.

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CALENDAR OF ECONOMIC RELEASES

Country	Economic Indicator	Period	Forecast	Consensus	Actual	Previous	GMT	AEST
Monday 15 July 2019								
CH	Property Investment YTD YoY	Jun				11.2	2.00	12.00
US	Empire Manufacturing	Jul		2		-8.6	12.30	22.30
US	Fed's Williams Speaks at Libor briefing						12.50	22.50
Tuesday 16 July 2019								
NZ	CPI QoQ / YoY	2Q	0.5/1.6	0.6/1.7		0.1/1.5	22.45	8.45
AU	RBA Minutes of July Policy Meeting						1.30	11.30
UK	Claimant Count Rate	Jun				3.1	8.30	18.30
EC	Trade Balance SA	May		17.5		15.3	9.00	19.00
GE	ZEW Survey Current Situation / Expectations	Jul		5/-22		7.8/-21.1	9.00	19.00
UK	BOE's Carney speaks on panel in Paris.						12.00	22.00
US	Fed's Bostic Moderates Fed Listens Event in Augusta, Georgia						12.15	22.15
US	Retail Sales Advance MoM / Ex Auto MoM	Jun		0.1/0.3		0.5/0.5	12.30	22.30
US	Industrial Production MoM	Jun		0.1		0.4	13.15	23.15
US	Capacity Utilization	Jun		78.1		78.1	13.15	23.15
US	Fed's Evans to Speak in Chicago						19.30	5.30
US	Total Net TIC Flows	May				-7.8	20.00	6.00
Wednesday 17 July 2019								
NZ	Dairy Auction Avg. Winning Price MT	16 Jul				3302		early am
AU	Westpac Leading Index MoM	Jun				-0.08	0.30	10.30
UK	CPI MoM / YoY	Jun		0/2		0.3/2	8.30	18.30
UK	CPI Core YoY	Jun		1.8		1.7	8.30	18.30
EC	CPI MoM / YoY	Jun		0.1/1.2		0.1/1.2	9.00	19.00
EC	CPI Core YoY	Jun F		1.1		1.1	9.00	19.00
US	Housing Starts	Jun		1260		1269	12.30	22.30
US	Building Permits	Jun		1300		1294	12.30	22.30
CA	CPI NSA MoM / YoY	Jun		-0.3/2		0.4/2.4	12.30	22.30
CA	CPI Core- Median YoY%	Jun		2.1		2.1	12.30	22.30
CA	CPI Core- Common YoY%	Jun		1.8		1.8	12.30	22.30
CA	CPI Core- Trim YoY%	Jun		2.2		2.3	12.30	22.30
US	U.S. Federal Reserve Releases Beige Book						18.00	4.00
Thursday 18 July 2019								
JN	Trade Balance	Jun		403.45		-967.108	23.50	9.50
AU	Employment Change / Unemployment rate	Jun	20/5.2	9/5.2		42.3/5.2	1.30	11.30
AU	Participation Rate	Jun	66	65.9		66	1.30	11.30
AU	NAB Business Confidence	2Q				-1	1.30	11.30
UK	Bank of England Bank Liabilites/Credit Conditions Surveys						8.30	18.30
UK	Retail Sales Inc Auto Fuel MoM / YoY	Jun		-0.3/2.6		-0.5/2.3	8.30	18.30
CA	ADP Canada Releases June Payroll Estimates						12.30	22.30
US	Philadelphia Fed Business Outlook	Jul		5		0.3	12.30	22.30
US	Initial Jobless Claims	13 Jul		216		209	12.30	22.30
US	Fed's Bostic Speaks to Clarksville Chamber in Tennessee						13.30	23.30
US	Leading Index	Jun		0.1		0	14.00	0.00
US	Fed's Williams Speaks on Monetary Policy						18.15	4.15
Friday 19 July 2019								
JN	Natl CPI YoY	Jun		0.7		0.7	23.30	9.30
JN	All Industry Activity Index MoM	May		0.3		0.9	4.30	14.30
UK	Public Sector Net Borrowing ex Banking Groups	Jun		3.9		5.1	8.30	18.30
CA	Retail Sales MoM / Ex Auto MoM	May		0.3/0.4		0.1/0.1	12.30	22.30
US	U. of Mich. Sentiment / Expectations	Jul P		98.6/		98.2/89.3	14.00	0.00
US	Fed's Bullard Speaks at Central Bank Research in New York						15.05	1.05
US	Fed's Rosengren Joins Panel on Central Bank Independence						20.30	6.30
Upcoming Central Bank Interest Rate Announcements								
Europe, ECB		25-Jul	-0.4%	-0.4%		-0.4%		
Japan, BoJ		30-Jul	-0.1%	-0.1%		-0.1%		
US, Federal Reserve		31-Jul	2-2.25%	2.25-2.5%		2.25-2.5%		
UK, BOE		1-Aug	0.75%	0.75%		0.75%		
New Zealand, RBNZ		7-Aug	1.25%	1.25%		1.5%		
Australia, RBA		6-Aug	1.00%	1%		1%		
Canada, BoC		4-Sep	1.75%	1.75%		1.75%		

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

FORECASTS

Economic Forecasts

	Annual % change				Quarterly % change															
					2018				2019				2020				2021			
Australia Forecasts	**2018**	**2019**	**2020**	**2021**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**
Household Consumption	2.6	1.5	2.3	2.3	0.4	0.8	0.3	0.4	0.3	0.2	0.5	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.5	0.6
Underlying Business Investment	0.9	0.9	4.3	3.6	0.6	-1.0	-2.1	0.0	0.6	1.2	0.7	1.8	0.3	1.7	0.4	1.4	0.4	0.9	0.7	1.5
Residential Construction	4.7	-8.2	-8.3	-1.6	4.1	1.7	0.7	-2.9	-2.5	-3.3	-3.0	-2.2	-2.0	-1.8	-1.9	-0.8	-0.2	0.5	0.2	0.8
Underlying Public Spending	5.0	5.4	4.5	4.1	1.4	0.4	2.5	1.6	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.0	1.0	1.0	1.0
Net Exports (a)	0.7	0.6	-0.3	-0.4	0.5	0.2	0.3	-0.2	0.2	0.3	0.1	0.1	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Inventories (a)	0.1	-0.2	-0.1	0.0	-0.1	0.2	-0.3	0.2	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Domestic Demand (q/q %)	--	--	--	--	0.9	0.6	0.5	0.4	0.1	0.3	0.4	0.7	0.6	0.7	0.5	0.7	0.6	0.7	0.7	0.8
Dom Demand (y/y %)	2.9	1.4	2.3	2.7	3.4	3.2	2.8	2.4	1.6	1.3	1.2	1.6	2.0	2.4	2.5	2.5	2.6	2.6	2.8	2.8
Real GDP (q/q %)	--	--	--	--	1.0	0.9	0.3	0.2	0.4	0.4	0.4	0.8	0.5	0.6	0.5	0.6	0.5	0.6	0.5	0.7
Real GDP (y/y %)	2.8	1.7	2.3	2.3	3.1	3.1	2.8	2.4	1.8	1.4	1.5	2.1	2.2	2.4	2.4	2.2	2.2	2.3	2.3	2.4
CPI headline (q/q %)	--	--	--	--	0.4	0.4	0.4	0.5	0.1	0.7	0.4	0.6	0.4	0.4	0.5	0.7	0.5	0.5	0.6	0.7
CPI headline (y/y %)	1.9	1.7	1.8	2.2	1.9	2.1	1.9	1.8	1.4	1.8	1.7	1.8	2.0	1.7	1.8	1.9	2.0	2.2	2.3	2.3
CPI underlying (q/q %)	--	--	--	--	0.5	0.5	0.3	0.4	0.2	0.4	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5
CPI underlying (y/y %)	1.8	1.4	1.5	1.9	1.9	1.7	1.7	1.7	1.4	1.4	1.3	1.3	1.5	1.4	1.5	1.6	1.8	1.9	2.0	2.0
Private wages (q/q %)	--	--	--	--	0.5	0.6	0.6	0.5	0.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Private wages (y/y %)	2.1	2.4	2.7	2.8	1.9	2.1	2.2	2.3	2.4	2.4	2.4	2.5	2.6	2.7	2.7	2.8	2.8	2.8	2.8	2.8
Unemployment Rate (%)	5.3	5.2	5.3	5.4	5.5	5.5	5.1	5.0	5.1	5.2	5.2	5.2	5.3	5.3	5.3	5.3	5.3	5.4	5.3	5.4
Terms of trade	1.8	2.9	-3.8	-1.5	3.2	-1.2	1.1	2.9	3.1	-1.1	-2.6	-1.4	-0.6	-1.0	0.4	-0.2	-0.2	-0.8	-0.8	-0.5
Current Account (% GDP)	-2.0	-0.9	-1.8	-2.5	-2.2	-2.5	-2.1	-1.3	-0.6	-0.5	-1.1	-1.4	-1.5	-1.8	-1.8	-2.0	-2.1	-2.3	-2.6	-2.8

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

Exchange Rate Forecasts

	15-Jul	Sep-19	Dec-19	Mar-20	Jun-20	Sep-20
Majors						
AUD/USD	0.703	0.71	0.73	0.74	0.75	0.75
NZD/USD	0.67	0.67	0.68	0.69	0.70	0.70
USD/JPY	108.0	107	108	107	106	105
EUR/USD	1.13	1.12	1.13	1.13	1.13	1.14
GBP/USD	1.26	1.22	1.24	1.24	1.25	1.27
USD/CNY	6.87	6.96	6.95	6.92	6.90	6.85
USD/CAD	1.30	1.33	1.30	1.29	1.27	1.28
USD/CHF	0.98	0.98	0.98	1.02	1.02	1.00
Australian Cross Rates						
AUD/NZD	1.05	1.06	1.07	1.07	1.07	1.07
AUD/JPY	76.0	76	79	79	80	79
AUD/EUR	0.62	0.63	0.65	0.65	0.66	0.66
AUD/GBP	0.56	0.58	0.59	0.60	0.60	0.59
AUD/CNY	4.83	4.94	5.07	5.12	5.18	5.14
AUD/CAD	0.92	0.94	0.95	0.95	0.95	0.96
AUD/CHF	0.69	0.70	0.72	0.75	0.77	0.75

Interest Rate Forecasts

	15-Jul	Sep-19	Dec-19	Mar-20	Jun-20	Sep-20
Australian Rates						
RBA cash rate	1.00	1.00	0.75	0.75	0.75	0.75
3 month bill rate	1.13	1.10	0.85	0.85	0.85	0.85
3 Year Swap Rate	1.06	0.80	0.80	1.10	1.25	1.40
10 Year Swap Rate	1.66	1.38	1.38	1.60	1.75	1.90
Offshore Policy Rates						
US Fed funds	2.50	2.00	2.00	2.00	2.00	2.00
ECB deposit rate	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40
BoE repo rate	0.75	0.75	0.75	0.75	0.75	0.75
BoJ excess reserves rate	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10
RBNZ OCR	1.50	1.50	1.25	1.25	1.25	1.25
China 1yr lending rate	4.35	4.35	4.35	4.35	4.35	4.35
China Reserve Ratio	13.5	12.00	12.00	12.00	12.00	12.00
10-year Bond Yields						
Australia	1.46	1.20	1.20	1.40	1.50	1.60
United States	2.12	1.90	1.90	2.00	2.10	2.20
New Zealand	1.65	1.60	1.65	1.85	2.00	2.20

Sources: NAB Global Markets Research; Bloomberg; ABS

Global GDP

	2018	2019	2020	2021
Australia	2.8	1.7	2.3	2.3
United States	2.9	2.4	1.7	1.7
Eurozone	1.8	1.2	1.3	1.4
United Kingdom	1.4	1.5	1.4	1.5
Japan	0.8	0.7	0.4	0.9
China	6.6	6.3	6.0	5.8
India	7.1	6.7	7.2	7.1
New Zealand	2.8	2.4	2.6	2.5
World	3.6	3.2	3.3	3.5

Commodity prices ($US)

	15-Jul	Sep-19	Dec-19	Mar-20	Jun-20
Brent oil	66.6	68	70	70	75
Gold	1412	1300	1310	1350	1370
Iron ore	121	79	76	72	68
Hard coking coal*	187	178	170	165	160
Thermal coal	75	85	90	93	90
Copper	5929	6400	6300	6225	6150
Aus LNG**	10	12	12	12	12

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

*** Implied Australian LNG export prices*

CONTACT DETAILS

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