

AUSTRALIAN MARKETS WEEKLY

The RBA's renewed focus on financial stability



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Analysis – The RBA's renewed focus on financial stability

- The Reserve Bank has a renewed focus on financial stability, where the benefit of lower rates in achieving the inflation target and full employment is weighed against the longer-term risk of adding to already-high household debt. Facing the same issue, the Bank of Canada advocates using macroprudential tools to deal with structural vulnerability of high debt. At this point, the Reserve Bank is taking a different approach, consciously factoring in stability risks in deciding on rates and favouring a temporary and targeted use of macroprudential policy.
- In terms of financial stability, house prices have rebounded strongly and by more than suggested by the past relationship with interest rates. New loans have also rebounded strongly, although the recovery in the number of loans is modest, especially when judged against the stock of housing. Credit growth has likely troughed, but remains weak as households have maintained high repayments despite lower interest rates.
- At face value, this analysis suggests that we are some distance from the Reserve Bank's "crossover point" where the risks from lower rates outweigh the benefits. However, this interpretation of the data is contradicted by the bank's own actions, where it has considered cutting rates over recent months and decided to remain on hold. This revealed preference suggests that the Reserve Bank may be more concerned about financial stability than we think, which underscores the risk that the bank takes longer to cut rates than we currently expect.

The week ahead – AU RBA minutes, wages & labour market; coronavirus

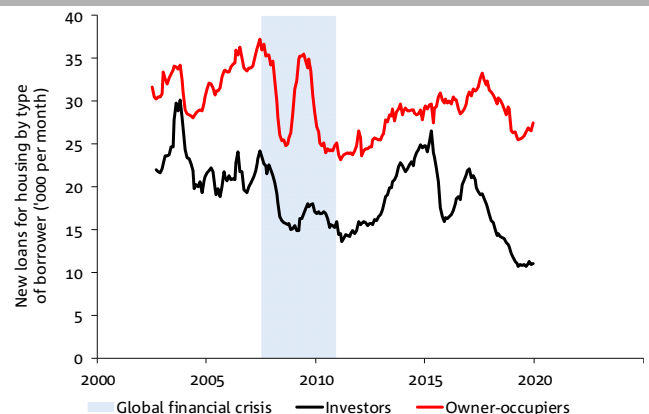
- **Australia/NZ.** The minutes of the RBA's February meeting are unlikely to surprise the market given Governor Lowe's recent keynote speech and parliamentary testimony. In testimony, the governor said the minutes would again discuss the case for cutting rates, where the Board decided to hold steady as it balanced the risks to easing further. Australian wages data (Wednesday) and labour market data (Thursday) will be important given Lowe said rising unemployment could tilt the risks in favour of cutting the cash rate. NAB forecasts unemployment ticked up to 5.2% in January amid a 10k gain in employment, with wages growth steady at 0.5% in Q4.
- **International.** The focus remains on the coronavirus with the PBoC expected to trim prime rates by 5bp on Thursday. It is unclear how fast production will be ramped up after the gradual lifting of internal travel bans, although daily pollution levels suggest activity is coming back online. There is a series of US housing releases this week that should show an acceleration in activity. The FOMC minutes are out and 12 Fed speeches are scheduled, although the Fed seems comfortably on hold for now. The Nevada caucuses are on 22 February, with the focus on whether Biden can get his campaign back on track. Flash German, French and EZ manufacturing and service-sector PMIs are due Friday.

Key markets over the past week

	Last	% chg week		Last	bp/% chg week
AUD	0.6678	-0.2	RBA cash	0.75	0
AUD/CNY	4.68	1.1	3y swap	0.70	9
AUD/JPY	73.2	0.7	ASX 200	6,993	0.9
AUD/EUR	0.610	0.8	Iron ore	79	1.1
AUD/NZD	1.043	0.7	Brent oil	54.0	-0.8

Source: Bloomberg

Chart of the week: New home loans are recovering



The RBA has a renewed focus on financial stability

- The Reserve Bank has a renewed focus on financial stability, where the benefit of lower rates in achieving the inflation target and full employment is weighed against the longer-term risk of adding to already-high household debt. Facing the same issue, the Bank of Canada advocates using macroprudential tools to deal with structural vulnerability of high debt. At this point, the Reserve Bank is taking a different approach, consciously factoring in stability risks in deciding on rates and favouring a temporary and targeted use of macroprudential policy.
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Financial stability again looms large in the Reserve Bank's decision on whether to cut rates further

Earlier this month, Reserve Bank Governor Lowe testified before parliament, recounting the Board's ongoing discussion on whether to lower the cash rate further.¹ Lowe said that the case for lower rates rested with the need to make faster and more assured progress towards the inflation target and full employment, while the argument against cutting further reflected the risks stemming from very low interest rates.

The risks weighed by the Board were the impact of very low interest rates on:

- Resource allocation in the economy and the spending confidence of "some people", citing unspecified "international concerns" on these issues; and
- Financial stability, where low rates could "encourage more borrowing by households ... to buy residential property" amid already-high housing debt and strongly rising house prices, which "could increase the risk of [future] problems".

Discussing these risks in his testimony, there was little focus on the potential misallocation of resources. At the same time, Lowe rejected the claim that rate cuts have damaged sentiment, arguing instead that low consumer confidence reflected weak wage growth and the earlier fall in house prices.

Instead, Lowe had a renewed focus on financial stability, something missing from the bank's discussion on monetary policy over the past couple of years, which had concentrated on the inflation target and a new emphasis on full employment.

Lowe framed the issue in terms of "medium-term macrostability". Rewriting history somewhat, Lowe said last year's rate cuts had been aimed at helping overindebted households repair their balance sheets. However, the Board was now focused on the unknown "crossover point" at which the benefit from lower interest rates is outweighed by an increase in future vulnerabilities.

The time-frame for assessing this risk to financial stability was well outside the Reserve Bank's usual forecast horizon of 2-2½ years, in that the governor said the short-term benefit from lowering rates should be weighed against the potential cost over the next five to ten years if the "main effect of lower interest rates is to encourage people to borrow more".

Higher unemployment would likely still trigger a rate cut, as conventional policy nears its limits

While financial stability has returned as a key consideration for the Reserve Bank Board, Lowe acknowledged that the balance of risks would tilt towards a further rate cut if there was a material increase in the unemployment rate with no progress on inflation.

Lowe also admitted that conventional monetary policy was near its limits in that substantially easier policy was required to return inflation to the midpoint of the 2-3% target band. Reflecting a flatter Phillips curve relationship between unemployment and inflation, the bank's modelling showed that the cash rate would need to be 3-4pp lower than its current level of 0.75% to generate 2.5% inflation in two years' time.

Given the Reserve Bank's self-imposed 0.25% floor for the cash rate, this indicates that unconventional monetary policy would be needed to achieve the bank's economic objectives over the short term. This is not surprising, as our joint economics/strategy work on quantitative easing reached the same conclusion last year.²

The Bank of Canada emphasises a greater role for macroprudential policy in addressing stability risks

The trade-off between economic objectives and financial stability was also explored in a subsequent panel discussion between former Reserve Bank Board-member Martin Parkinson, Governor Lowe and Bank of Canada Governor Stephen Poloz.³

¹ House of Representatives Standing Committee on Economics, *Reserve Bank of Australia annual report 2019*, Commonwealth of Australia Proof Committee Hansard, Canberra, 7 February 2020.

² National Australia Bank market economics, fixed income strategy and foreign exchange strategy, *Analysing the potential impact of QE*, 20 November 2019.

³ Martin Parkinson, Reserve Bank of Australia Governor Lowe and Bank of Canada Governor Stephen Poloz, *Panel*

Poloz restated Lowe’s timing trade-off between traditional economic objectives and financial stability a little more clearly, saying, “if [debt] vulnerabilities go up further, the next shock that comes along will be magnified in its impact on the economy ... [such that] you may be able to get inflation exactly on target today but at the cost of making it very hard to keep inflation on target down the road”.

Poloz said this raised the question of the right horizon for judging a central bank’s inflation target, something touched on by Governor Lowe in his testimony, where he balked at specifying a time-frame for achieving Australia’s target.

Poloz went on to stress that the best way to address debt vulnerabilities was to use macroprudential tools. These included counter-cyclical capital buffers for system-wide lending and stress tests for mortgages, where mortgage guidelines had been adopted in Canada.

Governor Lowe had a different perspective. Acknowledging that the main issue for financial stability in Australia was high household debt, he said high debt and very high house prices relative to income reflected the structural forces of: (1) a very liberal financial system; and (2) society’s choices about the supply and demand for housing.

Lowe said the Reserve Bank managed this structural vulnerability by:

- Consciously factoring it into interest rate decisions; and
- Using temporary and targeted macroprudential tools where the vulnerability was “most acute”.

In the example highlighted by Governor Lowe, the targeted nature of macroprudential tools was demonstrated by the Council of Financial Regulators – which is chaired by Lowe – temporarily limiting lending for investor mortgages and interest-only loans in 2017 and 2018.⁴ As such, he gave little indication that the Board was considering the broader use of macroprudential tools canvassed by Poloz to assist monetary policy.

House prices are almost back at the all-time high reached in 2017

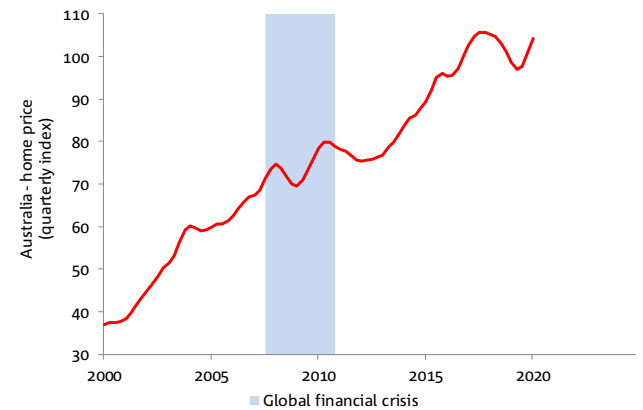
In judging financial stability risks, the clearest change since last year’s interest rate cuts has been the rebound in house prices. Nationally, prices reached a record high in Q3 2017 before falling by about 8% to trough in Q2 2019. Since then prices have recovered almost all their lost ground, with daily data suggesting that they will be 1% shy of the all-time high by the end of this quarter.

The recovery in prices should not come as a complete surprise to the Reserve Bank given the bank’s MARTIN macroeconomic model shows that higher house prices are an integral part of the transmission mechanism of monetary policy. That said, the extent of the rebound is greater than indicated by the MARTIN model. The model suggests that last year’s 75bp reduction in the cash rate would boost prices by about 3.25%, with most of the effect apparent after one-and-a-half years. This

compares with the roughly 7% rebound in prices over the past few quarters.

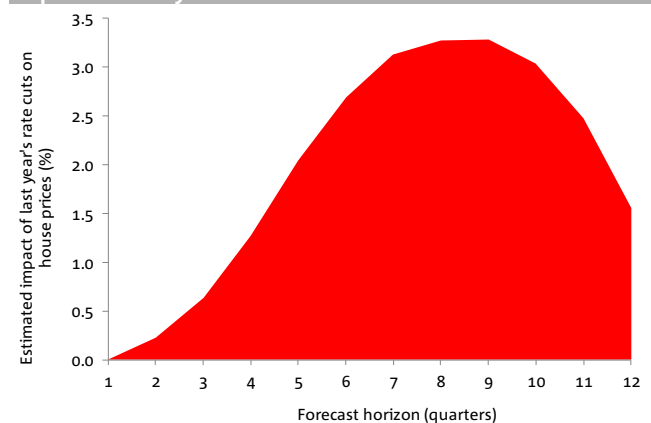
It is likely, though, that there has been an additional boost to prices from last year’s tweaking of mortgage serviceability criteria by the Australian Prudential Regulation Authority. The removal of concern about a change in government and change to negative gearing rules may also have played some role.

Chart 1: House prices are nearly back at their record peak ...



Note: Seasonally adjusted by National Australia Bank. Q1 2020 is an estimate based on daily prices for the largest capital cities for the quarter to date. Source: CoreLogic, National Australia Bank

Chart 2: ... where the recovery in prices is greater than expected solely on the basis of a lower cash rate



Note: Based on a MARTIN model simulation assuming full-pass-through to mortgage rates of last year’s 75bp reduction in the cash rate. Source: Reserve Bank of Australia, National Australia Bank

New loans for housing have rebounded, although the recovery is modest as a share of the housing stock

The sharp rebound in house prices has been accompanied by a strong recovery in new loans for housing. The value of new loans has increased by 17% from mid-2019, with lending to owner-occupiers up 18%, almost returning to the record peak reached in 2017. Lending to investors has rebounded by 14% over the same period, albeit from a much lower level.

In comparison, we estimate that the *number* of new home loans has rebounded by 4% over this time. The number of loans to owner-occupiers has increased by

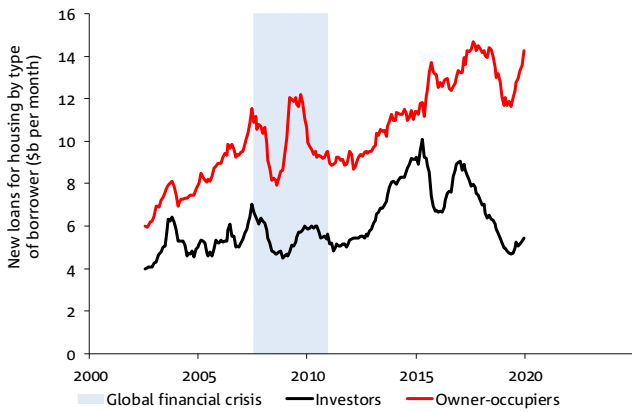
participation, 7th Australia-Canada Economic Leadership Forum, Melbourne, 13 February 2020.

⁴ For example, see Australian Prudential Regulation Authority, *APRA to remove interest-only benchmark for residential mortgage lending*, Media release, 19 December 2018.

7%, led by first home-buyers returning to the market (loans to first home-buyers are up 13% versus a 4% increase in the number of upgraders/downgraders). Judging the number of investors is harder because official statistics are only available from July 2019 onwards. Assuming that the average loan size for investors grew at the same rate as for owner-occupiers in history, we estimate that the number of new loans to investors is up 2% from mid-2019.

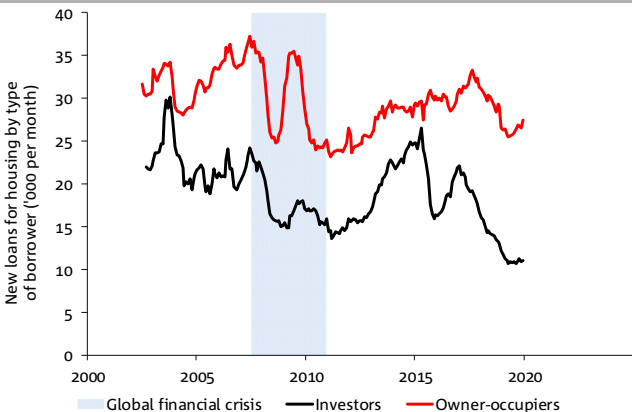
Scaling new home loans by the housing stock, the number of new loans to owner-occupiers was 0.8% of the stock in Q4 2019, holding at the lowest share since at least the early 2000s. The estimated number of loans to investors was also unchanged at a multi-decade low of 0.3% of the stock in Q4. This stability contrasts with a separately-measured pick-up in housing turnover from 0.9% of the stock in Q2 2019 to a still-low 1.2% by Q4 2019, which might reflect an increase in cash purchases of housing and/or the fact that recent sales are estimated to allow for anticipated revisions from late transactions data.

Chart 3: The value of new home loans has rebounded ...



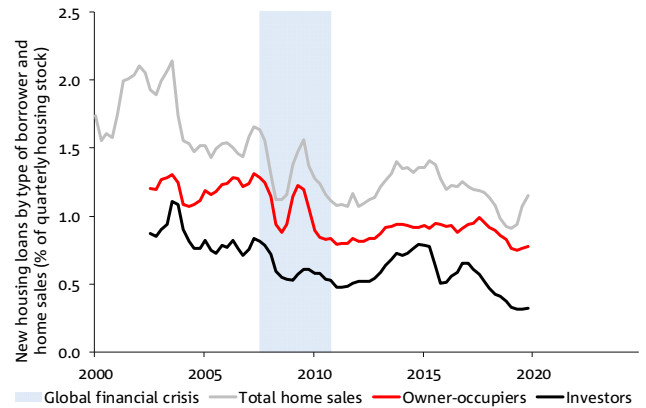
Source: Australian Bureau of Statistics, National Australia Bank

Chart 4: ... although the rebound in the number of loans has been more modest ...



Note: The number of investor loans is estimated prior to July 2019 by assuming that the average loan size for investors grew at the same rate in history as the average loan size for owner-occupiers. Source: Australian Bureau of Statistics, National Australia Bank

Chart 5: ... especially when expressed as a share of the housing stock

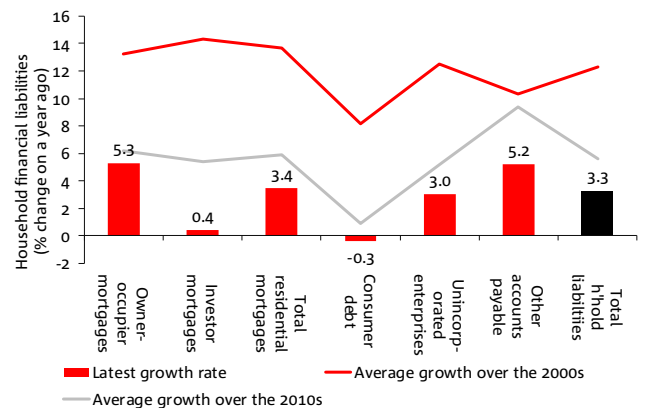


Note: The number of investor loans is estimated prior to July 2019 by assuming that the average loan size for investors grew at the same rate in history as the average loan size for owner-occupiers. The lending data are sourced from the Australian Bureau of Statistics, while turnover is sourced from CoreLogic. Source: Australian Bureau of Statistics, CoreLogic, National Australia Bank

Credit growth lags, but remains slow as indebted households focus on repaying debt

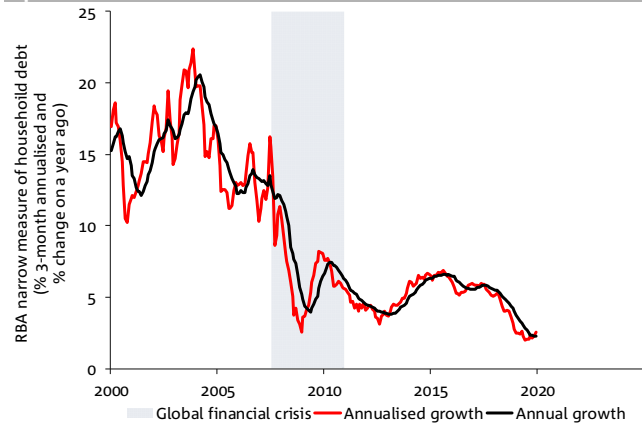
As for credit growth, the Australian Bureau of Statistics will publish comprehensive data on household balance sheets next month. Based on Q3 figures, credit growth remains weak, with total household debt increasing at an annual rate of 3.3%. That said, the narrower measure of household debt published by the Reserve Bank – which notably excludes small business debt that often relies on housing as collateral – suggests growth has stabilised at a low rate and may have picked up marginally in Q4 2019.

Chart 6: The broadest measure of household debt is growing at a slow rate ...



Source: Australian Bureau of Statistics, Reserve Bank of Australia, National Australia Bank

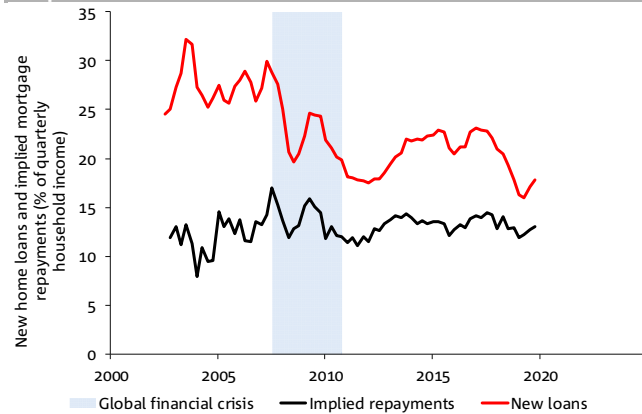
Chart 7: ... although a narrower measure of debt picked up a little in Q4



Note: Household debt = residential mortgages + personal debt.
Source: Reserve Bank of Australia, National Australia Bank

Credit is a lagging indicator, but the sharp rebound in new lending to date has not produced much change in debt because: (1) the increase in new loans is modest relative to the stock of debt; and (2) borrowers have maintained mortgage repayments at existing levels despite lower interest rates. The latter point is not surprising as estimated repayments of principal and interest are generally much more stable than interest payments.

Chart 8: Total mortgage payments appear little changed despite lower interest rates



Note: New loans are proxied by housing finance commitments, where not every commitment ends up a loan.
Source: Australian Bureau of Statistics, Reserve Bank of Australia, National Australia Bank

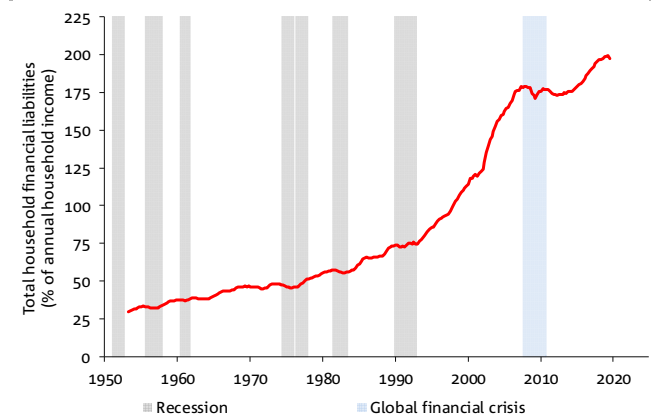
Stability concerns could see the Reserve Bank take more time in cutting rates further

While house prices and new loans have rebounded strongly and by more than what the past relationship with interest rates would suggest, this analysis suggests at face value that the Reserve Bank is still some distance from the “crossover point” where the perceived risk from lower rates outweighs the benefits.

However, this interpretation of the data is contradicted by the Reserve Bank’s own actions, where the Board has considered cutting rates over recent months, but chose not to as it weighed up the risks to easing policy further. This revealed preference suggests that the Reserve Bank may be more concerned about financial stability than we think, which underscores the risk that the bank takes longer to cut rates than we currently expect.

That said, in assessing financial stability it is worth noting that the vulnerability of high household gearing has been accentuated by persistently weak wage growth, something that low rates aimed at achieving the inflation target and full employment could help address.

Chart 9: Household gearing is unquestionably high



Source: Australian Bureau of Statistics, Melbourne Institute, Reserve Bank of Australia, National Australia Bank

Kieran Davies

CALENDAR OF ECONOMIC RELEASES

Country	Economic Indicator	Period	Forecast	Consensus	Actual	Previous	GMT	AEDT
Monday 17 February 2020								
NZ	Performance Services Index	Jan		--		51.9	21.30	8.30
NZ	Net Migration SA	Dec		--		2610	21.45	8.45
JN	GDP SA QoQ	4Q P		-1		0.4	23.50	10.50
JN	Industrial Production YoY	Dec F		--		-3	4.30	15.30
Tuesday 18 February 2020								
AU	RBA minutes	Feb		--		--	0.30	11.30
UK	Jobless Claims Change	Jan		--		14.9	9.30	20.30
UK	ILO Unemployment Rate 3Mths	Dec		--		3.8	9.30	20.30
GE	ZEW Survey Current Situation	Feb		--		-9.5	10.00	21.00
US	Empire Manufacturing	Feb		5		4.8	13.30	0.30
Wednesday 19 February 2020								
AU	Westpac Leading Index MoM	Jan		--		0.05	23.30	10.30
JN	Core Machine Orders YoY	Dec		0.5		5.3	23.50	10.50
AU	Wage Price Index QoQ	4Q	0.5	0.5		0.5	0.30	11.30
AU	Wage Price Index YoY	4Q	2.2	2.2		2.2	0.30	11.30
UK	CPI YoY	Jan		--		1.3	9.30	20.30
UK	CPI Core YoY	Jan		--		1.4	9.30	20.30
US	Fed's Bostic speaks on economic outlook						13.10	0.10
US	Fed's Mester speaks						13.30	0.30
US	Housing Starts	Jan		1400		1608	13.30	0.30
CA	CPI YoY	Jan		--		2.2	13.30	0.30
CA	CPI Core- Common YoY%	Jan		--		2	13.30	0.30
US	PPI Final Demand YoY	Jan		1.6		1.3	13.30	0.30
US	Fed's Kashkari speaks						21.30	3.45
US	Fed's Kaplan speaks						21.30	5.30
US	FOMC Meeting Minutes	Jan 29		--		--	19.00	6.00
US	Fed's Barkin discusses monetary policy						21.30	8.30
Thursday 20 February 2020								
AU	Employment Change	Jan	10	7.5		28.9	0.30	11.30
AU	Unemployment Rate	Jan	5.2	5.2		5.1	0.30	11.30
AU	Participation Rate	Jan		--		66	0.30	11.30
UK	Retail Sales Inc Auto Fuel YoY	Jan		--		0.9	9.30	20.30
US	Philadelphia Fed Business Outlook	Feb		10		17	13.30	0.30
EC	Consumer Confidence	Feb A		--		-8.1	15.00	2.00
Friday 21 February 2020								
JN	Natl CPI YoY	Jan		0.6		0.8	23.30	10.30
JN	Jibun Bank Japan PMI Mfg	Feb P		--		48.8	0.30	11.30
JN	All Industry Activity Index MoM	Dec		0.3		0.9	4.30	15.30
GE	Markit/BME Germany Manufacturing PMI	Feb P		--		45.3	8.30	19.30
GE	Markit Germany Services PMI	Feb P		--		54.2	8.30	19.30
EC	Markit Eurozone Manufacturing PMI	Feb P		--		47.9	9.00	20.00
UK	Markit UK PMI Manufacturing SA	Feb P		--		50	9.30	20.30
EC	CPI Core YoY	Jan F		--		1.1	10.00	21.00
EC	CPI YoY	Jan		--		1.3	10.00	21.00
CA	Retail Sales MoM	Dec		--		0.9	13.30	0.30
US	Markit US Manufacturing PMI	Feb P		--		51.9	14.45	1.45
Upcoming Central Bank Interest Rate Announcements								
Australia, RBA		Mar 3	0.75	0.75		0.75		
Canada, BoC		Mar 4	1.75	1.75		1.75		
Europe, ECB		Mar 12	-0.50	-0.50		-0.50		
Japan, BoJ		Mar 19	-0.10	-0.10		-0.10		
US, Federal Reserve		Mar 18	1.5/1.75	1.5/1.75		1.5/1.75		
New Zealand, RBNZ		Mar 25	0.50	1.00		1.00		
UK, BOE		Mar 26	0.75	0.75		0.75		

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

FORECASTS

Economic Forecasts																				
	Annual % change				Quarterly % change															
	2018	2019	2020	2021	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	2.7	1.4	1.1	1.9	0.5	0.8	0.3	0.4	0.3	0.3	0.1	0.4	-0.1	0.3	0.6	0.5	0.4	0.5	0.5	0.6
Underlying Business Investment	1.3	-3.1	-3.5	-3.9	1.0	-1.0	-1.4	-0.4	0.9	-1.2	-2.9	-1.9	-1.0	0.2	0.6	1.1	1.0	1.2	1.0	1.2
Residential Construction	4.7	-7.1	-7.0	4.1	3.4	2.5	0.4	-3.0	-1.6	-3.7	-1.7	-2.4	-2.2	-2.0	0.0	0.5	1.3	1.9	1.9	1.9
Underlying Public Spending	4.4	4.8	4.6	3.8	1.4	-0.5	2.0	0.7	1.0	1.7	1.7	0.8	1.1	1.1	1.0	1.0	1.0	0.9	0.8	0.8
Net Exports (a)	0.9	1.5	-0.2	-0.3	0.6	0.0	0.4	-0.1	0.4	0.5	0.2	0.3	0.1	0.0	-0.1	-0.1	0.0	-0.1	-0.1	-0.1
Inventories (a)	0.1	-0.3	0.0	0.1	-0.1	0.3	-0.3	0.1	-0.1	-0.4	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0
Domestic Demand (q/q %)	-	-	-	-	0.9	0.3	0.5	0.1	0.3	0.3	0.2	0.2	0.0	0.4	0.7	0.7	0.7	0.7	0.8	0.8
Dom Demand (y/y %)	2.9	1.1	1.1	2.8	3.7	3.3	2.6	1.8	1.2	1.2	0.9	1.0	0.7	0.8	1.3	1.8	2.5	2.9	3.0	3.0
Real GDP (q/q %)	-	-	-	-	0.9	0.7	0.3	0.2	0.5	0.6	0.4	0.4	0.0	0.4	0.7	0.7	0.6	0.7	0.7	0.7
Real GDP (y/y %)	2.7	1.8	1.5	2.6	3.1	3.2	2.5	2.1	1.7	1.6	1.7	2.0	1.5	1.2	1.5	1.8	2.4	2.7	2.7	2.7
CPI headline (q/q %)	-	-	-	-	0.4	0.4	0.4	0.5	0.0	0.6	0.5	0.7	0.4	0.4	0.5	0.6	0.5	0.5	0.6	0.7
CPI headline (y/y %)	1.9	1.6	2.1	2.3	1.9	2.1	1.9	1.8	1.3	1.6	1.7	1.8	2.3	2.1	2.1	2.0	2.1	2.2	2.3	2.4
CPI underlying (q/q %)	-	-	-	-	0.5	0.5	0.4	0.4	0.2	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.5	0.5	0.5	0.5
CPI underlying (y/y %)	1.8	1.4	1.7	2.0	1.9	1.8	1.8	1.8	1.5	1.4	1.4	1.5	1.6	1.6	1.7	1.7	1.8	1.9	2.0	2.1
Private wages (q/q %)	-	-	-	-	0.5	0.6	0.5	0.6	0.5	0.5	0.5	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Private wages (y/y %)	2.1	2.3	2.5	2.8	1.9	2.1	2.1	2.3	2.4	2.3	2.2	2.2	2.3	2.5	2.6	2.6	2.7	2.7	2.8	2.8
Unemployment Rate (%)	5.3	5.2	5.4	5.5	5.5	5.6	5.1	5.0	5.1	5.2	5.4	5.2	5.2	5.2	5.5	5.6	5.5	5.5	5.5	5.5
Terms of trade	1.8	5.1	-7.3	-1.8	3.3	-1.2	0.7	2.6	3.3	1.4	0.3	-5.5	-1.9	-1.9	0.0	-1.9	-0.3	0.2	0.2	0.6
Current Account (% GDP)	-2.1	0.7	-0.4	-1.1	-2.1	-2.6	-2.1	-1.3	-0.4	0.9	1.6	0.6	0.2	-0.3	-0.4	-1.0	-1.1	-1.1	-1.1	-1.1

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

Exchange Rate Forecasts

	17-Feb	Mar-20	Jun-20	Sep-20	Dec-20	Mar-21
Majors						
AUD/USD	0.673	0.68	0.69	0.70	0.71	0.71
NZD/USD	0.64	0.65	0.65	0.66	0.67	0.67
USD/JPY	109.8	109	109	108	110	108
EUR/USD	1.08	1.14	1.16	1.16	1.17	1.17
GBP/USD	1.30	1.35	1.35	1.35	1.33	1.36
USD/CNY	6.98	7.05	7.00	6.90	6.85	6.85
USD/CAD	1.32	1.31	1.30	1.30	1.31	1.32
USD/CHF	0.98	0.98	0.96	0.96	0.96	0.96

Australian Cross Rates

AUD/NZD	1.05	1.05	1.06	1.06	1.06	1.06
AUD/JPY	73.9	74	75	76	78	77
AUD/EUR	0.62	0.60	0.59	0.60	0.61	0.61
AUD/GBP	0.52	0.50	0.51	0.52	0.53	0.52
AUD/CNY	4.69	4.79	4.83	4.83	4.86	4.86
AUD/CAD	0.89	0.89	0.90	0.91	0.93	0.94
AUD/CHF	0.66	0.67	0.66	0.67	0.68	0.68

Interest Rate Forecasts

	17-Feb	Mar-20	Jun-20	Sep-20	Dec-20	Mar-21
Australian Rates						
RBA cash rate	0.75	0.75	0.25	0.25	0.25	0.25
3 month bill rate	0.91	0.85	0.35	0.35	0.35	0.35
3 Year Swap Rate	0.76	0.65	0.50	0.45	0.35	0.45
10 Year Swap Rate	1.20	1.15	1.02	1.02	0.92	1.02
Offshore Policy Rates						
US Fed funds	1.75	1.75	1.75	1.75	1.75	1.75
ECB deposit rate	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50
BoE repo rate	0.75	0.75	0.75	0.75	0.75	0.75
BoJ excess reserves rate	-0.10	-0.20	-0.30	-0.30	-0.30	-0.30
RBNZ OCR	1.00	1.00	1.00	1.00	1.00	1.00
China 1yr lending rate	4.35	4.10	4.10	4.10	4.10	4.10
China Reserve Ratio	12.5	12.0	12.0	12.0	12.0	12.0
10-year Bond Yields						
Australia	1.05	1.00	0.90	0.90	0.80	0.90
United States	1.58	1.80	1.80	1.80	1.80	1.90
New Zealand	1.35	0.95	1.05	1.10	1.30	1.45

Sources: NAB Global Markets Research; Bloomberg; ABS

Global GDP

	2018	2019	2020	2021
Australia	2.7	1.8	1.5	2.6
United States	2.9	2.3	1.8	1.9
Eurozone	1.9	1.2	1.0	1.4
United Kingdom	1.3	1.4	1.0	1.4
Japan	0.3	1.1	0.4	1.0
China	6.6	6.1	5.5	5.8
India	7.4	5.1	6.2	7.1
New Zealand	3.2	2.2	1.7	2.3
World	3.6	3.0	3.0	3.5

Commodity prices (\$US)

	17-Feb	Mar-20	Jun-20	Sep-20	Dec-20	Mar-21
Brent oil	57.2	55	58	60	62	62
Gold	1583	1560	1540	1560	1580	1580
Iron ore	na	85	76	72	68	71
Hard coking coal*	153	135	152	150	148	151
Thermal coal	66	68	68	65	70	70
Copper	5751	5650	5725	5750	5850	5900
Aus LNG**	10	10	10	11	11	11

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

** Implied Australian LNG export prices

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