AUSTRALIAN MARKETS WEEKLY

Assessing easier monetary policy

National Australia Bank

In this issue

Analysis – Assessing easier monetary policy

- The Reserve Bank has exhausted conventional monetary policy, with the cash rate at a record low of 0.25%, and has implemented several unconventional measures, such that the real exchange rate is now down 5.5% from the end of 2019.
- The lower cash rate would ordinarily boost growth by 0.6pp over the next year and a half, but this has been partly offset by a further fall in the neutral rate (the lower neutral rate mainly reflects a wider spread between lending rates and the cash rate). Moreover, this stimulus may be partly unwound as the real cash rate *rises* over the next year or so given actual/expected inflation usually falls in a recession.
- Unconventional policies to date have seen the Reserve Bank's balance sheet expand from 9% to 13% of annual GDP, with international research suggesting this could boost growth by 0.8pp. If the fall in the exchange rate is sustained, it could boost growth by a further 0.6pp.
- This all suggests that easier monetary policy should be helpful in supporting the economy as activity rebounds later this year. That said, the economy is dealing with the largest shock to growth in the post-WW2 period, which brings home the need for the government's unprecedented fiscal stimulus, which should see the budget deficit reach a peacetime record of 13% of GDP next financial year.

The week ahead – AU Q1 CPI; US and EZ Q1 GDP

- **Australia.** Q1 inflation is released on Wednesday, where NAB is forecasting a slightly above-market 0.3% rise in the CPI, lifting annual inflation to 2.2%. The trimmed mean CPI should rise by 0.4% or 1.7% over the year. That said, stronger inflation will be short lived, where we forecast the headline CPI to fall a sharp 1.9% in Q2 amid falling oil prices and the introduction of free childcare from April. **NZ.** New Zealand is scaling down containment measures a notch to a level 3 lockdown on Tuesday. The week's data focus is on the ANZ's business survey update on Thursday, along with its consumer confidence reading for April, due Friday.
- **International.** We expect China's PMIs to recover further in April with more firms able to open for business. Q1 US GDP on Wednesday should show an annualised contraction of about 4%. Also Wednesday, the market expects no change to policy at the FOMC meeting, which is followed by Fed Chair Powell's press conference. Friday's US manufacturing ISM for April is expected to report a big fall to 38. Thursday sees Q1 EZ GDP, which is expected to contract by at least 4% in the quarter. The ECB meets Thursday and the focus is on its assessment of the economy, with no new forecasts or policy announcements expected.

Key markets over the past week

	Last	% chg week		Last	bp/% chg week
AUD	0.6459	1.9	RBA cash	0.14	-1
AUD/CNY	4.57	1.3	3y swap	0.31	-1
AUD/JPY	69.2	1.5	ASX 200	5,321	-0.6
AUD/EUR	0.596	2.1	Iron ore	81	-3.0
AUD/NZD	1.065	1.5	Brent oil	20.3	-20.6

Source: Bloomberg

Kieran Davies

Assessing easier monetary policy

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- Unconventional policies to date have seen the Reserve Bank's balance sheet expand from 9% to 13% of annual GDP, with international research suggesting this could boost growth by 0.8pp. If the fall in the exchange rate is sustained, it could boost growth by a further 0.6pp.
- This all suggests that easier monetary policy should be helpful in supporting the economy as activity rebounds later this year. That said, the economy is dealing with the largest shock in the post-WW2 period, which brings home the need for the government's unprecedented fiscal stimulus, which should see the budget deficit reach a peacetime record of 13% of GDP next financial year.

The stimulus from a lower cash rate has been offset by a lower neutral cash rate

The instant recession caused by necessary health containment measures to deal with the coronavirus pandemic has seen an unprecedented easing of monetary policy, with the individual policies listed in the appendix.

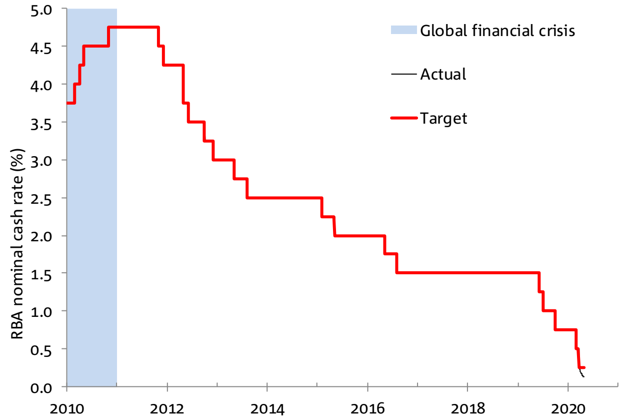
The nominal cash rate target is now at the lowest level since the Reserve Bank was established in 1960, with the effective rate slightly lower at 0.1%. This means the real cash rate, calculated using underlying inflation, has fallen from -0.6% at the end of 2019 to -1.3%. This is the lowest real cash rate since the late 1970s recession.

Modelling suggests a 0.7pp real rate cut should boost growth by about 0.6pp in a year and a half's time.[1] However, this rule-of-thumb assumes that the neutral cash rate is unchanged, whereas it has fallen further. The Reserve Bank estimate of the neutral cash rate has not been updated since 2017, when the bank calculated that the neutral real rate had fallen to 0.8%.[2] Since then the neutral rate has declined further reflecting a wider margin between lending rates and the cash rate and slightly lower potential growth, both of which have a roughly one-for-one relationship with the neutral rate.[3]

Simple measures of potential growth have fallen by around 0.1pp since end-2017, while the spread of the discounted variable mortgage rate over the cash rate has widened by roughly 65bp as lending rates have fallen by less than the cash rate. This suggests that the neutral real cash rate has decline by about 0.7pp to 0.1%, although the uncertainty around this estimate is large.

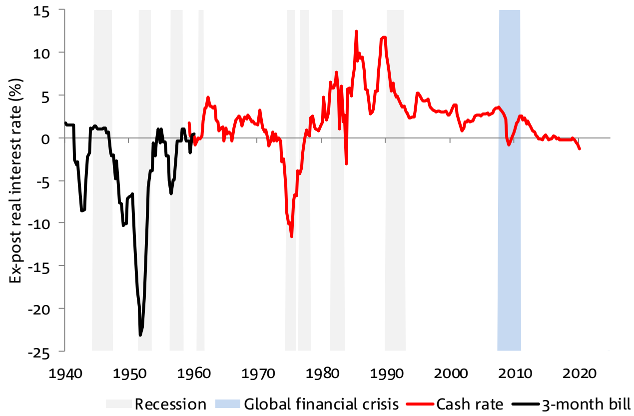
Accordingly, the stimulus from the record low cash rate has been partly offset by the further decline in the neutral rate. As a result, the real cash rate is only 1.4pp below the estimated neutral rate, which compares with a 2.6pp gap after the tax reform-induced slowdown in 2000-01 and a 3.3pp gap during the global financial crisis.

Chart 1: The target cash rate is at a record low of 0.25%



Source: Reserve Bank of Australia, National Australia Bank

Chart 2: The real cash rate is at its lowest level since the 1970s …



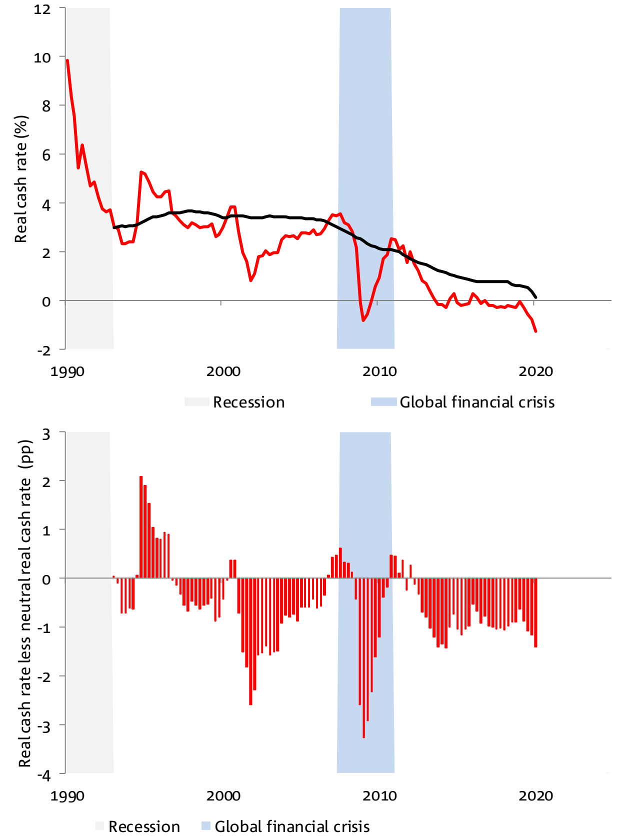
Source: Australian Bureau of Statistics, Melbourne Institute, Reserve Bank of Australia, National Australia Bank

[1] See Alexander Ballantyne, Tom Cusbert, Richard Evans, Rochelle Guttmann, Jonathan Hambur, Adam Hamilton, Elizabeth Kendall, Rachael McCririck, Gabriela Nodari and Daniel Rees, *MARTIN has its place: A macroeconometric model of the Australian economy*, Reserve Bank of Australia Discussion Paper 2019-07, August 2019.

[2] See Rachael McCririck and Daniel Rees, *The neutral interest rate*, Reserve Bank of Australia Bulletin, September quarter 2017.

[3] See Reserve Bank Deputy Governor Guy Debelle, *Global influences on domestic monetary policy*, Committee for Economic Development of Australia mid-year update, Adelaide, 21 July 2017.

Chart 3: .. but the neutral rate has also fallen, reducing the stimulus from a lower cash rate



Source: Australian Bureau of Statistics, McCririck and Rees (2017), Melbourne Institute, Reserve Bank of Australia, National Australia Bank

The stimulus from a low cash rate should also be offset by lower actual/expected inflation

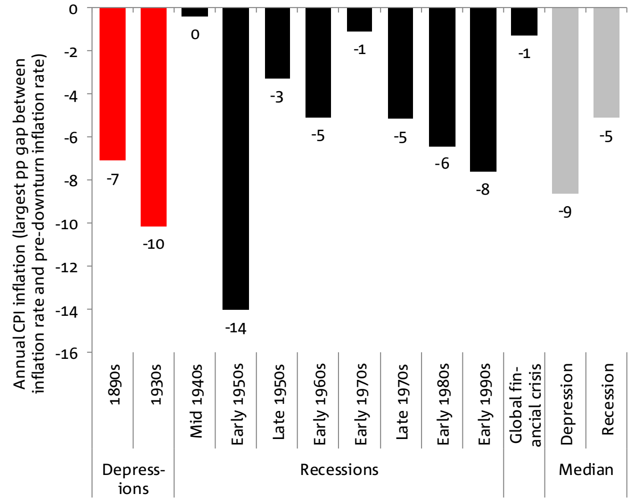
Aside from the decline in the neutral cash rate, the stimulus from the record low cash rate will be partly unwound if the real cash rate *rises* over the next year or two.

A rise in the real cash rate seems likely given inflation often falls in a recession. On our calculation, actual inflation tends to fall sharply, with a median fall in post-WW2 recessions of 5pp. Expected inflation is more mixed, falling by between 4-5pp during the early 1990s recession, but generally little changed in prior downturns.

NAB forecasts consumer prices to *decline* in the near term, with underlying inflation falling to zero by the end of 2021. The Reserve Bank will publish updated forecast scenarios in the 8 May Statement on Monetary Policy, which we think will also show weak expected inflation.

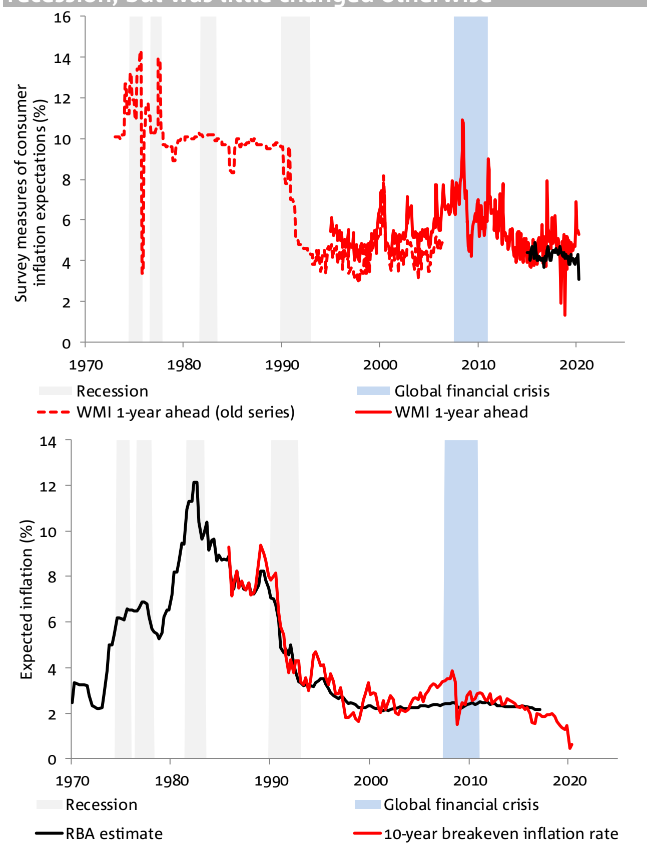
Timely measures of expected inflation have fallen. The 10-year bond break-even inflation rate has fallen to 0.6%, which is the lowest level since inflation-indexed bonds were first issued in the mid 1980s. The weekly ANZ-Roy Morgan Research survey measure of 2-year ahead consumer inflation expectations has fallen to 3.1%, which is the lowest level since the series began in 2015.

Chart 4: Inflation normally falls sharply during a recession



Note: The CPI was spliced with its retail price index predecessor.
Source: Australian Bureau of Statistics, Melbourne Institute, Ville and Withers (2015), Waterman (1972), National Australia Bank

Chart 5: Expected inflation fell sharply in the early 1990s recession, but was little changed otherwise

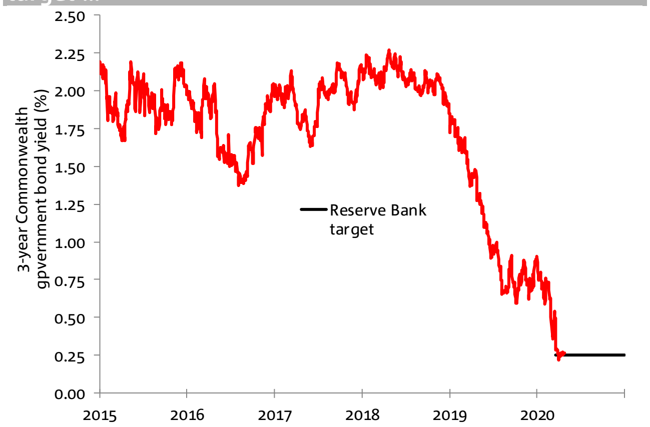


Note: The breakeven inflation rate is derived from the bond market. The Reserve Bank estimate is modelled.
Source: ANZ Bank and Roy Morgan Research, Bloomberg, Reserve Bank of Australia, Westpac and Melbourne Institute, National Australia Bank

Unconventional policy helps given the Reserve Bank is unwilling to adopt a negative cash rate

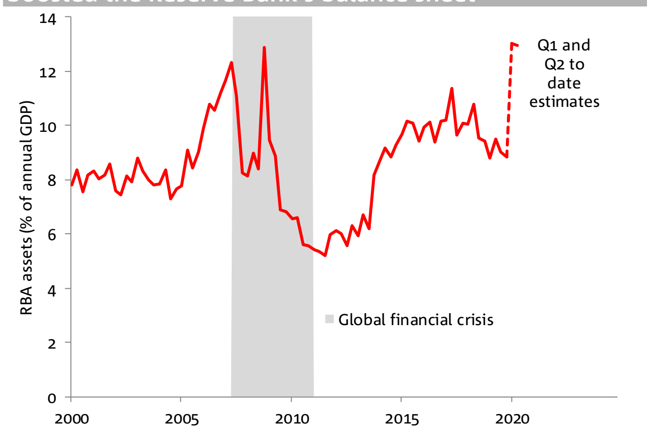
The Reserve Bank's unconventional policies have underpinned a rapid expansion of the bank's balance sheet. Total assets have increased from 9% of annual GDP at the end of 2019 to 13% in Q2 to date. This matches the high reached during the global financial crisis when the bank undertook quantitative easing to address market disruption. Given that the bank is only in the initial stage of its unconventional policy, the balance sheet is likely to reach its highest level since the 1950s, when large holdings of gold and foreign exchange boosted the bank's assets.

Chart 6: The Reserve Bank is achieving its bond yield target ...



Source: Reserve Bank of Australia, National Australia Bank

Chart 7: ... and unconventional policies have greatly boosted the Reserve Bank's balance sheet



Note: Q1 and Q2 2020 nominal GDP are estimated by NAB.
Source: Reserve Bank of Australia, National Australia Bank

International research suggests that the expansion of the balance sheet to date should eventually boost economic growth by 0.8pp. There is great uncertainty around this estimate, particularly when it is unclear how offshore experience translates to Australia, but at face value this is the equivalent of a further 100bp rate cut. As such, this shows how unconventional policy helps fill the gap when conventional policy has been exhausted and with the Reserve Bank reluctant to adopt a negative cash rate.

Table 1: The estimated effect on real GDP of a 1% increase in a central bank balance sheet as a share of GDP

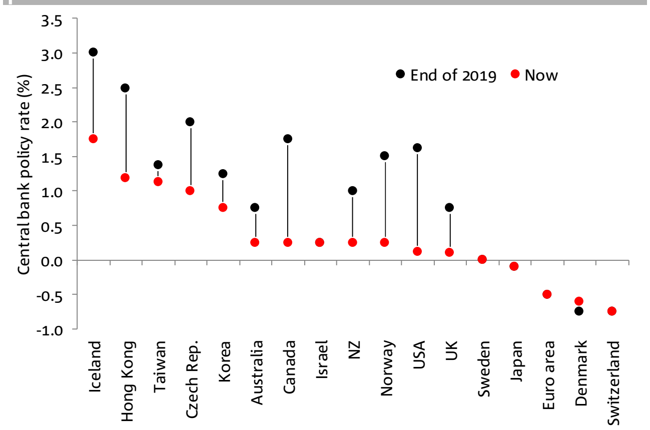
		%
Estimates:		
Chung et al (2011)	US	0.2
Chen et al (2012)	US	0.1
Federal Reserve (2013)	US	0.1
Burriel & Galesi (2016)	Euro area	0.2
Haldane (2016)	Euro area	0.2
	Japan	0.2
	UK	0.2
	US	0.6
Weale & Wieladek (2016)	UK	0.3
	US	0.6
Hess et al (2017)	UK	0.2
	US	0.2
Gagnon & Sack (2018)	US	0.1
Summary statistics:		
- average		0.2
- minimum		0.1
- maximum		0.6

Note: Some estimates were scaled to equate to a 1% of GDP increase in the balance sheet. Estimates are rounded to one decimal place. Gagnon & Sack equated the change in the balance sheet to the policy rate, which we converted to a GDP effect using the average estimated effect of conventional policy from the FRB model and Ramey (2014).
Source: Chen Curdia and Ferrrero (2012), Chung, Hess, Laforte, Reifschneider and Williams. (2011), Gagnon and Sack (2018) in conjunction with Brayton, Laubach and Reifschneider (2014) and Ramey (2014), Federal Reserve (2013), Haldane (2016); Hess, Hofmann and Weber (2017), Weale and Wieladek (2016), National Australia Bank

Easier policy has also contributed to a lower real exchange rate

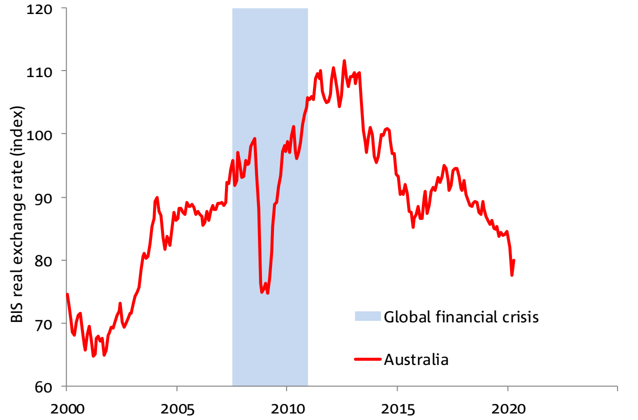
The real exchange rate has fallen sharply, down 5.5% from the end of 2019. Identifying the impact of easier monetary policy on the exchange rate is difficult given that other central banks have also eased policy. For example, almost all advanced economy central banks with positive policy rates have cut rates in recent weeks, with Australia's cash rate of 0.25% now in the middle of the pack internationally. That said, most of the decline in the exchange rate occurred in March when the Reserve Bank and government took aggressive action.

Chart 8: Australia's cash rate is now in the middle of the pack



Note: "Now" is as at 17 April 2020.
Source: Bank for International Settlements, Bloomberg, Reserve Bank of Australia, National Australia Bank

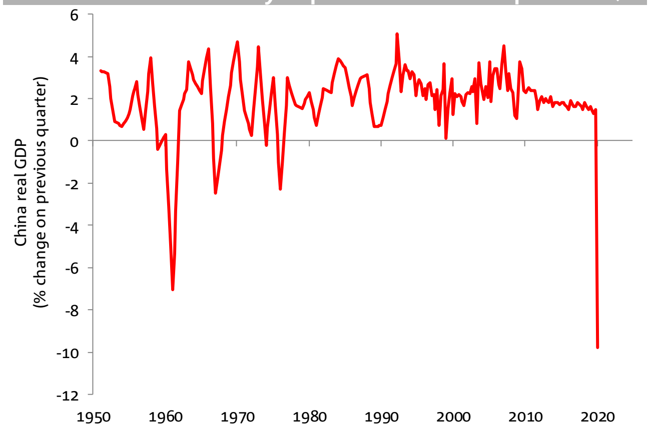
Chart 9: The real exchange rate fell sharply in March



Note: April 2020 is a NAB estimate.
Source: Bank for International Settlements, Reserve Bank of Australia, National Australia Bank

Ordinarily a 5.5% decline in the real exchange rate would boost growth by about 0.6pp after 1-2 years. This is similar to the boost from a 75bp rate cut, although it should be stressed that the benefit from a more competitive exchange rate has been more than offset by a deep recession in Australia's major trading partners.

Chart 10: Australia's key export markets collapsed in Q1



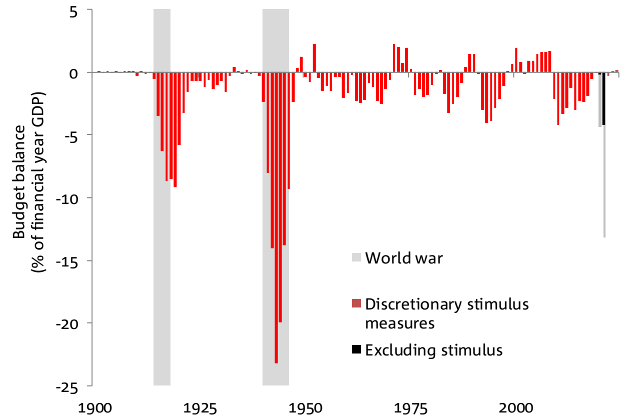
Source: Bloomberg, Penn World Table, World Bank, National Australia Bank

Given the size of the economic shock, fiscal policy has had to play a vastly greater role

This preliminary assessment suggests that easier monetary policy should be helpful in supporting the economy as activity rebounds later this year when health-related containment measures are progressively rolled back. That said, the support should not be overstated in the face of the largest negative economic shock in the post-WW2 period. For example, NAB is forecasting GDP to fall by 8% by Q3, while the above analysis suggest that a lower cash rate should boost growth by at most 0.6pp, unconventional policy to date potentially adding a further 0.8pp, and the lower real exchange rate adding 0.6pp if sustained.

This brings home the need for the government's unprecedented fiscal stimulus, which should see the budget deficit reach a peacetime record of 13% of GDP next financial year. Indeed, while the outlook remains highly uncertain, it is quite likely that further fiscal stimulus will be required as the economy rebounds.

Chart 11: The budget could post a deficit of 13% of GDP in 2020-21



Note: Underlying budget balance from 1970-71 onwards. Numbers may not add because of rounding. ".." = not published.
Source: Australian Bureau of Statistics, Reserve Bank of Australia, Treasury, Vamplew (1987), National Australia Bank

Kieran Davies

APPENDIX – POLICY DETAILS

On monetary policy, the Reserve Bank has practically exhausted conventional monetary policy and implemented unconventional policy for the first time since the global financial crisis.

- **Low interest rates for several years.** The bank has cut the cash rate to its self-imposed floor of 0.25%. Governor Lowe has said the Reserve Bank's Board agreed that it was "quite likely [the cash rate] could be at this level for three years" because it would not be raised until progress is made towards full employment and there is confidence that inflation will be sustainably within the 2-3 per target cent range.[4] The effective lower bound of the cash rate is negative, but this option has been repeatedly rejected by Lowe, with board-members remarking they "had no appetite for negative interest rates in Australia".[5]
- **Pegging bond yields and buying bonds.** The Reserve Bank has adopted limited yield curve control by targeting a 0.25% yield on the 3-year government bond. This involves buying bonds via regular auctions in the secondary bond market. The bonds are of different maturities given the high level of substitutability between them and the bank has also bought semi-government securities to achieve the target and ensure the smooth functioning of the bond market. The bank has said that the target for 3-year yields would be maintained until progress was made towards full employment and the inflation target, but would be removed before the cash rate was raised.
- **Cheap funding for banks.** The Reserve Bank has established a "term funding facility" of at least $90b (4.5% of annual GDP), which: (1) reduces lending rates by offering collateralised three-year funding at a fixed rate of 0.25% to banks and other authorised lenders of up to 3% of their outstanding business credit until September 2020; and (2) offers additional low-cost funding to lenders that expand their lending to business until March 2021, with incentives for lending to small- and medium-sized business.
- **A technical adjustment to bank balances at the Reserve Bank.** Under the "corridor system", there is a +/-25bp band around the cash rate, comprising: (1) a floor of the cash rate less 25bp paid on bank exchange settlement balances held at the Reserve Bank; and (2) a ceiling of the cash rate plus 25bp charged when a bank borrows overnight funds from the Reserve Bank. The range has been tightened to +25bp/-15bp, which means exchange settlement balances now earn 0.1% when the cash rate is 0.25%. This should reduce some of the pressure on bank costs as exchange settlement balances are significantly higher because of the Reserve Bank's increased liquidity operations, bond purchases and the term funding facility (higher balances should also see the actual cash rate trade below the target of 0.25%).

The Commonwealth has taken additional co-ordinated steps to reinforce the effectiveness of easier monetary policy by ensuring the flow of credit.[6]

- **The government is providing a partial guarantee on loans to small- and medium-sized businesses.** The government has established a "Coronavirus SME Guarantee Scheme" to support business cash flows in the near term. The scheme guarantees eligible lenders 50% of new unsecured loans – preferably a loan facility – to small- and medium-sized businesses, including sole traders and not-for profits. The scheme will cover up to $40b of debt, meaning the guarantee could cost up to $20b (1% of annual GDP), where each loan can be up to $0.25m with a term up to 3 years, including an initial 6-month repayment holiday.
- **Relaxing regulatory obligations on small business loans.** The government is suspending responsible lending obligations for 6 months on loans to existing small business customers, covering new loans, limit increases and restructures. Strictly speaking, the obligations did not previously apply to business loans, but lenders may still undertake the assessment.
- **Reducing funding costs for small authorised lenders and non-banks.** The Australian Office of Financial Management has established a "Structured Finance Support Fund" that is initially investing $15b (0.75% of annual GDP) in: (1) primary market securitisations of home, small business and consumer loans by small lenders; and (2) warehouse facilities.[7]

The bank regulator is suspending guidance on bank capital to boost lending. The Australian Prudential Regulation Authority has set benchmark targets for bank capital that are well above current minimum regulatory requirements and judged as "unquestionably strong" by international standards. For the four major banks, this equated to a common equity tier 1 capital ratio of at least 10.5% of risk-weighted assets, whereas the ratio for all banks exceeded 11% at end-2019. The regulator is suspending the targets "during the period of disruption"

[4] See Reserve Bank of Australia Governor Lowe, *Transcript of Q&A session*, 19 March 2020.
[5] See Reserve Bank of Australia, *Minutes of the Monetary Policy Meeting of the Reserve Bank Board*, 18 March 2020.
[6] See Treasury, *Supporting the flow of credit*, www.treasury.gov.au, Accessed 17 April 2020.
[7] See Australian Office of Financial Management, *Structured finance support fund*, www.aofm.gov.au, Accessed 17 April 2020.

caused by the pandemic if minimum standards are still met, which allows banks to use their large buffers to increase lending.[8]

[8] See Australian Prudential Regulation Authority, *APRA adjusts bank capital* expectations, Media release, 19 March 2020.

CALENDAR OF ECONOMIC RELEASES

Country	Economic Indicator	Period	Forecast	Consensus	Actual	Previous	GMT	AEST
Monday 27 April 2020								
JN	BOJ Policy Balance Rate	Apr 28	-0.1	-0.1		-0.1		around 2pm
GE	Retail Sales NSA YoY	Mar		--		6.4		27 April to 5 May
Tuesday 28 April 2020								
JN	Jobless Rate	Mar		2.5		2.4	22.30	9.30
US	Wholesale Inventories MoM	Mar P		--		-0.7	11.30	22.30
US	Conf. Board Consumer Confidence	Apr		90		120	13.00	0.00
Wednesday 29 April 2020								
JN	**Showa Day public holiday**							
NZ	Trade Balance NZD	Mar		--		594	21.45	8.45
AU	CPI QoQ	1Q	0.3	0.2		0.7	0.30	11.30
AU	CPI YoY	1Q	2.2	1.9		1.8	0.30	11.30
AU	CPI Trimmed Mean QoQ / YoY	1Q	0.4 / 1.7	0.3 / 1.6		0.4 / 1.6	0.30	11.30
EC	M3 Money Supply YoY	Mar		--		5.5	7.00	18.00
EC	Consumer Confidence	Apr F		--		-22.7	8.00	19.00
GE	CPI YoY	Apr P		0.8		1.4	11.00	22.00
US	GDP Annualized QoQ	1Q A		-3.7		2.1	11.30	22.30
US	Core PCE QoQ	1Q A		--		1.3	11.30	22.30
US	FOMC Rate Decision (Upper Bound)	Apr 29	0.25	0.25		0.25	17.00	4.00
US	Interest Rate on Excess Reserves	Apr 30		--		0.1	17.00	4.00
Thursday 30 April 2020								
JN	Industrial Production MoM / YoY	Mar P		-5 / -7.7		-0.3 / -5.7	22.50	9.50
NZ	ANZ Business Confidence	Apr F		--		-73.1	0.00	11.00
CH	Manufacturing PMI	Apr		51		52	0.00	11.00
CH	Non-manufacturing PMI	Apr		50.5		52.3	0.00	11.00
AU	Export Price Index QoQ	1Q		3		-5.2	0.30	11.30
AU	Import Price Index QoQ	1Q		1		0.7	0.30	11.30
AU	Private Sector Credit MoM	Mar		0.3		0.4	0.30	11.30
AU	Private Sector Credit YoY	Mar		2.8		2.8	0.30	11.30
GE	Unemployment Change (000's)	Apr		150		1	6.55	17.55
GE	Unemployment Claims Rate SA	Apr		5.3		5	6.55	17.55
EC	Unemployment Rate	Mar		--		7.3	8.00	19.00
EC	GDP SA QoQ / YoY	1Q A		-4.2 / -3.6		0.1 / 1	8.00	19.00
EC	CPI MoM / YoY	Apr P		--		0.5 / 0.7	8.00	19.00
EC	CPI Core YoY	Apr P		--		1	8.00	19.00
EC	ECB Main Refinancing Rate	Apr 30	0	0		0	10.45	21.45
EC	ECB Deposit Facility Rate	Apr 30	-0.5	-0.5		-0.5	10.45	21.45
EC	ECB Marginal Lending Facility	Apr 30	0.25	0.25		0.25	10.45	21.45
US	PCE Core Deflator YoY	Mar		1.5		1.8	11.30	22.30
CA	GDP MoM / YoY	Feb		0 / 1.7		0.1 / 1.8	11.30	22.30
Friday 01 May 2020								
EZ, CH	**Labour Day public holiday**							
NZ	ANZ Consumer Confidence Index	Apr		--		106.3	21.00	8.00
AU	AiG Perf of Mfg Index	Apr		--		53.7	21.30	8.30
JN	Tokyo CPI YoY	Apr		0.2		0.4	22.30	9.30
AU	CoreLogic House Px MoM	Apr		--		0.7	23.00	10.00
JN	Jibun Bank Japan PMI Mfg	Apr F		--		43.7	23.30	10.30
AU	PPI YoY	1Q		--		1.4	0.30	11.30
AU	Commodity Index SDR YoY	Apr		--		-10.2	5.30	16.30
UK	Markit UK PMI Manufacturing SA	Apr F		--		32.9	7.30	18.30
CA	Markit Canada Manufacturing PMI	Apr		--		46.1	12.30	23.30
US	Markit US Manufacturing PMI	Apr P		35		36.9	12.45	23.45
US	Construction Spending MoM	Mar		-3.6		-1.3	13.00	0.00
US	ISM Manufacturing	Apr		37.5		49.1	13.00	0.00
Upcoming Central Bank Interest Rate Announcements								
Japan, BoJ		Apr 28	-0.10	-0.10		-0.10		
US, Federal Reserve		Apr 29	0/0.25	0/0.25		0/0.25		
Europe, ECB		Apr 30	-0.50	-0.50		-0.50		
Australia, RBA		May 5	0.25	0.25		0.25		
UK, BOE		May 7	0.10	0.10		0.10		
New Zealand, RBNZ		May 13	0.25	0.25		0.25		
Canada, BoC		Jun 3	0.25	0.25		0.25		

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

CONTACT DETAILS

Market Economics

Kieran Davies
Chief markets economist
+61 2 9237 1406
kieran.davies@nab.com.au

Tapas Strickland
Senior Economist
+61 2 9237 1980
tapas.strickland@nab.com.au

Kaixin Owyong
Economist, Markets
+61 2 9237 1980
kaixin.owyong@nab.com.au

Markets Research

Ivan Colhoun
Global Head of Research
+61 2 9237 1836
ivan.colhoun@nab.com.au

Group Economics

Alan Oster
Chief Economist
+61 3 8634 2927
alan.oster@nab.com.au