

AUSTRALIA CORONA – WHERE TO FROM HERE?

APRIL 2020

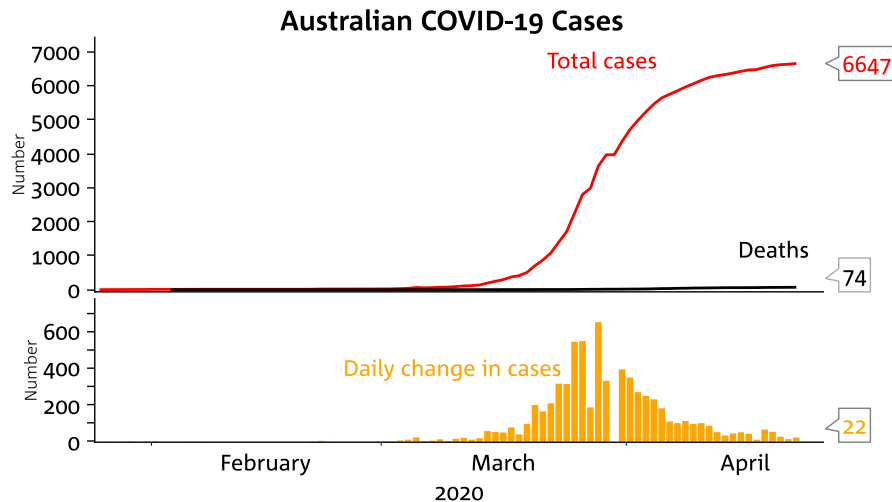
KEY THEMES

- **All about coronavirus – containment works, now question is how quickly we can lift it**
 - Virus peaking in Europe, Australia, NZ. It will also start to peak in the US and UK soon
 - China has lifted measures, Austria, Denmark, Germany, Italy and Spain also starting to lift
 - Vaccine? Trials likely to occur within 3-6m; production could start in late 2020 if successful
- **When can we expect Australia to start lifting some measures?**
 - PM Morrison has extended measures to mid-May, so sometime thereafter
 - Likely work places and retail first, then onto pubs/restaurants, after that bigger events e.g. sport
 - Possible some international travel even – done in done in bubbles – e.g. Australia-NZ-Singapore
- **Economy? Large falls in GDP and steep rises in unemployment widely expected**
 - A sharp recession is already baked in, question turns to how quickly can we recover
 - RBA will keep rates very low for an extended period (0.25% for 2+ years)
 - Structural changes: more online; depth of relationships; higher inventory; tourism slow to recover
- **Markets – moving ahead of macro data, looking at containment being lifted internationally**
 - Lessening of risk aversion in recent week on the back of signs of the virus peaking in Europe and on tentative plans by some countries to relax containment measures starting late April/early May
 - AUD/USD low of 0.5510 (March 19), now sitting at 0.6318. Markets move swiftly. Yield curve steepening, short-end penned in by the RBA (3yr yield target of 0.25%)

CORONAVIRUS IN AUSTRALIA – CONVERSATION TURNS

Cases peaked at end of March with additional cases falling since. How can we lift containment?

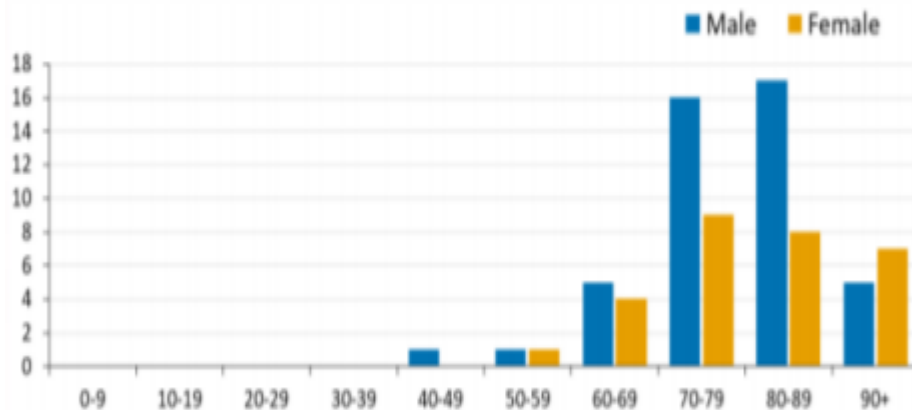
CASES IN AUSTRALIA LOOKED TO HAVE PEAKED



Source: National Australia Bank, WHO

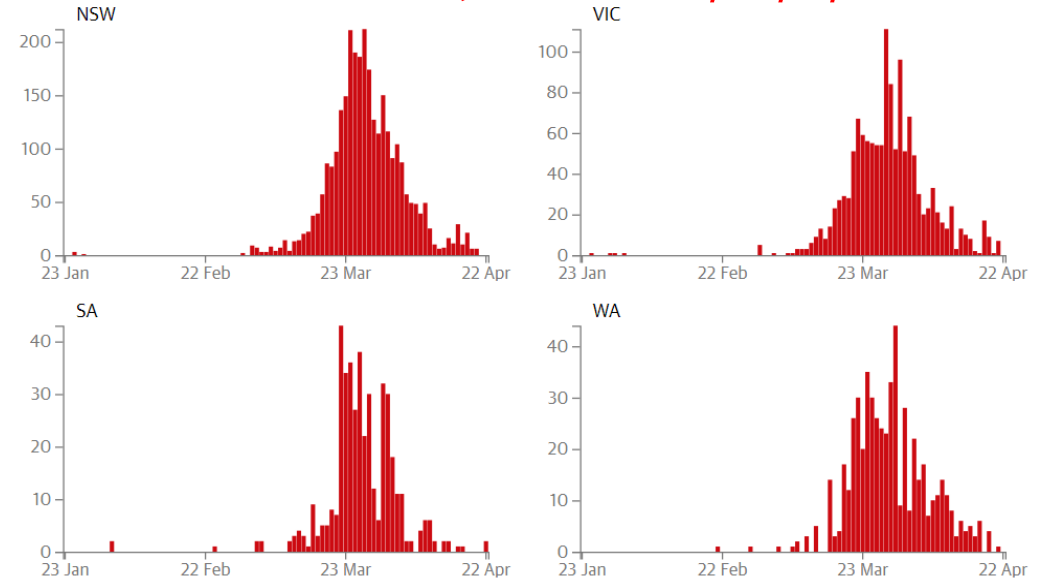
MORTALITY OVERWHELMINGLY THOSE 60+ YEARS

DEATHS BY AGE GROUP AND SEX



https://www.health.gov.au/sites/default/files/documents/2020/04/coronavirus-covid-19-at-a-glance-coronavirus-covid-19-at-a-glance-infographic_12.pdf

NSW TRENDING LOWER, NO CASES IN SA/ACT/NT/WA



CONVERSATION NOW TURNS TO WHEN WE CAN LIFT

- Fed government to review in mid-May:
 - “When it comes to the specific economic restrictions that have been put in place, after the next month then there will be the opportunity to review that and potentially make some changes”
- State government to review now in instances where they exceed federal guidelines:
 - e.g. re-opening of beaches / schools

SOME EASING OCCURRING INTERNATIONALLY – Austria, Denmark, Italy, Spain Germany and New Zealand have laid out roadmaps to re-open

Table 1: Gradual Easing in Containment Measures

	Easing so far		Prospective Easing
	Easing measures	Notable caveats	
Austria			
	Shops under 400 sq m (4,300 sq ft) in size are allowed to reopen, along with hardware stores and garden centres. (14/04/2020)	Still compulsory for people to wear a mask in supermarkets and pharmacies; 1.5/2m social distance still applies.	May 1: Larger shops, shopping centres and hairdressers are due to reopen mid-May: restaurants and hotels could reopen if health conditions allow,
Denmark			
	Opening schools for those aged 13years and below. (15/04/2020)	Restaurants, cafes and hair dressers remain shut.	
Italy			
	In some areas bookshops and clothing stores can open, a ban on exercising more than 200m away from home has been lifted. (14/04/2020)	Residents will still need to wear a mask and gloves if they go out.	
Spain			
	Some Spanish businesses, including construction and manufacturing, were allowed to resume. (13/04/2020)	Builders can only work in areas away from local residents, so they cannot yet go back to doing home improvements.	April 26: Shops, bars and public spaces could re-open from here
Germany			
	April 20: Shops of up to 800 square metres in size, as well as bookshops, bike stores and car dealerships,		May 4: schools to gradually re-open; hairdressers May 3: social distancing could be lifted Aug 31: large events - concerts and festivals could re-open
New Zealand			
	April 27: Moving to level 3 restrictions from level 4. Allows similar to movement to what is in Australia, but importantly 500k people can go back to work		May 11: Likely move to level 2 restrictions, most businesses can re-open. Social distancing eased with 100 indoors and 500 outdoors allowed.

Source: National Australia Bank, various media outlets

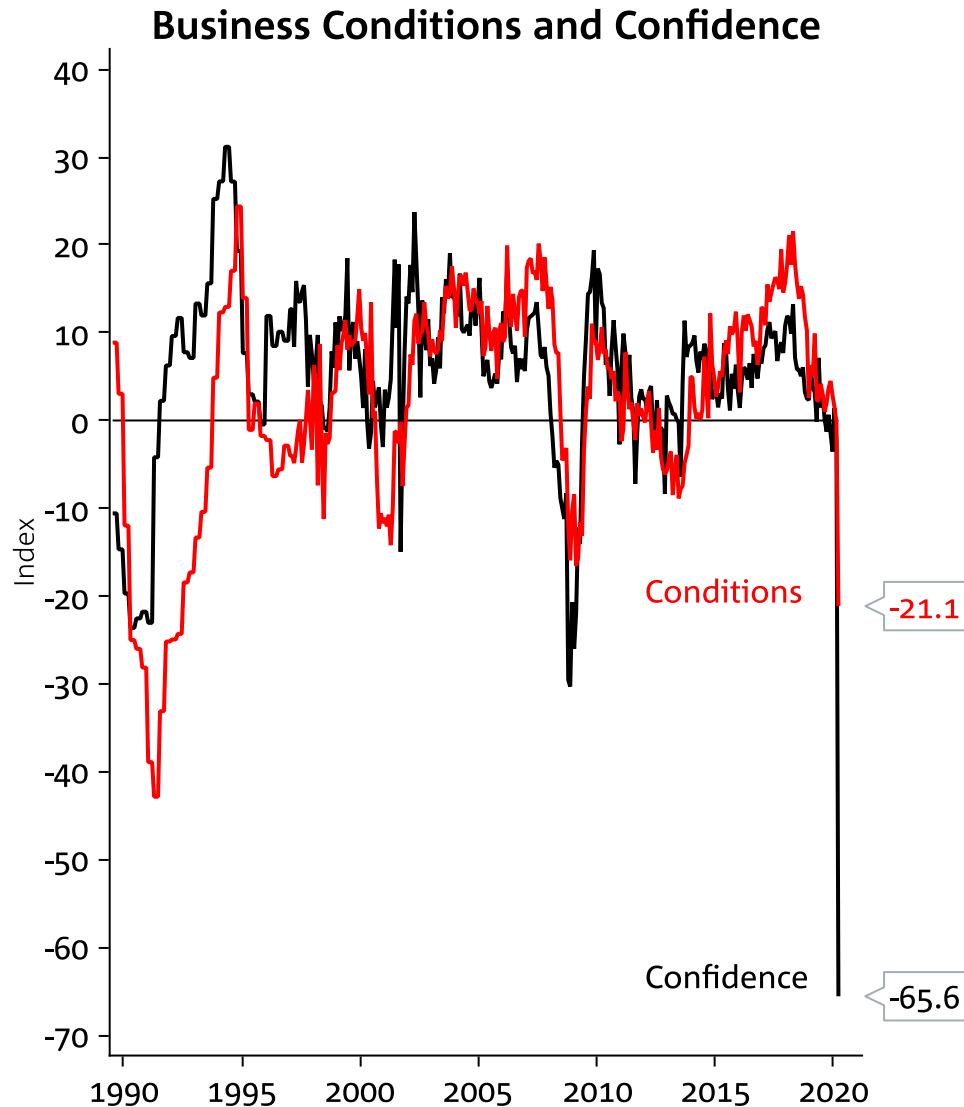
AUSTRALIA SET TO REVIEW IN MID-MAY – Government sources have said easing will be done in reverse order; 2 person rule to be reviewed

Table 1: Containment Measures to Date

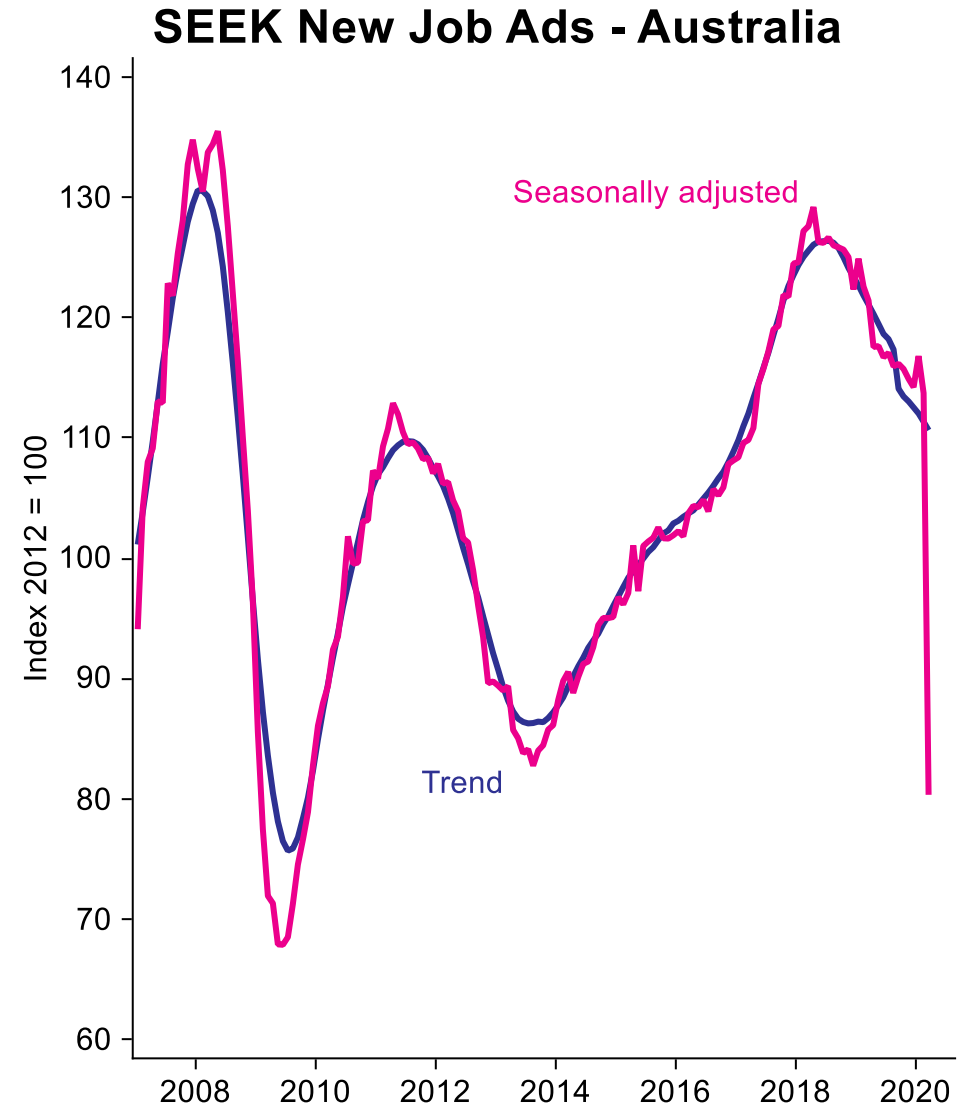
Date	Event Type	Summary
1-Feb	Travel Restrictions	Foreigners arriving from China banned from entering.
1-Mar	Travel Restrictions	Foreigners arriving from Iran banned from entering.
5-Mar	Travel Restrictions	Foreigners arriving from South Korea banned.
11-Mar	Travel Restrictions	Foreigners arriving from Italy banned.
15-Mar	Travel Restrictions	All arrivals to Australia must self-isolate for 14 day. Cruise ships from foreign ports banned for 30 days.
16-Mar	Containment Measures	Bans on non essential gatherings of over 500 people.
18-Mar	Containment Measures	Indoor gatherings of over 100 people banned, access to aged care restricted.
20-Mar	Travel Restrictions	Australian borders are now closed to all non-citizens and non-residents.
20-Mar	Containment Measures	There must be a density of no more than one person per 4sqm indoors.
23-Mar	Containment Measures	Some non essential service businesses shut. Restaurants and cafes will only be able to serve take away. Retail continues to trade.
24-Mar	Travel Restrictions	Ban on Australians travelling overseas.
26-Mar	Containment Measures	More non essential services shut, this time including casinos, markets and real estate auctions.
28-Mar	Travel Restrictions	All citizens and residents returning to Australia are now mandated to quarantine for 14 days in hotels.
30-Mar	Containment Measures	Australians advised to stay inside except for essential reasons. Any outdoors gatherings are restricted to two people, with families and households exempted.
16-Apr	Containment Measures	The government says containment measures will be reviewed in 4 weeks, developing an opt-in contact tracing app similar to that used in Singapore.

Source: National Australia Bank, various media sources

MY TWO FAVOURITE INDICATORS OF THE AUSTRALIAN ECONOMY – data beginning to reflect but still lagging hit to actual economy

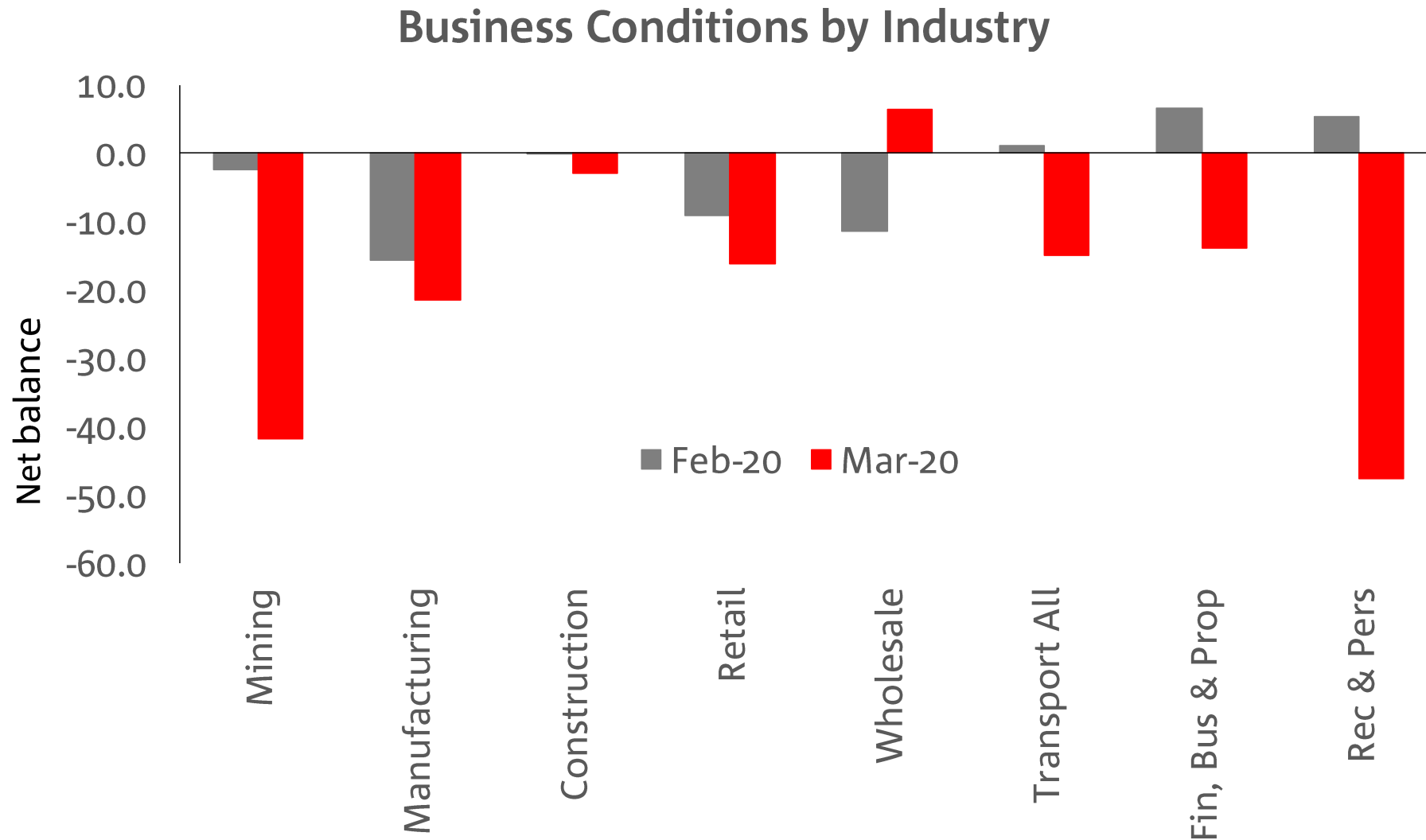


Source: National Australia Bank



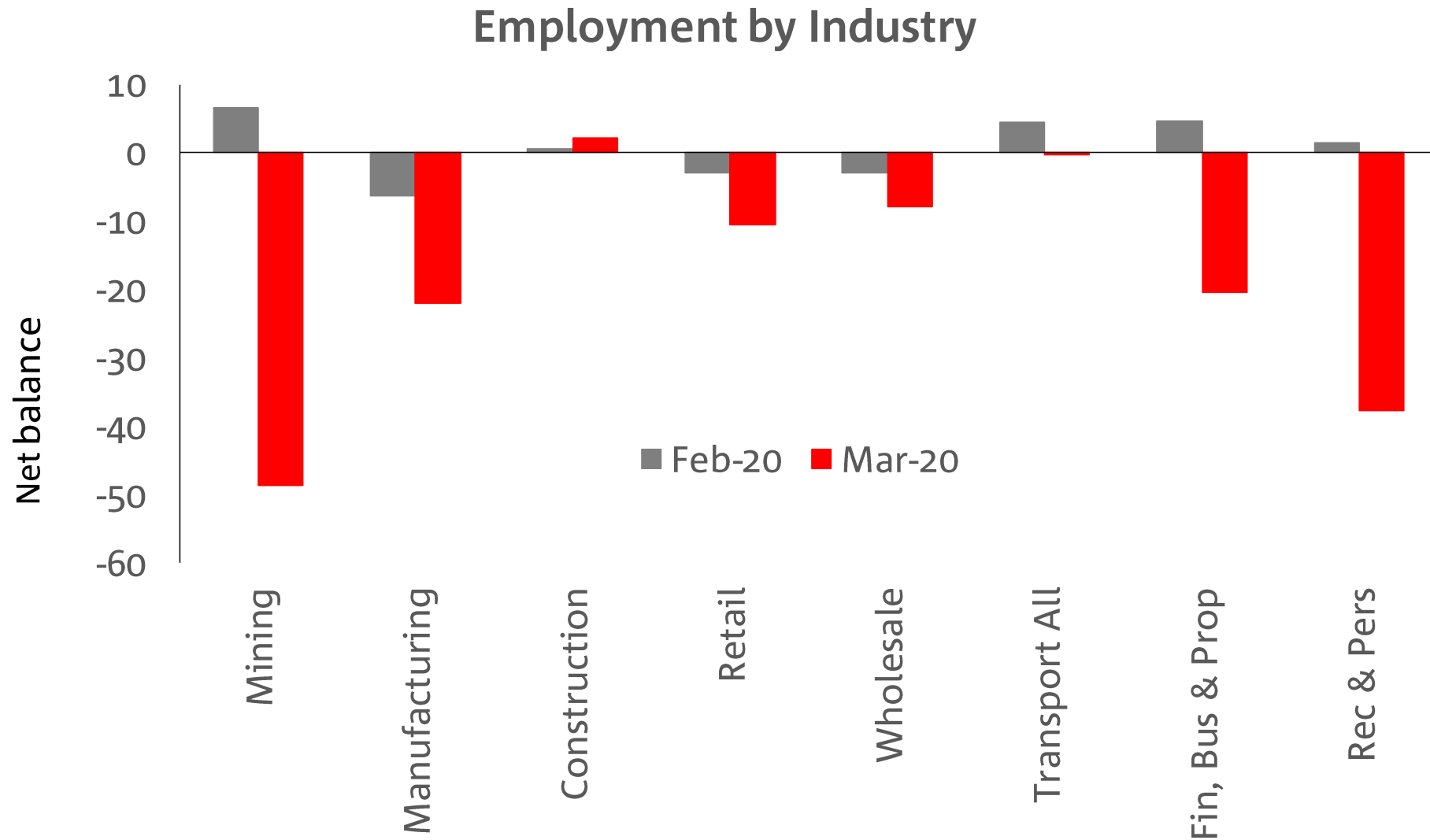
Source: SEEK, National Australia Bank

CONDITIONS BY INDUSTRY – Many, but not all sectors see a sharp drop in conditions: wholesale up! (online retail and food possibly supporting here?)



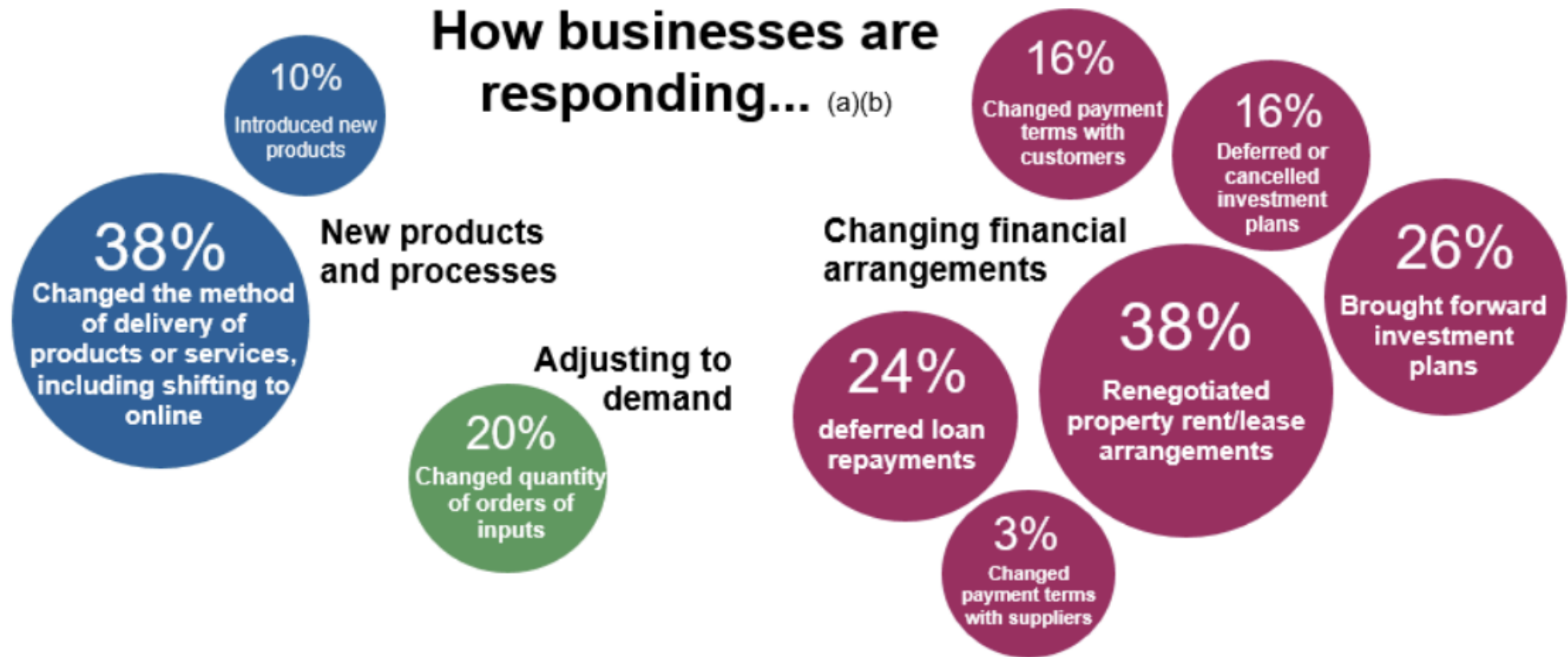
Source: National Australia Bank

EMPLOYMENT BY INDUSTRY – most, but not all, sectors see sharp drop in employment intentions



Source: National Australia Bank

FIRMS' RESPONSE – firms responding by pivoting online where possible, renegotiating leases and deferring loan repayments widespread



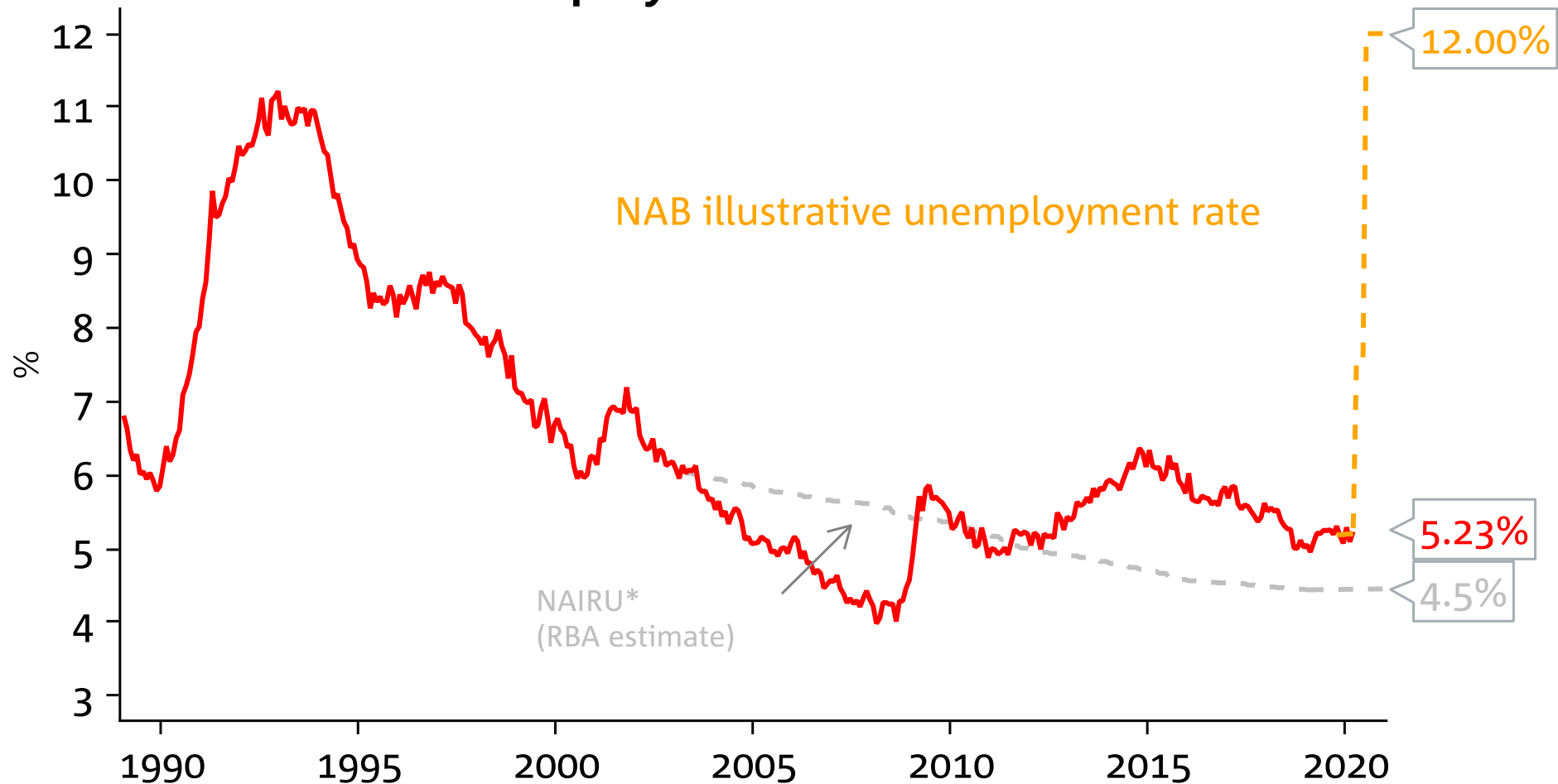
(a) Proportions are of businesses currently trading.

(b) Businesses could select more than one option.

AUSTRALIAN ECONOMY – RBA/Government think not possible/reasonable to forecast the economy at present. Watch for unemployment to shoot higher.

UNEMPLOYMENT NOW EXPECTED TO SHOOT HIGHER

Unemployment Rate Forecasts



* Non-Accelerating Inflationary Rate of Unemployment, below which inflation accelerates.

Source: National Australia Bank, ABS, RBA

GOVERNMENT'S RESPONSE – Bridging the (economic) “gap”: three stimulus packages and counting

- Fiscal policy turning – appropriately – exceedingly expansionary.
- Focus is on keeping businesses in business and Australians in jobs.
- \$17.6bn (1% of GDP) stimulus package announced two weeks ago
- \$46bn (2.5% of GDP) second package announced last weekend – instant access to higher value Newstart/Covid allowance (extra \$550 a fortnight)
- \$130bn (6.5% of GDP) third package announced – jobseeker wage subsidy of \$1,500 a fortnight for businesses
- Fourth package to support business expected later this week
- Need to “suspend”/freeze/hibernate some of the normal economic functions in Australia
 - 6 month ban on tenant evictions
 - Bankruptcy protection? Tax waivers.
- Banks to play a part: allow principal and interest payments to be deferred for six months; reduced rates for small business; don't foreclose on mortgages, support for cash flow. NAB open for business

JOB KEEPER IN DETAIL – *Firms must apply and subject to turnover tests*

- Government will provide \$1,500 per fortnight per employee from 30 March 2020 until 27 September 2020. First payments to be received by employers in the first week of May.
- Test: Employers (including not-for-profits) will be eligible for the subsidy if, at the time of applying:
 - their business has an aggregated turnover of less than \$1 billion (for income tax purposes¹) and they estimate their turnover has fallen or will likely fall by 30 per cent or more; or
 - their business has an annual turnover of \$1 billion or more (for income tax purposes) and they estimate their turnover has fallen or will likely fall by 50 per cent or more;
 - Self-employed individuals will be eligible to receive the JobKeeper Payment where they meet the relevant turnover test outlined above, and are not a permanent employee of another employer
 - Charities registered will be eligible for the subsidy if they estimate their turnover has or will likely fall by 15 per cent or more relative to a comparable period.
- Turnover test: expected to establish that their turnover has or will likely fall in the relevant month or quarter (depending on their Business Activity Statement reporting period) relative to their turnover in a corresponding period a year earlier
- Employers must elect to participate in the scheme: Eligible employers will receive the payment for each eligible employee that was on their books on 1 March 2020. — including full-time, part-time, long-term casuals and stood down employees. Casuals 12 months as at 1 March.
 - [https://treasury.gov.au/sites/default/files/2020-04/Fact sheet supporting businesses 4.pdf](https://treasury.gov.au/sites/default/files/2020-04/Fact%20sheet%20supporting%20businesses%204.pdf)
 - [https://treasury.gov.au/sites/default/files/2020-04/Fact sheet Info for Employers 2.pdf](https://treasury.gov.au/sites/default/files/2020-04/Fact%20sheet%20info%20for%20employers%202.pdf)

AUSTRALIAN STIMULUS MEASURES IN DETAIL – Direct stimulus now equivalent to nearly 12% of GDP or around \$237bn!

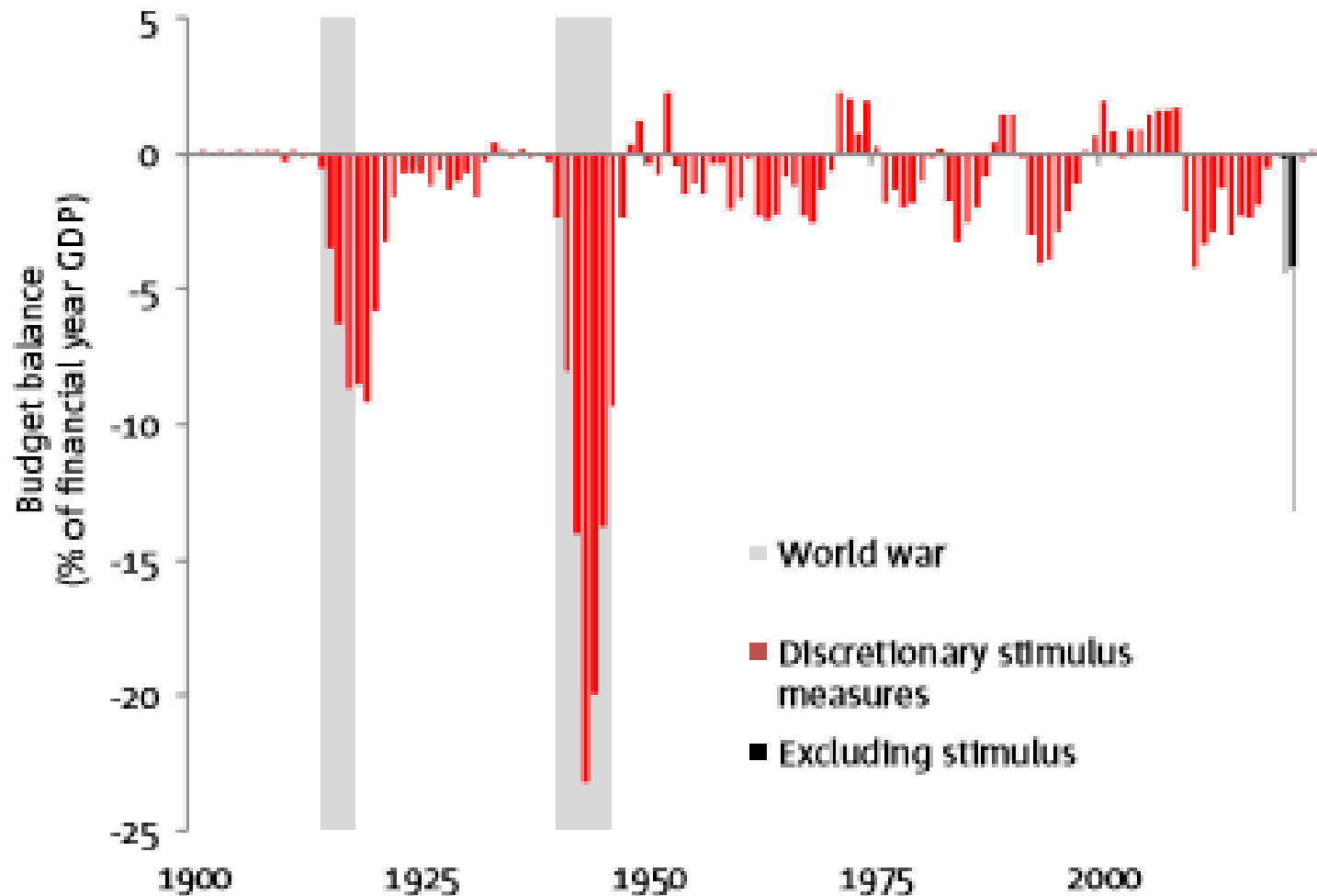
Table 1: The traditional easing of fiscal policy equates to about 12% of GDP

(Note: mostly front-loaded to Q2 2020 and 2020-2021)	1st package (\$b)	Separately announced (\$b)	2nd package (\$b)	Separately announced (\$b)	3rd package (\$b)	Separately announced (\$b)	Total (\$b)
(A) Commonwealth taxes / payments etc							
Households							
1. Income support for individuals			14.1				14.1
2. Cash payments to households	4.8		4.0				8.8
3. Temporary early release of super			1.2				1.2
4. Temp. reduce super drawdown rates							na
5. Lower social security deeming rates		0.9					0.9
6. JobSeeker wage subsidy payment					130.0		130.0
6. Early childhood education and childcare						0.3	0.3
Business							
1. Boost cashflow for employers	6.7		25.2				31.9
2. Temp. relief for distressed businesses							na
3. Instant asset writeoff	0.7						0.7
4. Temporary depreciation allowance	3.2						3.2
5. Support for apprentices/trainees	1.3						1.3
6. Regional support	1.0						1.0
7. Support for airlines			0.7	0.3			1.0
State Government							
1. Health		2.4		1.1			3.5
2. Reimbursing state health spending							tbd
Discretionary fund							
1. Advance to finance minister						38.8	38.8
Total	17.6	3.3	45.2	1.4	130.0	39.1	236.7
(% of annual GDP)	0.9	0.2	2.3	0.1	6.5	2.0	11.8
(B) Commonwealth and Reserve Bank balance-sheet support							
1. Guarantee for small- & medium-sized business loans			Up to 20				Up to 20
2. AOFM support for small lenders		Initially 15					Initially 15
3. RBA term loan facility		At least 90					At least 90
Total		Approx. 105	Up to 20				Approx. 125
(% of annual GDP)		Approx. 5.3	Up to 1.0				Up to 6.3

Note: Expressed as an approximate share of annual GDP of \$2tr. "tbd" = to be determined.

Source: Australian Bureau of Statistics, Sydney Morning Herald, The Australian, Treasury, National Australia Bank

FISCAL POLICY – govt. invests in less bad economic and unemployment outcomes. Very significant budget deficits likely. 12% of GDP is approx. \$200bn!



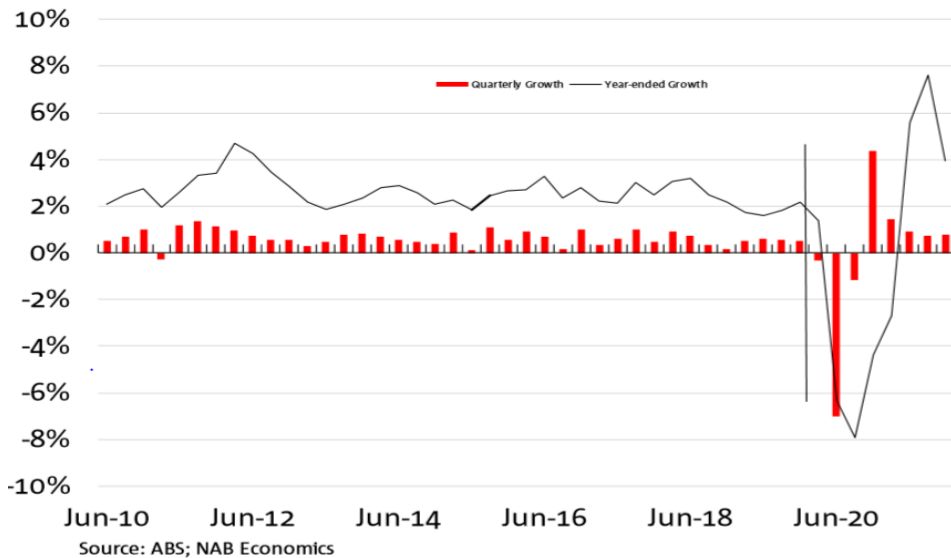
Note: Underlying budget balance from 1970-71 onwards. Numbers may not add because of rounding.

".." = not published.

Source: Australian Bureau of Statistics, Reserve Bank of Australia, Treasury, Vamplew (1987), National Australia Bank

POINT FORECASTS MEANINGLESS, ITS ALL ABOUT WHEN WE CAN EXPECT MEASURES TO BE LIFTED – NAB forecasts GDP to decline for 3 quarters

Q2 AND Q3 LIKELY NEGATIVE, BOUNCE BACK THEREAFTER



UNEMPLOYMENT RATE TO RISE TO NEAR 12% IN Q2

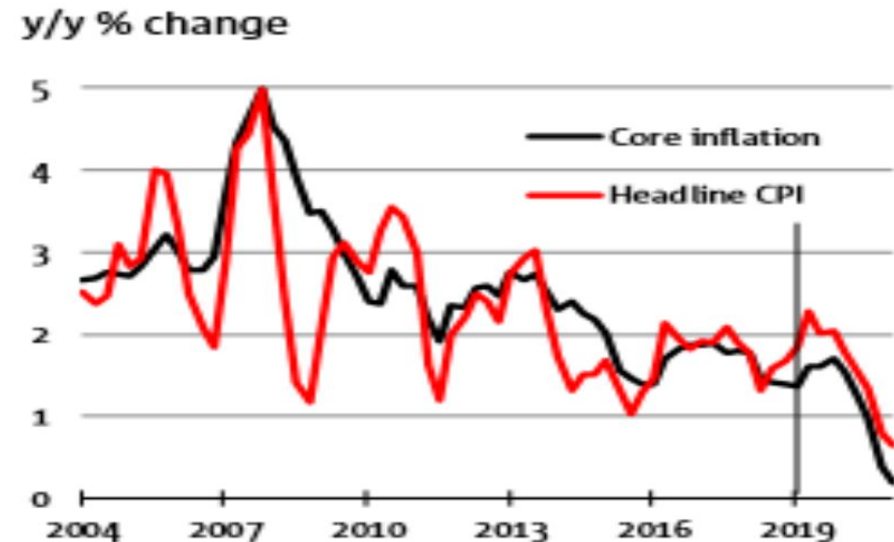
	2018	2019	2020-F	2021-F
Domestic Demand (a)	2.9	1.2	-5.0	0.9
Real GDP (annual average)	2.7	1.8	-4.3	3.5
Real GDP (year-ended to Dec)	2.2	2.2	-4.4	3.9
Terms of Trade (a)	1.8	5.2	-11.7	-2.2
Employment (a)	2.7	2.4	-6.0	0.0
Unemployment Rate (b)	5.0	5.1	11.6	7.3
Headline CPI (b)	1.8	1.8	1.8	0.6
Core CPI (b)	1.8	1.4	1.5	0.2
RBA Cash Rate (b)	1.50	0.75	0.25	0.25
\$A/US cents (b)	0.71	0.70	0.63	0.71

(a) annual average growth, (b) end-period, (c) through the year inflation

HOUSE PRICES FALLS ARE LIKELY

- Fall in house prices of 10 to 15% over the next year or so seems likely.
- That would see house prices down around 9% this year and around 4% in 2021 (albeit prices should stabilise by mid 2021).

PRICES ACROSS THE ECONOMY SET TO FALL, INFLATION DOWN



TREASURY PAPER ON THE ECONOMICS OF A FLU PANDEMIC – *confidence shocks and reduced employment, income matter most*

- In 2006, now-Treasury Secretary Steven Kennedy – who sits on the Reserve Bank Board and reportedly played a key role in shaping the government's fiscal response to the COVID-19 pandemic – co-wrote a Treasury paper on the economics of a flu pandemic.
- Kennedy used a macroeconomic model to analyse the economic fall-out from a pandemic. The value of the work is not so much the numerical estimates, but rather how it highlights the linkages in the economy. The results suggest that the economy enters a deep recession, with confidence effects on spending, investment and hiring and a temporary reduction in labour supply causing most of the damage.
- This means that the best macroeconomic policy response is to try to restore consumer and business confidence and promote a quick return to work. The paper also recommends supporting business cash flows, particularly in the service sector, and action that quickly stimulates demand. In this way, households and business can recover once the health crisis abates. Like past recessions, the work suggests that the labour market is slow to recover, pointing to low interest rates for an extended period.

See <https://treasury.gov.au/publication/2006-01-a-primer-on-the-macroeconomic-effects-of-an-influenza-pandemic/2006-01-a-primer-on-the-macroeconomic-effects-of-an-influenza-pandemic>

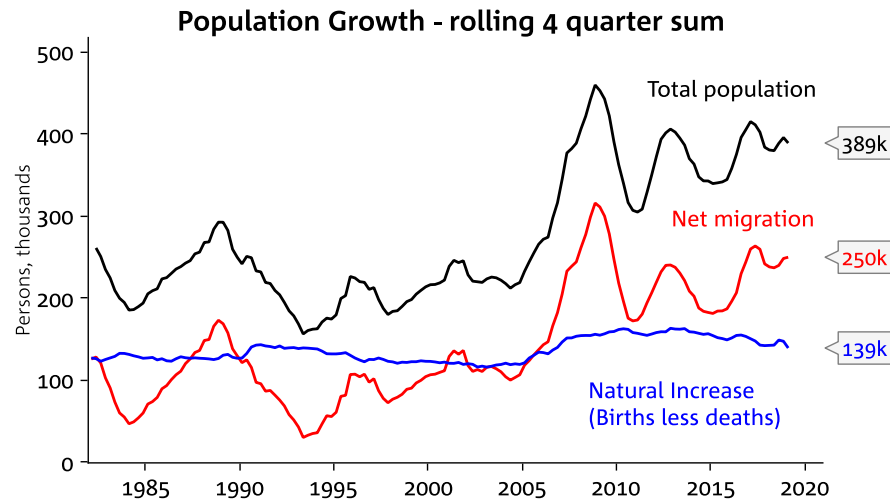
Estimated impact of a pandemic on key economic indicators by the end of the first year (relative to pre-pandemic trends)

Activity		
Consumer spending	(pp)	-12.2
Residential investment	(pp)	-16.3
Business investment	(pp)	-9.1
Net exports	(pp)	2.1
GDP	(pp)	-9.3
Labour market		
Employment	(pp)	-17.7
Labour force	(pp)	-16.9
Unemployment	(pp)	0.9
Wages/prices		
Wages	(pp)	1.9
Consumer prices	(pp)	-3.1
Other		
Terms of trade	(%)	-11.9
Budget balance	(% of GDP)	-3.5

Source: Kennedy et al (2006)

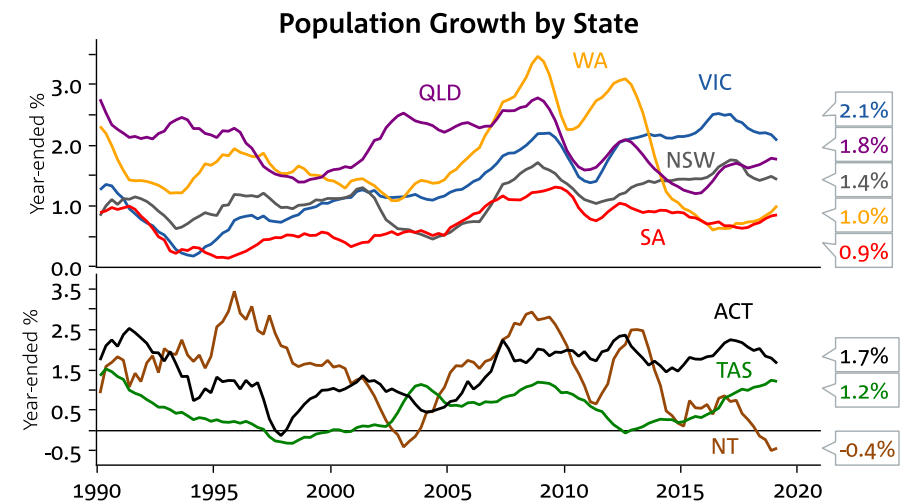
POPULATION GROWTH A BIG UNKNOWN – Was very strong and a large underpinning. Could slow sharply in the near-term for a while

AUSTRALIA'S POPULATION GROWS BY 1.3% OR 400K A YEAR



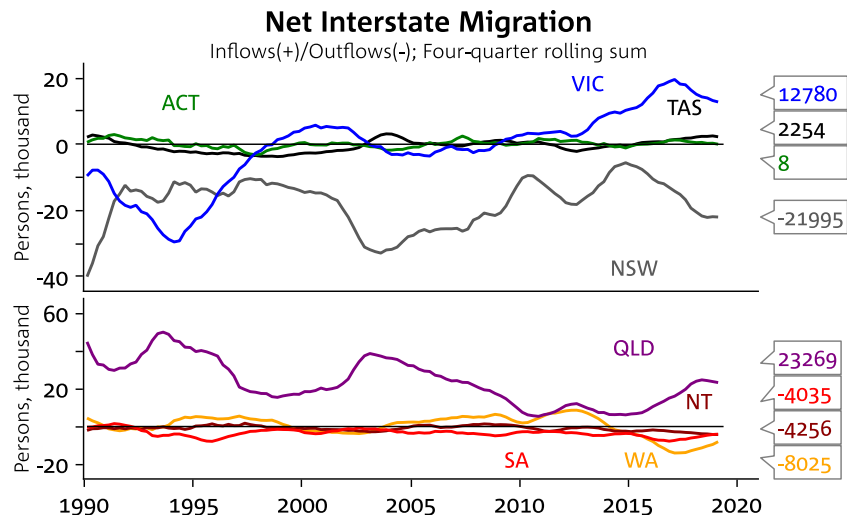
Source: National Australia Bank, ABS

WA & QLD RECOVERING, ACT & VIC EASING (STILL STRONG)



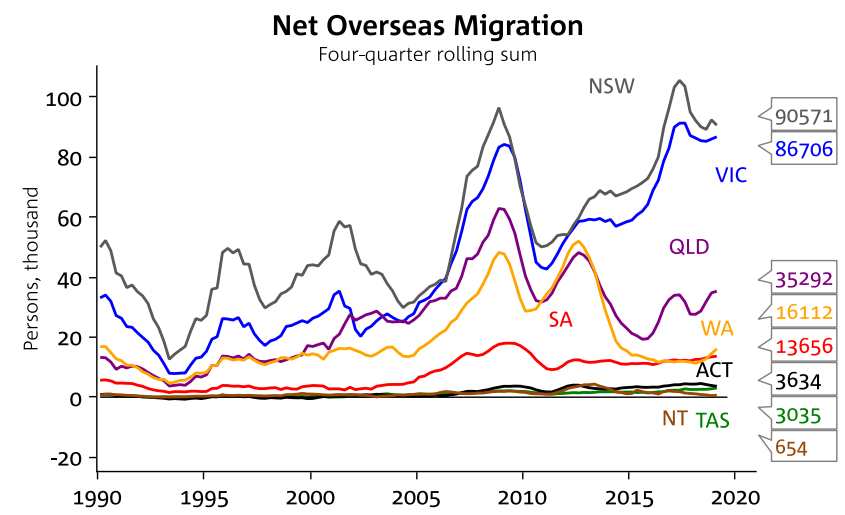
Source: National Australia Bank, ABS

INTERSTATE MIGRATION IMPORTANT NSW TO QLD/WA TO VIC



Source: National Australia Bank, ABS

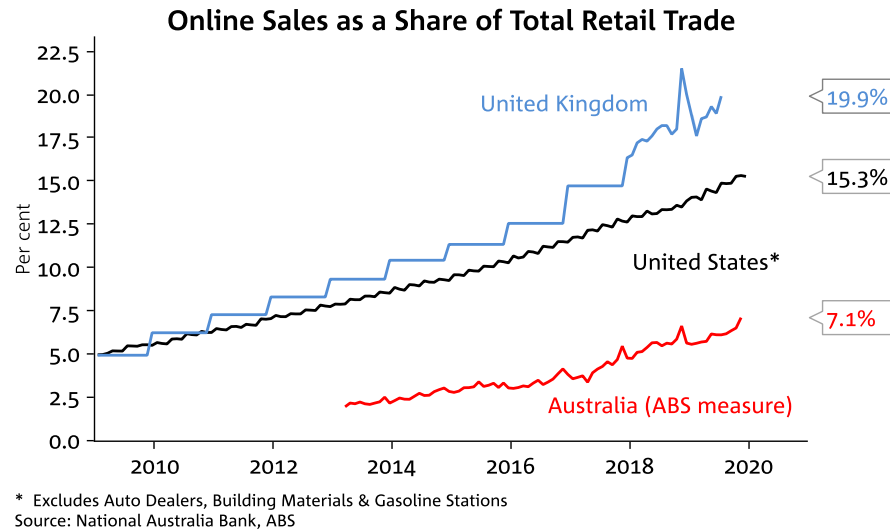
OVERSEAS MIGRATION STRONG VIC/NSW; IMPROVING WA/QLD



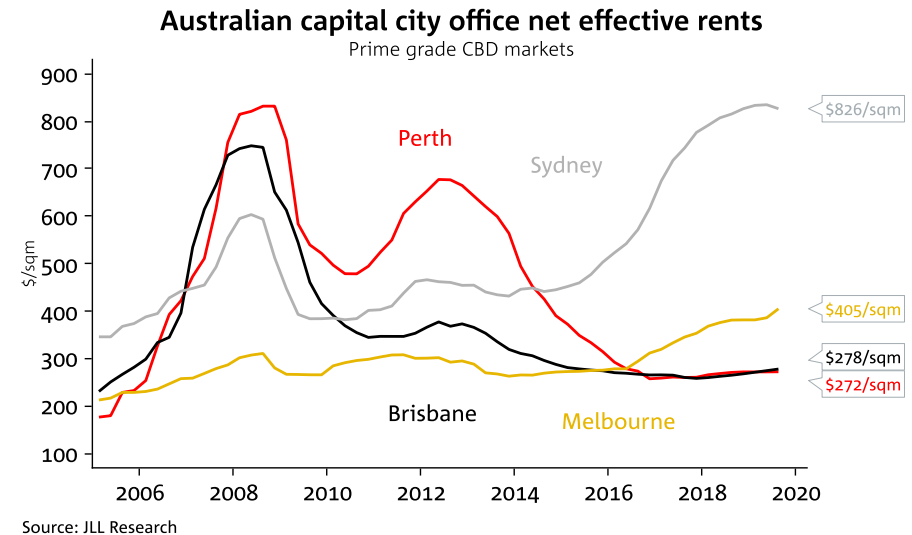
Source: National Australia Bank, ABS

STRUCTURAL CHANGES POST PANDEMIC – More online shopping, working from home may become more ingrained into society, need to hold inventory

SHIFT TO ONLINE RETAIL; WILL BE STRUCTURALLY HIGHER



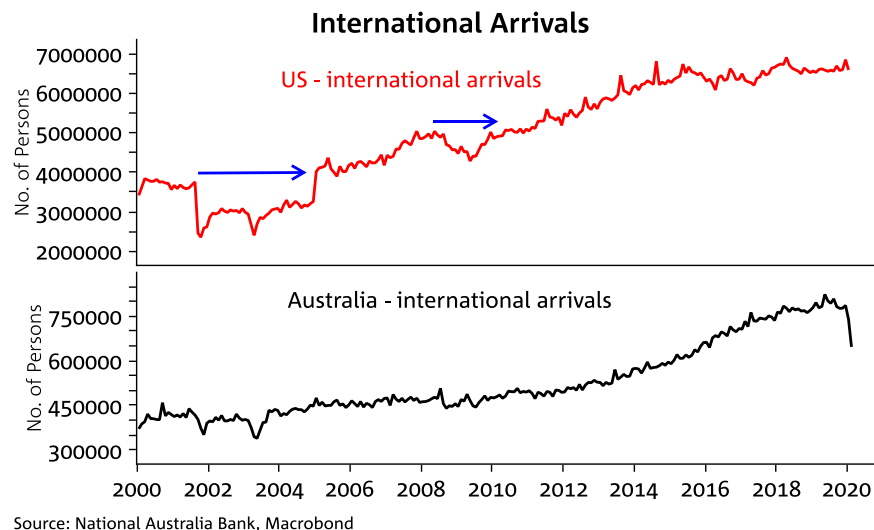
WORKING FROM HOME WILL BE MORE COMMON – OFFICE RENTS?



OTHER LIKELY DEVELOPMENTS

- Healthcare spending and restocking of healthcare supplies
- Companies will likely hold higher inventory levels
- Consumer likely to become more prudent (higher savings level for sometime)

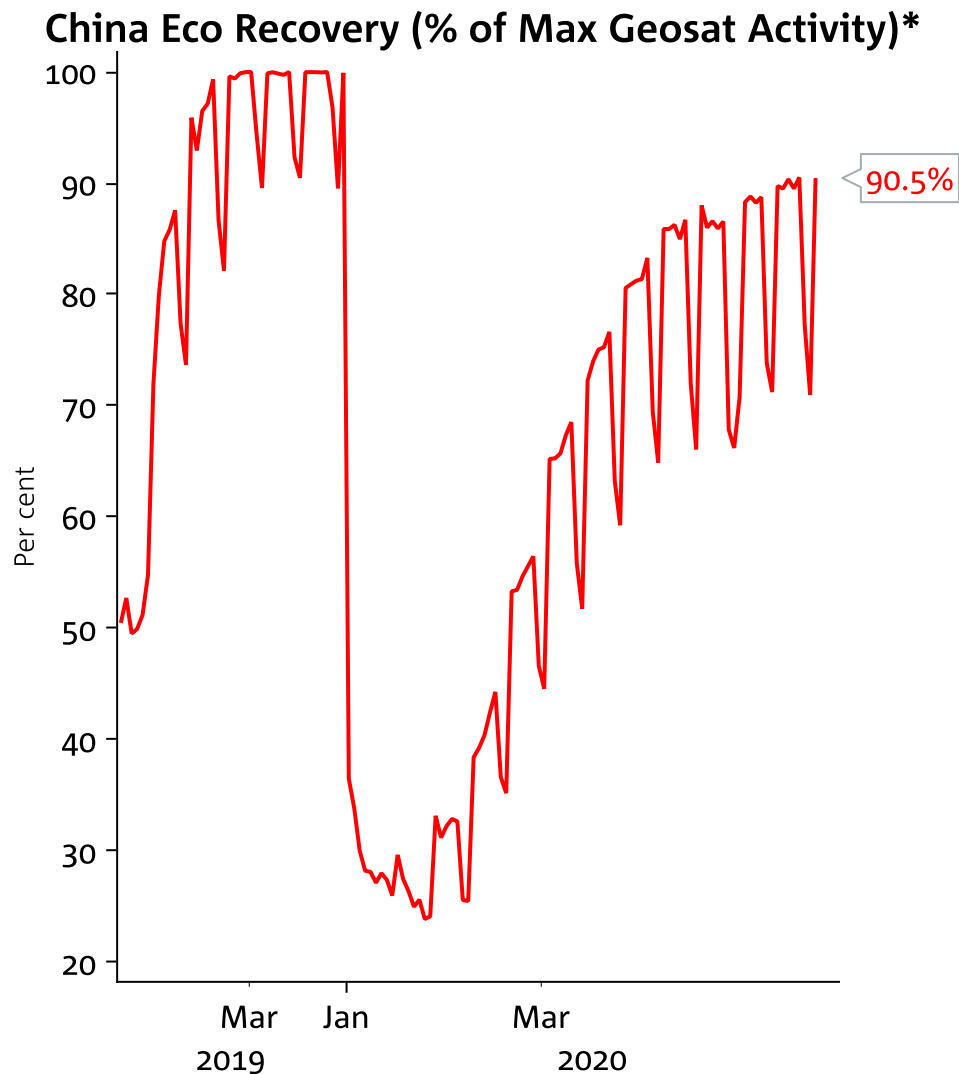
INTERNATIONAL TRAVEL WILL TAKE LONGER TO RECOVER



WHERE TO FROM HERE AFTER LOCKDOWN?

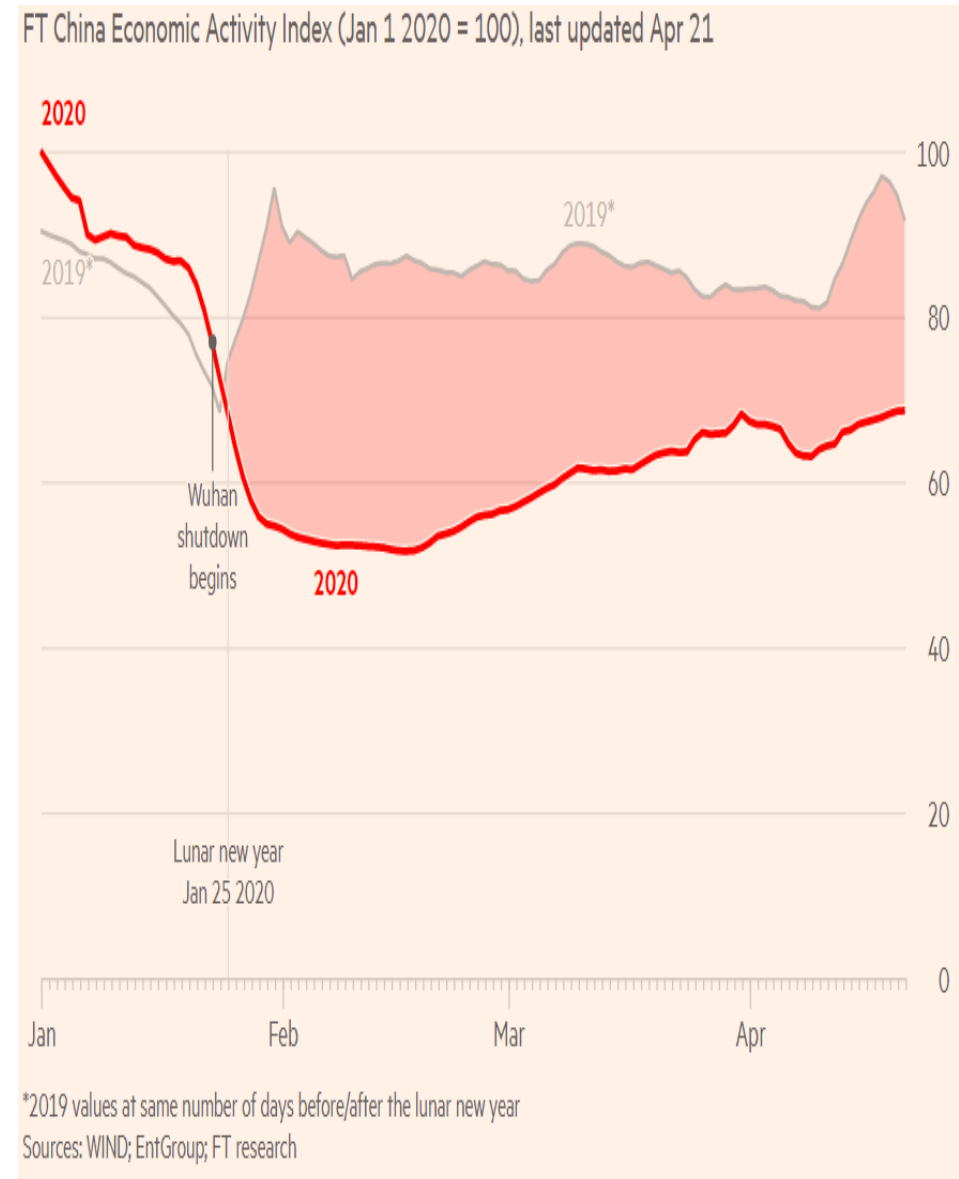
CHINA PROBABLY 70-90% BACK ONLINE – *By various different metrics, around 60-90% of the economy is back online*

SATELLITES SUGGESTS AROUND 90% AT WORK / 70% W/E



* Based on satellite and geolocation data
Source: NAB, Bloomberg

OTHER INDEXES SUGGEST MORE LIKELY 70% BACK



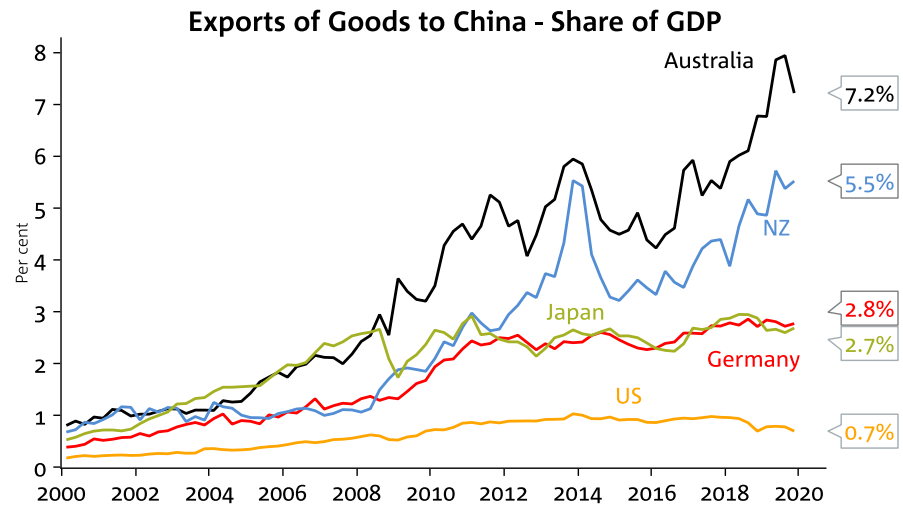
CHINA IS IMPORTANT FOR AUSTRALIA AND IS COMING BACK ONLINE – China makes up more than 30% of all our exports and around 7% of our GDP

MORE THAN 30% OF OUR EXPORTS GO TO CHINA



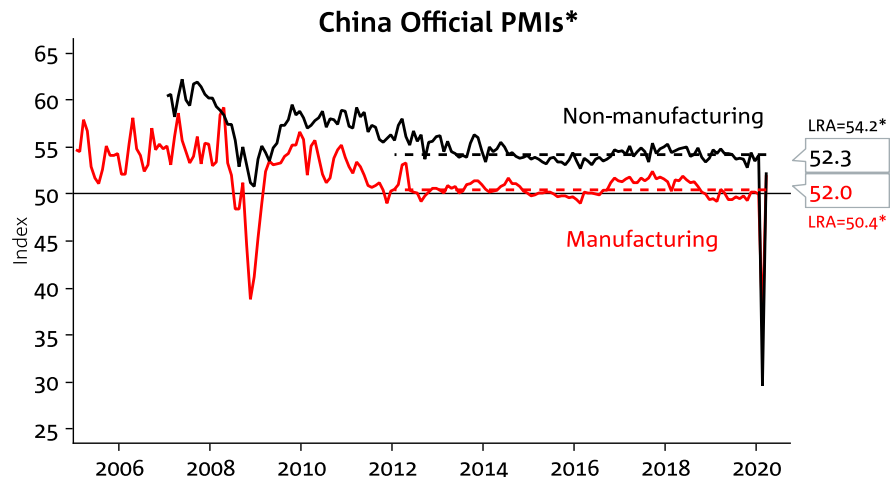
Source: National Australia Bank, Macrobond

AUSTRALIA AND NZ WILL BENEFIT FROM A CHINA RECOVERY



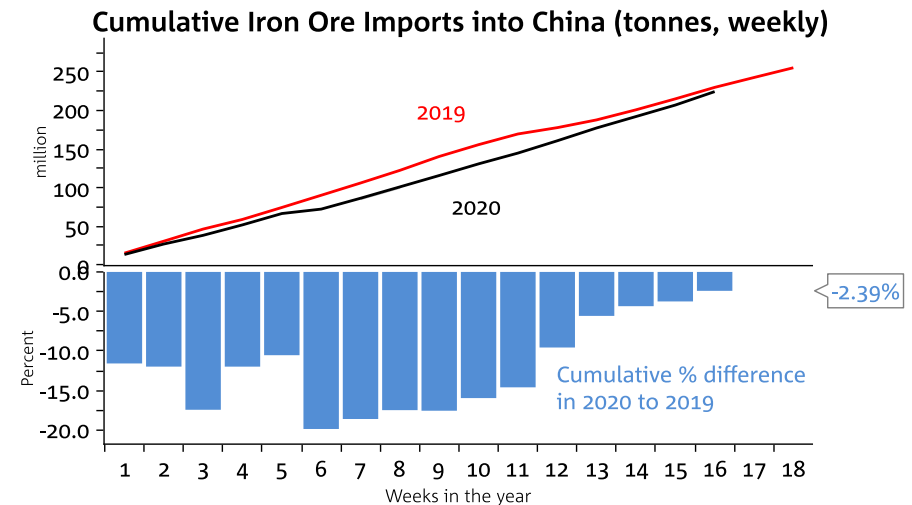
Source: National Australia Bank, Macrobond

CHINA COMING BACK ONLINE



* Long-run average since 2012
Source: NAB, IMF

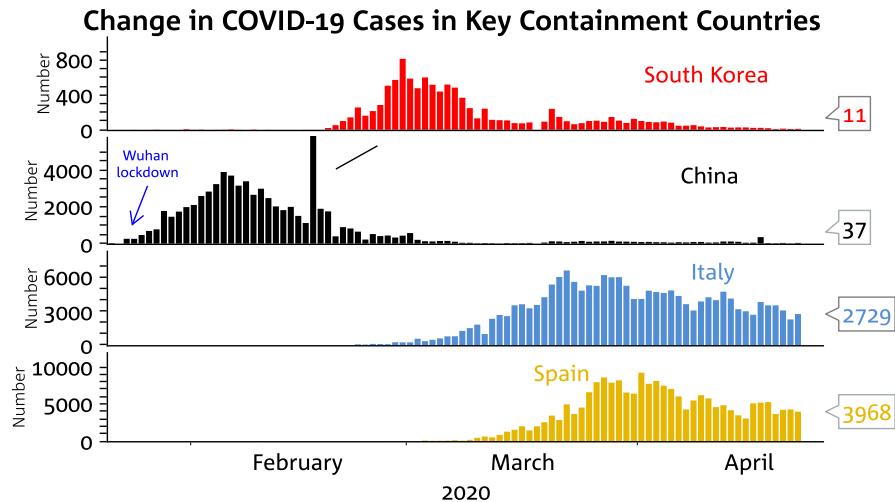
IRON ORE IMPORTS ALSO SUGGEST PRODUCTION COMING BACK



Source: National Australia Bank, Bloomberg

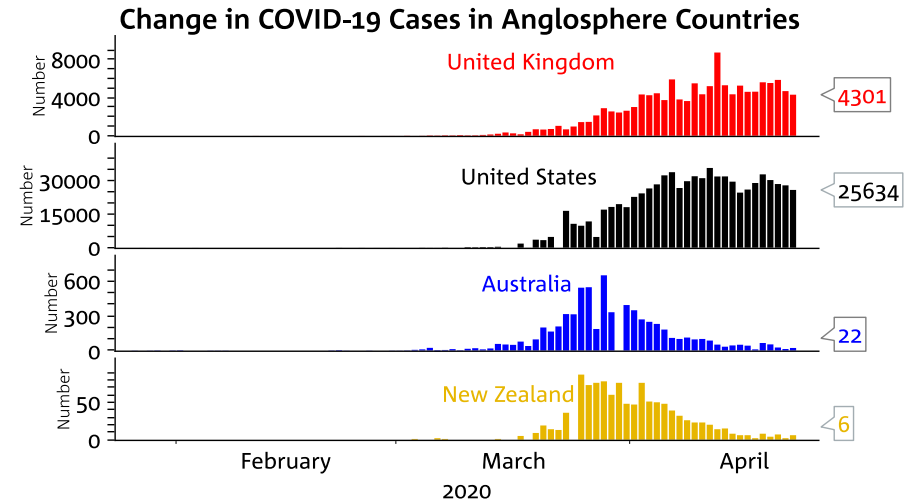
MARKETS ARE TURNING NOW – Markets are forward looking and started moving sharply once cases in Italy looked to have peaked

MARKETS WILL BE FOCUSED ON THE CHANGE IN CASES



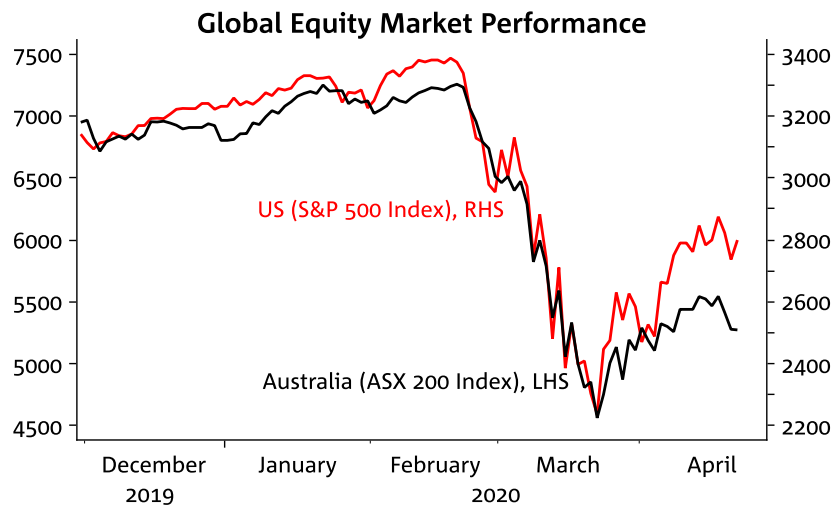
Source: National Australia Bank, Macrobond

CONTAINMENT TAKES 15-30 DAYS



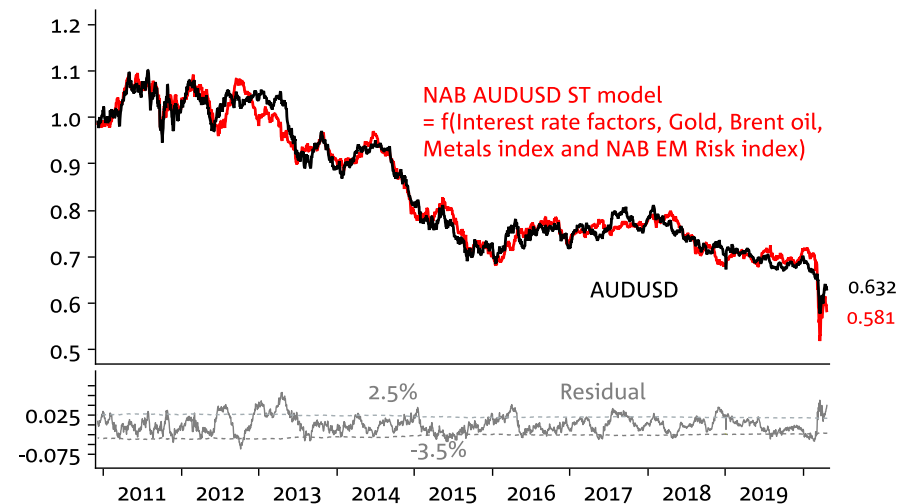
Source: National Australia Bank, WHO

EQUITIES MOVE SHARPLY ON CONTAINMENT EASING HOPES



Source: National Australia Bank, Bloomberg

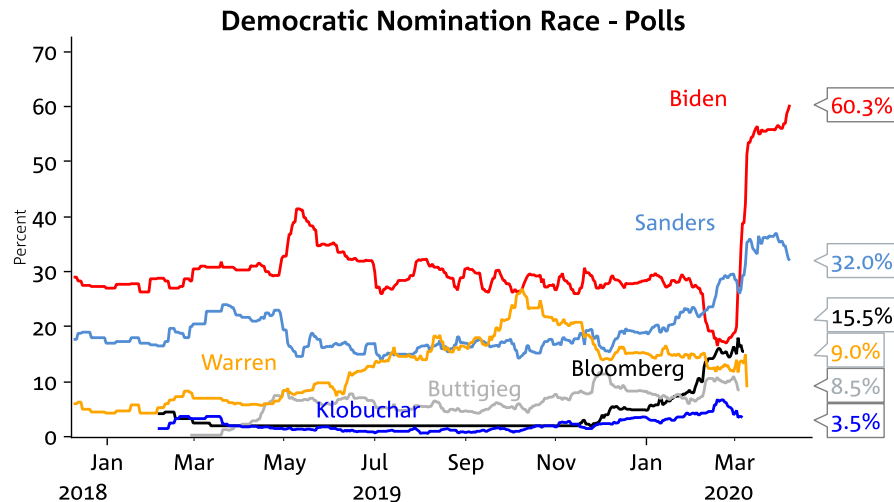
SHARP TURN HIGHER IN THE AUD, PARTLY LINKED TO CHINA



Source: National Australia Bank, Macrobond

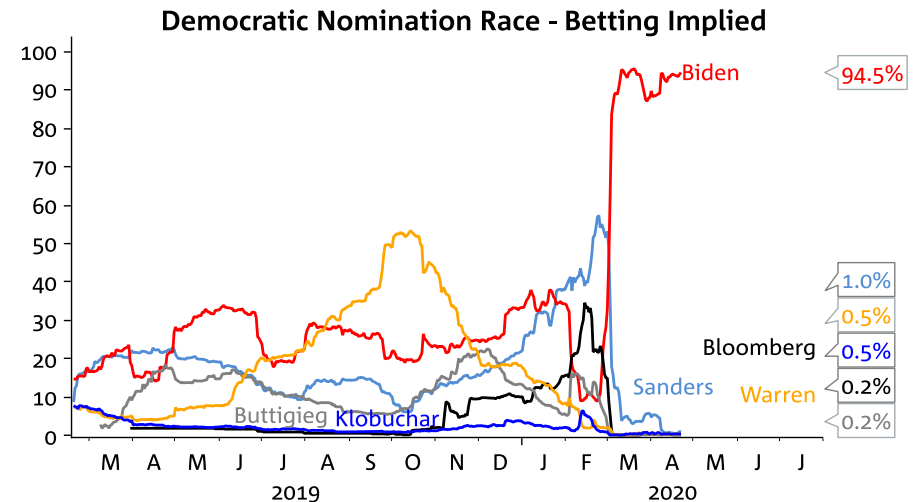
US ELECTIONS WILL BE DOMINATED BY COVID-19 RESPONSE – Biden should secure nomination, is polling well against Trump

BIDEN AND SANDERS SWITCH, BIDEN NOW FRONTRUNNER



Source: National Australia Bank, Real Clear Politics

BETTING MARKETS GIVE BIDEN A 90% CHANCE

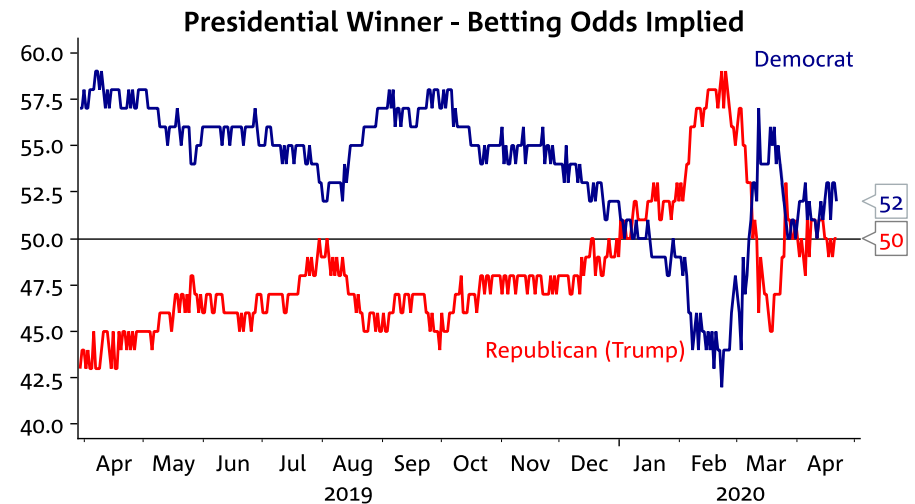


Source: National Australia Bank, Real Clear Politics

TRUMP V BIDEN, BATTLE GROUND STATES SHIFT TO BIDEN

	Trump	Biden	Sanders	Warren
Michigan		Even	Sanders +2	Trump +6
Pennsylvania		Biden +3	Sanders +1	Even
Wisconsin		Biden +3	Sanders +2	Even
Florida		Biden +2	Trump +1	Trump +4
Arizona		Biden +5	Trump +1	Warren +2
North Carolina		Trump +2	Trump +3	Trump +3

DEMOCRATS TAKE THE LEAD

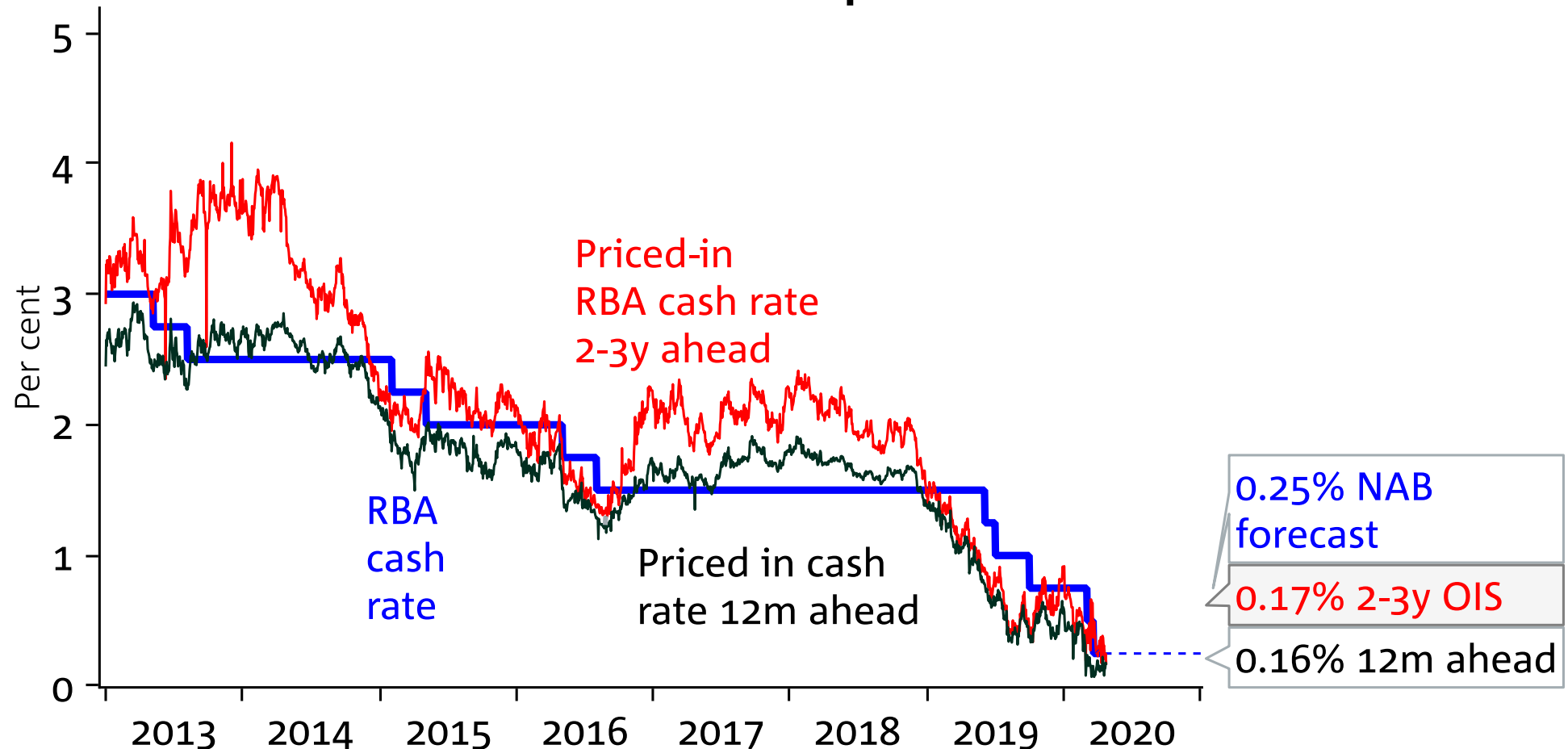


Source: National Australia Bank, PredictIT

FINANCIAL MARKETS OUTLOOK

MARKET PRICING – market pricing below RBA nominated lower bound of 0.25%
(expecting surplus cash due QE and liquidity provision – or some risk 0 or negative rates?)

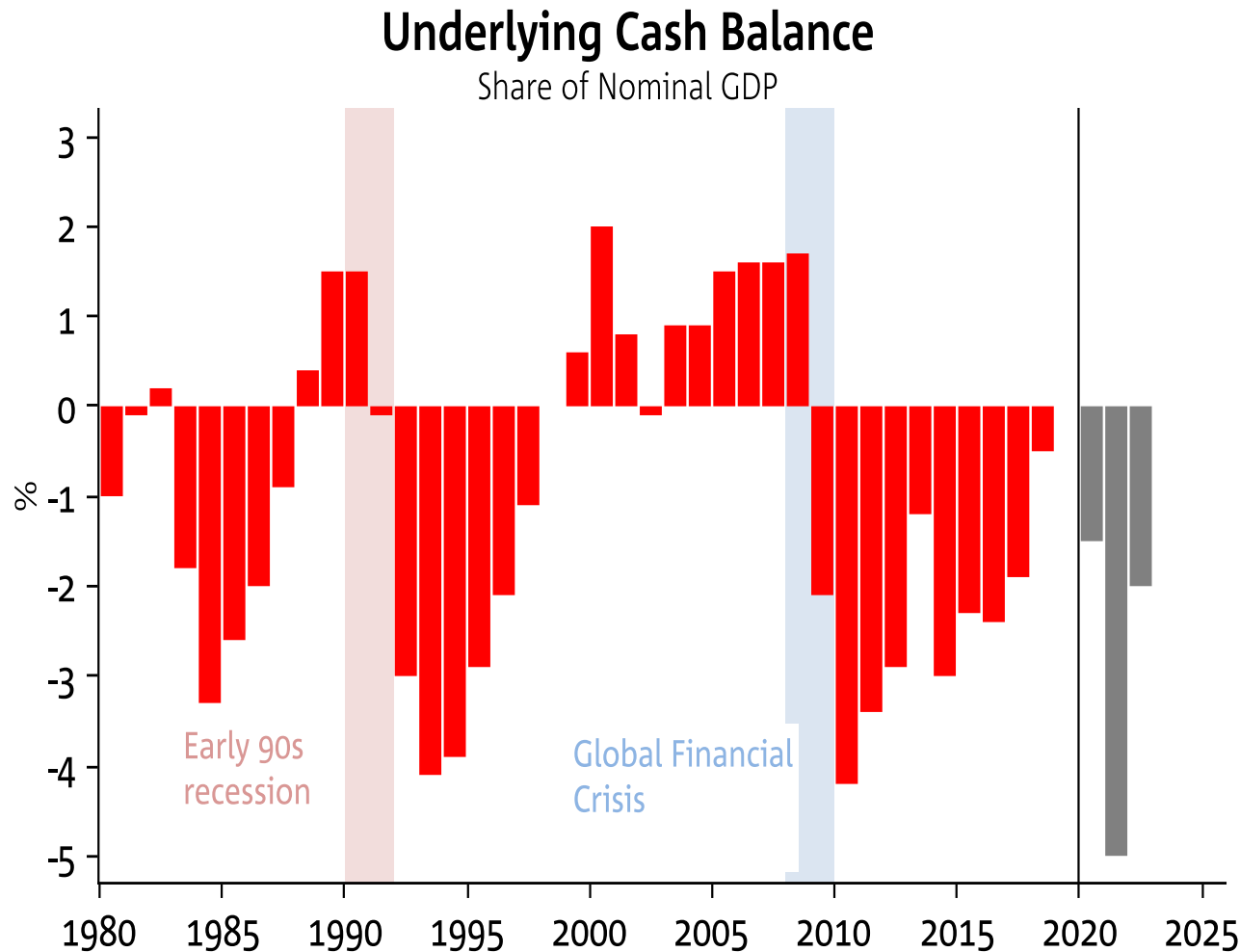
RBA Cash Rate: What's priced in



Source: National Australia Bank, Macrobond

OIS is Overnight Indexed Swaps, where the interest payment is compounded from the (overnight/daily) central bank rate

FISCAL POLICY – govt. to do whatever it takes given nature of shock. Significant budget deficits likely (risk even larger than shown). 5% of GDP is approx. \$100bn!

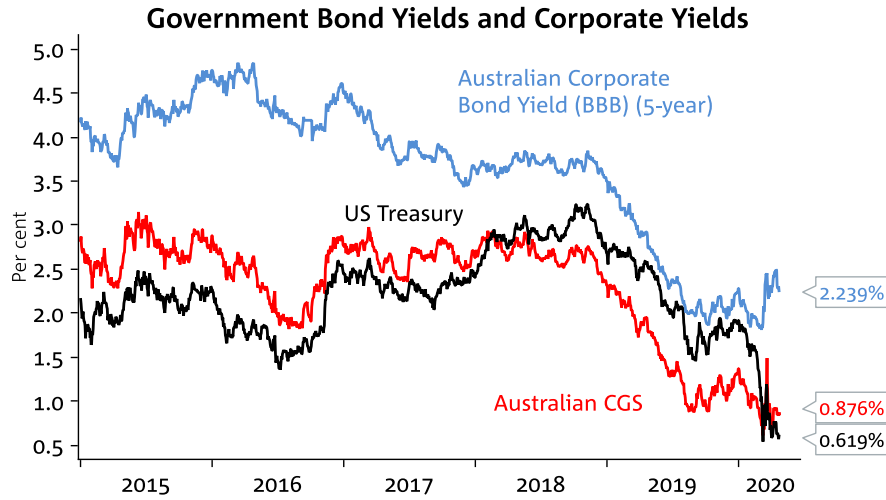


Source: National Australia Bank, Treasury

- S&P lowers Australia's credit rating outlook to AAA negative from AAA stable
- Indicative rating seems more attuned to AA+, but S&P appears to have made some supplemental adjustment.
- Clear risk of a full downgrade over the next two years given the expansion of the government deficit and the automatic stabilisers

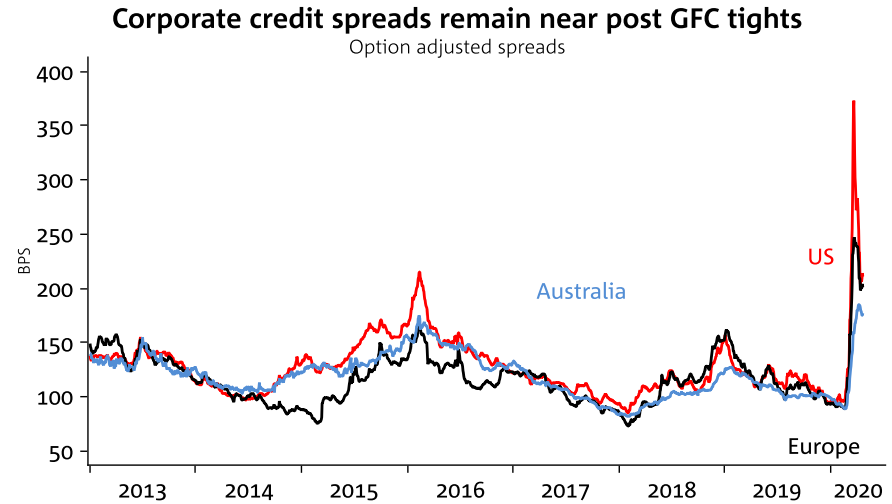
RATES – Swap rates have fallen broadly in line with government yields, though there has been a small increase in the spread in recent days

YIELDS HAVE FALLEN SHARPLY



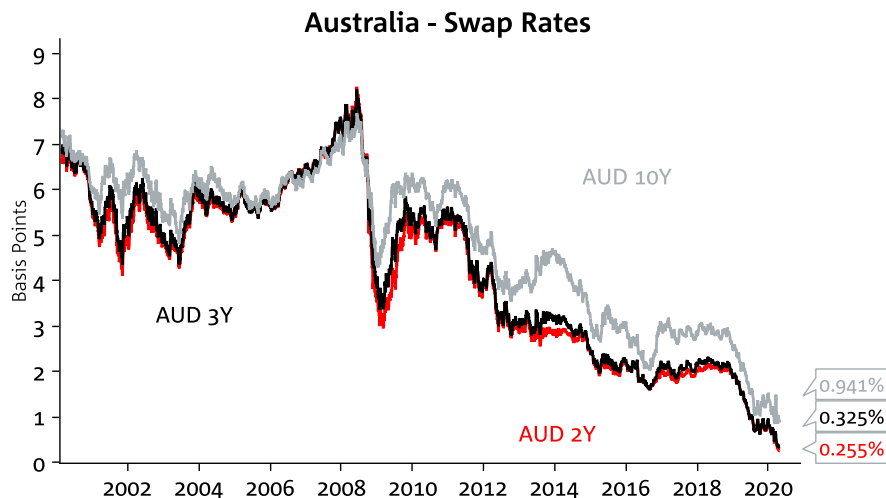
Source: National Australia Bank, Bloomberg

CORPORATE SPREADS NOW FALLING



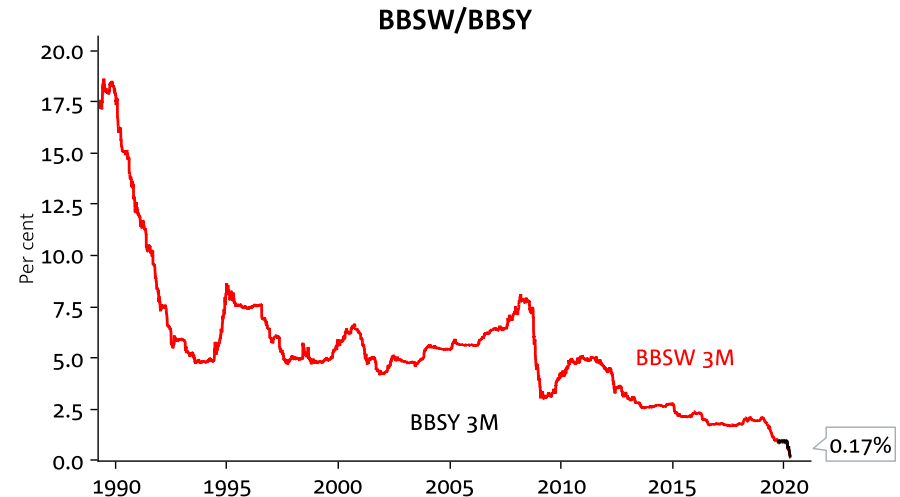
Source: Bloomberg, NAB Credit Research

SWAP RATES AT VERY LOW LEVELS



Source: National Australia Bank, Bloomberg

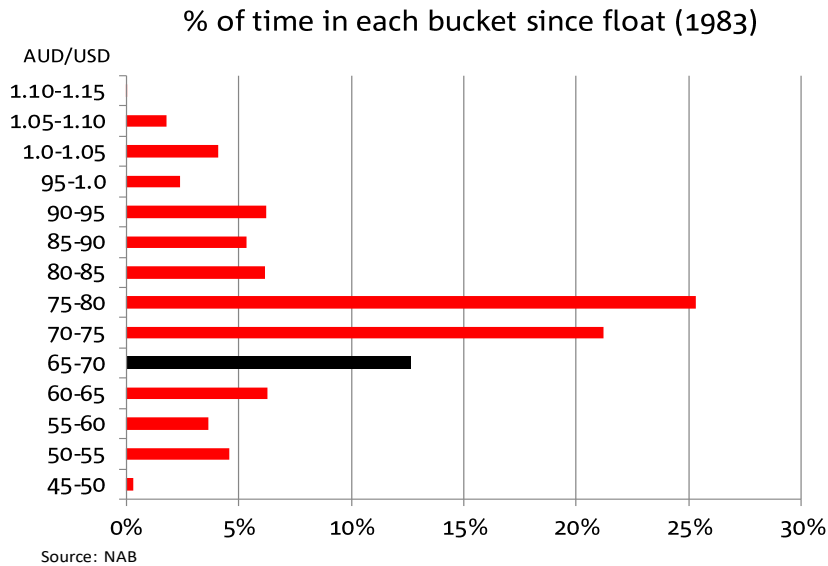
BBSW/BBSY CLOSE TO THE RBA'S 3YR YIELD TARGET



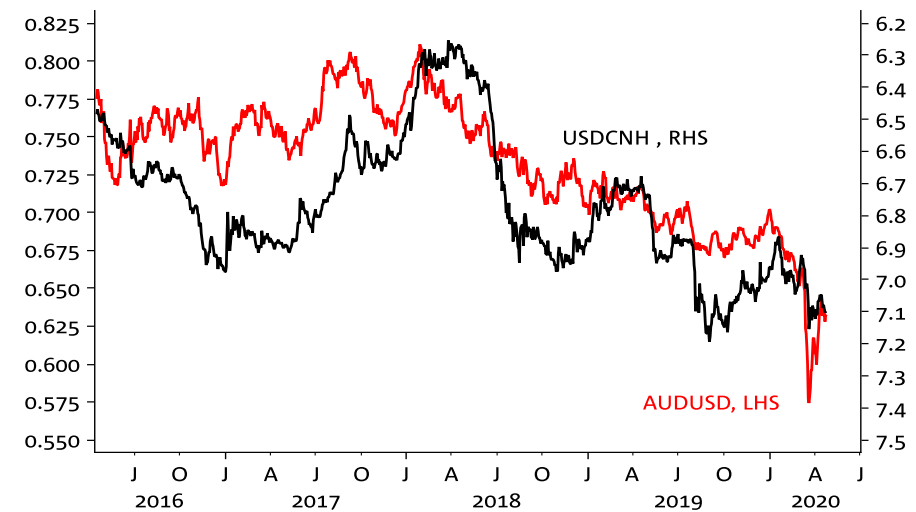
Source: National Australia Bank, Bloomberg

AUD/USD – COVID-19 and global growth fears weigh on the Australian dollar. AUD/CNY shifts with China wanting one bit of stability in its economy

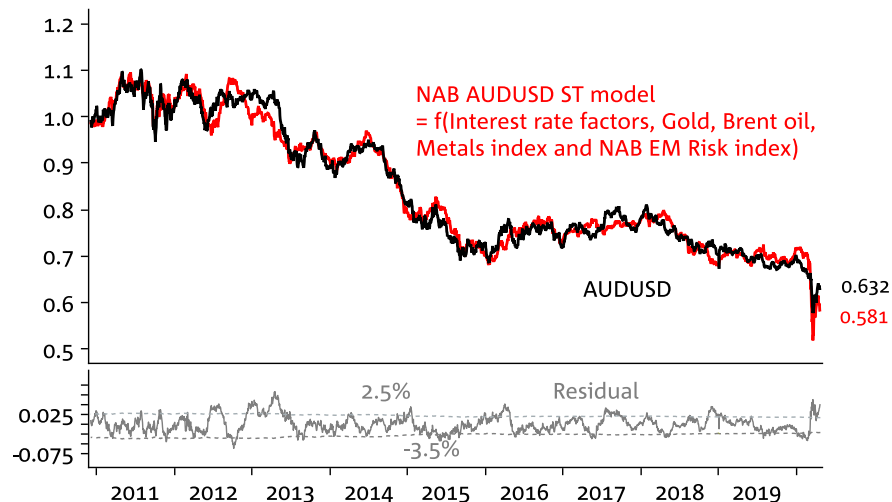
THE LIFE OF A FLOATING AUSSIE



AUD/USD DETACHES FROM CNH AND RETURNS

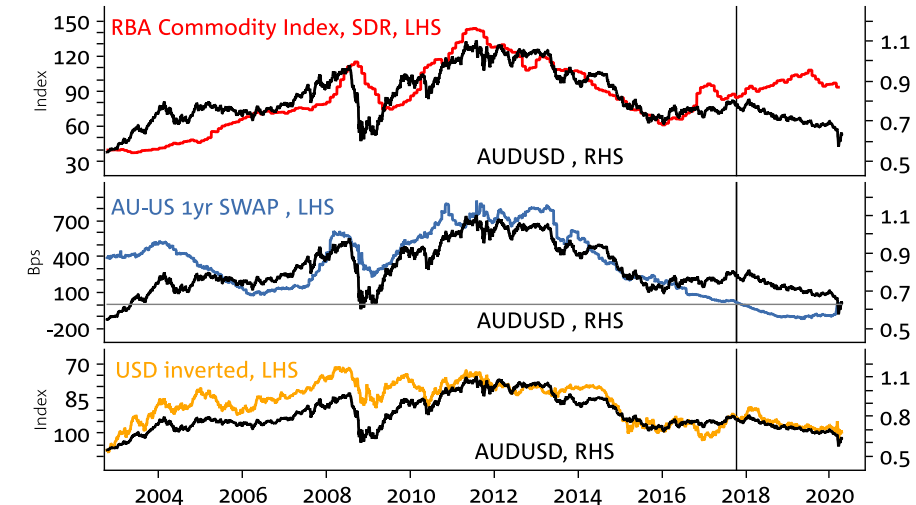


AUD TRADING ABOVE FAIR VALUE



Source: National Australia Bank, Macrobond

AUD FORTUNES LINKED TO USD, RATES AND COMMODITIES



Source: National Australia Bank, Macrobond

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- FX – Corporate FX Monthly
- Overnight Market Developments – Markets Today (available also as a Podcast)
- Economic Trends
 - Australian Markets Weekly
 - Australian and Global Economic Forecasts
 - NAB Business Survey
 - NAB Online Retail Sales; NAB Cashless Retail Sales Index
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- Commodities Research
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APPENDIX – VIRUS DETAILS

KEY RESEARCH FINDINGS ON THE DISEASE – *Mortality rate thought to be around 1-4%, highly infectious so requires extensive containment*

Mortality rate:

- Modelling suggests 0.7% mortality rate when accounting for underreporting of COVID-19 cases. Those over 80 years most susceptible with mortality rate of around 18%. Although modelled at around 1%, highly variable in practice and contingent on the quality of the healthcare system. Italy currently 11% and South Korea 1.6%.
[https://www.thelancet.com/journals/laninf/article/PIIS1473-3099\(20\)30243-7/fulltext](https://www.thelancet.com/journals/laninf/article/PIIS1473-3099(20)30243-7/fulltext) <https://www.imperial.ac.uk/media/imperial-college/medicine/sph/ide/qida-fellowships/Imperial-College-COVID19-severity-10-02-2020.pdf>

Severity of the disease:

- Data to date suggests that 20-30% of infections are asymptomatic (no symptoms), 50-60% are mild, 15% are severe requiring oxygen and 5% are critical infections, requiring ventilation https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200306-sitrep-46-covid-19.pdf?sfvrsn=96b04adf_2
- High potential to overwhelm health systems given 20% of cases are severe/critical and the reason why countries have implemented extensive containment measures to slow the spread of the infection.

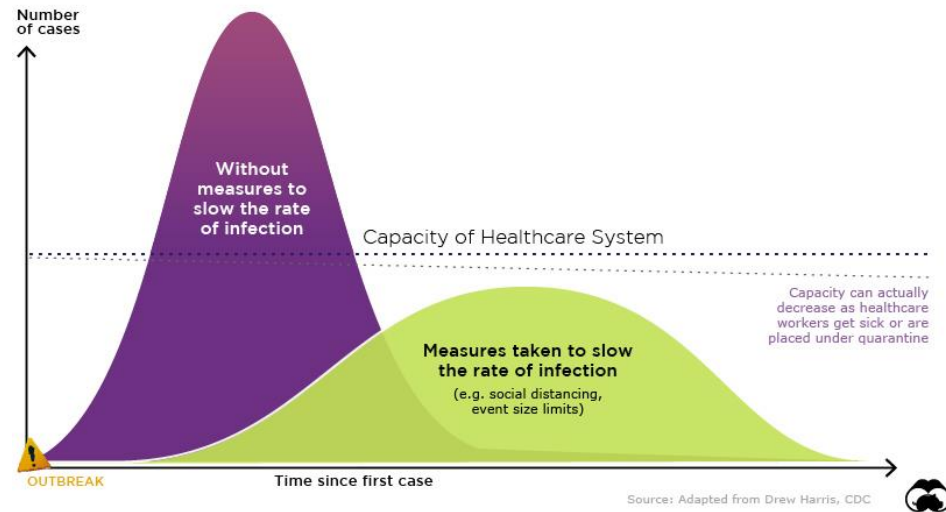
Spreadability (R_0):

- 2.6 in the early stages in Wuhan (meaning, each infected person infects 2.6 other people). Effectively means the disease will more than double each day without containment measures in place. Need to reduce to below 1 in order to effectively control the virus – successfully done in China, South Korea and Singapore.
<https://www.imperial.ac.uk/media/imperial-college/medicine/sph/ide/qida-fellowships/Imperial-College-COVID19-transmissibility-25-01-2020.pdf>
- Some researchers suggest eventually 50-60% of all people will eventually be infected. Containment thus is necessary to slow the spread until a vaccine/treatment is developed. Effective containment though should also halt the spread of the virus. The unknown factor is whether the virus will bounce back after the lifting of containment measures – China and South Korea are the ones to watch here. <https://www.imperial.ac.uk/news/196234/covid-19-imperial-researchers-model-likely-impact/>

POLICIES TO TACKLE THE VIRUS – Containment aims to slow the spread so the healthcare system is not overloaded; unclear when containment can be lifted

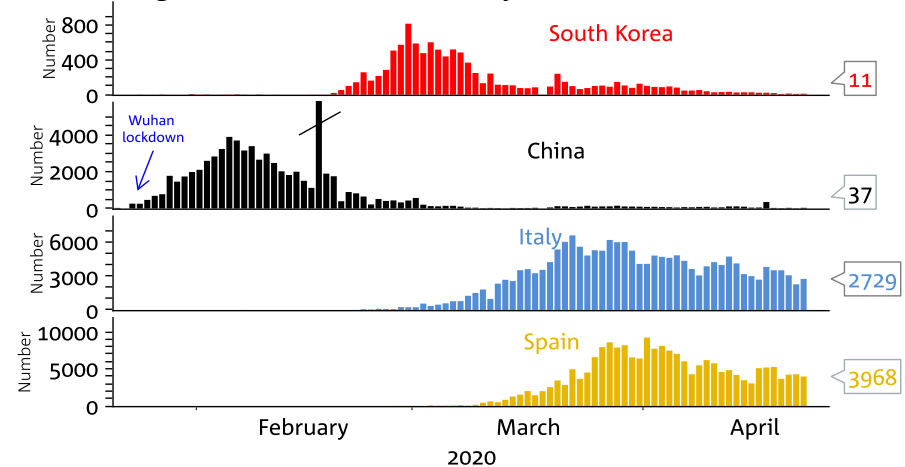
CONTAINMENT AIMS TO SLOW THE SPREAD

Flattening the COVID-19 Case Curve



CONTAINMENT TAKES 15-30 DAYS TO TAKE EFFECT

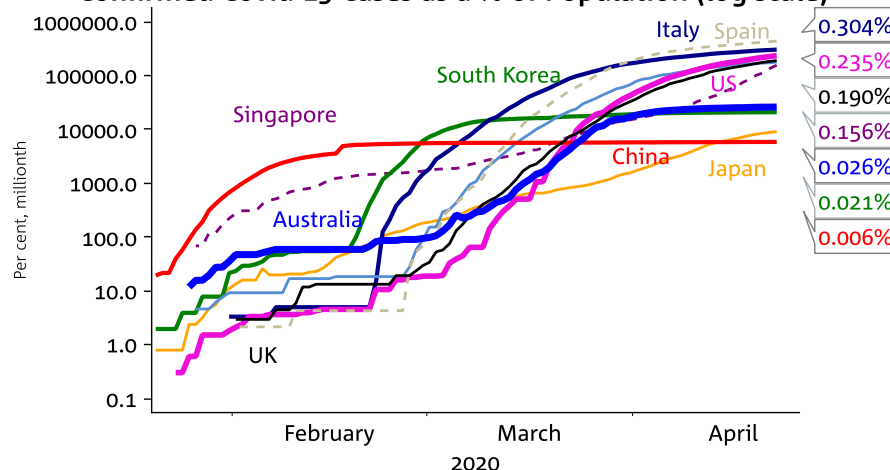
Change in COVID-19 Cases in Key Containment Countries



Source: National Australia Bank, Macrobond

CURVE IS FLATTENING IN AUSTRALIA AND IN EUROPE

Confirmed Covid-19 Cases as a % of Population (log scale)



Source: National Australia Bank, WHO

QUESTION IS CAN CONTAINMENT BE LIFTED BEFORE A VACCINE?

- ICL modelling finds: “once these interventions are relaxed, case numbers are predicted to rise. This gives rise to lower case numbers, but the risk of a later epidemic” <https://www.imperial.ac.uk/news/196234/covid-19-imperial-researchers-model-likely-impact/>
- Governments accordingly may well be cautious in lifting containment measures and this seems to be guiding the Australian government who advised such measures could be in place for 6 months.
- Watch China and South Korea to see whether you can lift containment measures. Italy for recent containment success indications.

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