



Fiordland National Park, New Zealand

Weekly Economic Commentary.

The economy at Level 4.

A four-week lockdown to counter Covid-19 is the correct decision for New Zealand, but it will cause June quarter GDP to fall by 14% and unemployment to rise to 9%. However, the recovery will be much faster than in past recessions. The mood in financial markets is calmer than a week ago, thanks to the impressive, sensible and aggressive response from the Government and Reserve Bank.

Going to Level 4 of the Covid-19 response plan, total lockdown, was the right decision for the Government to make because saving lives comes first. However, the economic cost will be severe. At Level 4, we estimate that approximately one third of economic activity will not happen.

At Level 3, where mass gatherings, public venues and some non-essential businesses are closed, but many other businesses can operate, the impact on the economy would be more like 8%. At Level 2 the main economic impact is the dearth of international tourists, and the impact on the economy is almost 4%.

What happens to GDP and employment this year will depend on which alert level we are at, and for how long. We are assuming Level 4 for four weeks and Level 3 for a

number of months. However, some regions could return to Level 4 at times, and the possibility of a nationwide return to Level 4 will make businesses and consumers cautious until Covid-19 has passed.

Our preliminary estimate is that New Zealand GDP will decline by 1% in the March quarter and 14% in the June quarter. As the lockdown is lifted there will be a large jump in economic activity as businesses reopen and as some catchup activity occurs (for example, haircuts and doctors' visits will have been delayed). We are forecasting a 9.9% lift in GDP for Q3. Stats NZ may have trouble measuring these gyrations in activity, especially given the restrictions on their own staff, so even if the true swings in GDP are huge the reported numbers may be smaller.



We estimate that annual GDP in 2020 will be 5.6% lower than 2019.

The impact on employment will be more moderate than the reduction in GDP. Most firms will hold onto their workers through the lockdown, although in industries where working arrangements are often more casual, such as hospitality, there could be more layoffs. However, the Government's enormous wage subsidy scheme will limit the job losses. Overall, we estimate that around 207,000 jobs will be lost, equating to 7% of the workforce. This would push the unemployment rate to 9% (not all of the affected workers will become unemployed, some will exit the labour force altogether).

New Zealand's housing market is currently frozen amid the lockdown, but when house sales resume prices are likely to decline. There is little reason to suppose that the long-run fundamental value of property has changed, but short-term market realities certainly have. Job losses and business failures will put fewer people in a position to buy property, and other erstwhile buyers will be too nervous to act. The plan to grant repayment holidays to mortgage borrowers affected by Covid-19 will limit forced selling, but there will still be some people whose circumstances require them to sell later this year. How far prices fall depends mainly on sentiment, which is hard to predict. For now we are pencilling in a 7% decline over the second half of 2020, based on the house price declines seen in past New Zealand recessions. Beyond 2020 we expect ultra-low interest rates and a recovering economy to slowly return house prices to their pre-Covid-19 trajectory, so we are forecasting house price inflation of 8% in 2021 and 12% 2022.

The recovery from this recession will be much faster than previous recessions, because the impediment to economic activity is temporary. This will mean a more rapid decline in unemployment and rise in GDP than, for example, after the GFC. However, a full recovery in the economy will take years. Many firms will fold during the disrupted period, and it will take time for new entrepreneurs to take their place. Other firms will be saddled with debt, making it harder to expand. Consumers will also be cautious for some time, and will take time to recover from the shock of asset prices falling like they have.

The Government's job is to backstop the economy through the Covid-19 disruption so that the recovery can be as smooth as possible, while keeping its own balance sheet reasonably intact. We have been impressed with the Government's response to date, which we think will do a lot to minimise long-term damage to the economy. Most of the Government's actions have met our three criteria for good Covid-19 policies: they should be timely, targeted and temporary.

The Government has expanded its wage subsidy scheme by removing the \$150,000 cap per business. We have heard that firms are able to access the cash within hours, and that the administration required is minimal. This will be a massive aid in keeping firms solvent and people attached to their jobs. The downside is that this policy is incredibly expensive, so the Government can't keep it up for long.

The Government is working on a loan guarantee scheme for small and medium sized businesses. Government will take 80% of the risk while the banks take 20%. Furthermore, the Government is working with banks to provide repayment holidays for mortgage holders. The success of these schemes will depend on the details, which we are yet to see, but the headlines looked sensible to us. Only the Government has a big enough balance sheet to backstop the business sector, but bringing the banks alongside to some extent will leverage the banks' credit expertise. The really positive thing about these schemes is that they won't stress the Government's balance sheet as much as the wage subsidies. Under these schemes the Government will effectively be providing bridging finance, most of which will eventually be paid back.

That is important, because in order to keep borrowing at a low interest rate the Government must demonstrate to markets that it has a plausible means of repaying the massive debt that it is going to incur as it backstops the economy through Covid-19.

Asset prices around the world have plunged to "fire sale" levels. Panicking Mum and Dad investors are switching their portfolios to cash en masse. Fund managers are therefore required to sell assets such as equities at whatever price they can get. With few buyers on the other side, the result has been heavy price declines. We seriously doubt that the long-run fundamental value of companies has fallen anywhere near as far as the declines in equity market indexes imply.

The turmoil on global financial markets has had a real impact on New Zealand, including a sudden lift in the interest rates on New Zealand Government bonds and on interbank lending. This occurred a couple of weeks ago, and left unchecked could have caused an unwanted increase in the interest rates that ordinary businesses and households pay or receive. The Reserve Bank has done a good job of calming the situation down. Its Term Auction Facility could provide virtually unlimited funding to banks if required. Its market liquidity measures have smoothed the functioning of some (but not all) financial markets. And most important, its Quantitative Easing program has provided a buyer for Government bonds, which will soon be in abundant supply due to the Government's sudden need to borrow. The rates at which banks lend to one another have fallen to roughly their normal spread over the OCR, and Government bond rates have come down substantially. In our view the Reserve Bank has done enough, for now, to keep New Zealand interest rates low and markets functioning. The mood in financial markets remains nervous, but less so than two weeks ago.



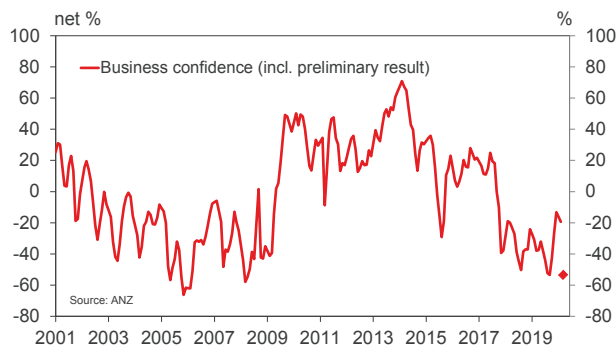
The week ahead.

NZ Mar ANZ business confidence

Mar 31, Last: -19.4, Preliminary result: -53.3

- Business confidence has fallen sharply in recent months in the face of coronavirus disruptions to economic activity domestically and abroad.
- A preliminary reading on business confidence based on the responses in the first part of the survey period (between March 2 to 9) recorded a sharp drop in headline business confidence to -53 (down from -19).
- There were related drops in all of the key activity indicators, including employment and investment intentions.
- Over the past few weeks, concerns about the coronavirus have increased and more stringent measures to contain the virus have been implemented. Those developments are likely to have reinforced the downturn in sentiment in the latter part of the survey period.

NZ business confidence

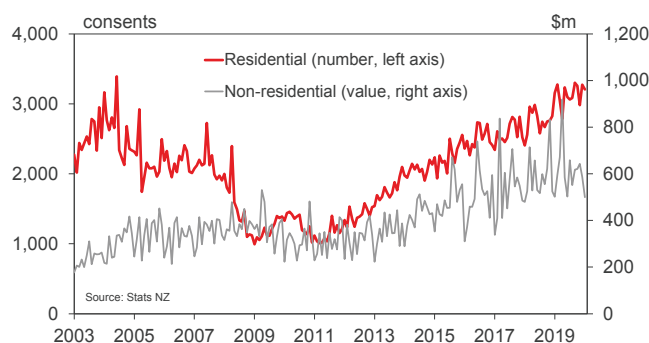


NZ Feb dwelling consents

Mar 31, Last: -2%, Westpac f/c: 4%

- Dwelling consent issuance fell 2% in January. That was a modest pull back after a large 10% rise in December.
- We're forecasting a modest 4% rise in total consents in February. That will leave annual issuance around record levels. Strength has been widespread.
- The strength in consent numbers points to a solid pipeline of building activity over the year ahead.
- However, this data predates the coronavirus lockdown in the New Zealand economy. That will delay much of the planned work. There is also the risk that some planned projects get cancelled.

NZ building consents

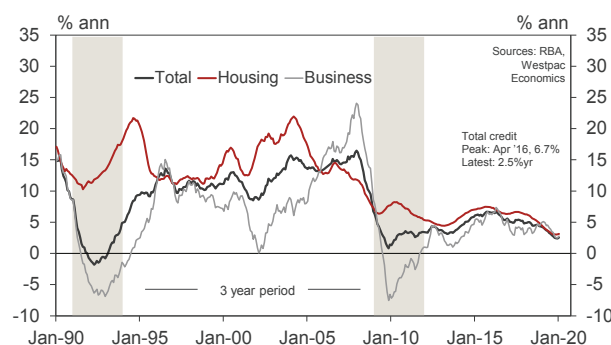


Aus Feb private credit

Mar 31, Last: 0.3%, WBC f/c: 0.3%

- Credit growth slowed to a weak pace in 2019, with annual growth of 2.4% moderating from 4.3% for 2018 - in what was a broadly based trend.
- The opening month of 2020 showed a slight uptick, credit grew by 0.3% with an emerging upswing in housing and with business volatile to the upside (recording a +0.5%).
- For February, we anticipate a further rise of 0.3%. The key risk is around business which is choppy month to month.
- Housing grew by 0.31%, 3.1% in January. Notably, credit momentum has lifted - up from a 2.7% annualised pace for the June quarter 2019 to 3.8% annualised for the month of January. This reflects the sharp rise in new lending in response to easier lending conditions.
- Business credit is subdued with the economy having slowed and holding at a sluggish pace. Annual growth was 2.5% for 2019, down from 4.7% for 2018.

Credit growth



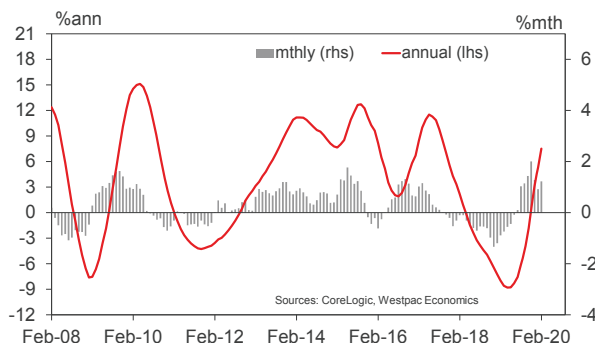
The week ahead.

Aus Mar CoreLogic home value index

Apr 1, Last: 1.2%, WBC f/c: 0.7%

- The resurgence in Australian dwelling prices that began in mid-2019 carried into early 2020, the CoreLogic home value index rising a further 1.2% in Feb to be up 7.3%yr. Prices have recovered most of their 2017-19 correction but are still 2.3% below their 2017 peak.
- March is set to see a slowdown although the full effect of coronavirus related shocks is still to come. The daily index points to a reasonably solid 0.7% gain for the March month despite a heavier lockdown on activity that looks likely to see little or no properties transact in the final week of the month. More generally, the price effects of the coronavirus economic shock may be slow to materialise given that markets are set to be virtually shut and forbearance from lenders will limit 'urgent' sales near term.

Australian dwelling prices

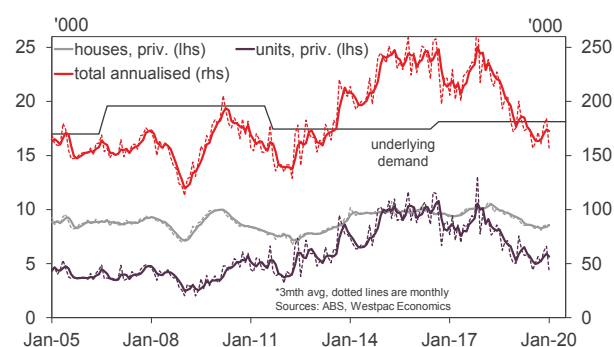


Aus Feb dwelling approvals

Apr 1, Last: -15.3%, WBC f/c: -2.5%
Mkt f/c: 4.5%, Range: -13.2% to 10.0%

- Dwelling approvals posted a much sharper than expected pull back in Jan as a spike in high rise approvals unwound and bushfire effects dragged at the margin. The detail was in line with the view of a muted upswing coming through non high rise segments but bypassing high rise.
- Feb is expected to see the start of a broader weakening as disruptions from the coronavirus outbreak start to come through. That said, the impact on the Feb month is likely to be small given the lags involved in getting a dwelling to approvals (the approval is the last sign-off before construction can commence rather than the 'development approval' that occurs much earlier in the process). On balance we expect these lags to see only a minor 2.5% pull back in approvals in the Feb month.

Dwelling approvals

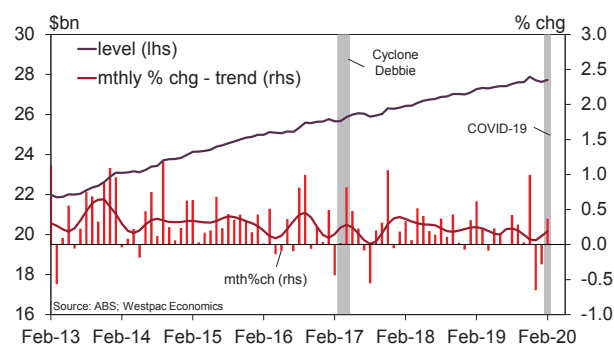


Aus Feb retail trade

Apr 3, Last: -0.3%, WBC f/c: 0.2%
Mkt f/c: 0.4%, Range: -0.1% to 0.6%

- Retail sales declined -0.3% in Jan following a -0.7% fall in Dec and a 1.0% rise in Nov. Several factors contributed to the weak read including: the continued unwind of a pull-forward in sales associated with the 'Black Friday' sales event in late Nov/early Dec; bushfires across much of the south east of Australia; and subdued consumer backdrop despite last year's tax and interest rate stimulus measures.
- The ABS has moved to releasing preliminary retail sales estimates as part of an effort to provide more timely information on the impacts of the coronavirus. Feb figures released last week showed a 0.4% rise for the month. This is based on responses covering 80% of total retail. We suspect they will be heavily skewed towards larger businesses such as supermarkets, which account for about 40% of total retail. As such, the final figure is expected to come in softer at a 0.2% rise.

Monthly retail sales



The week ahead.

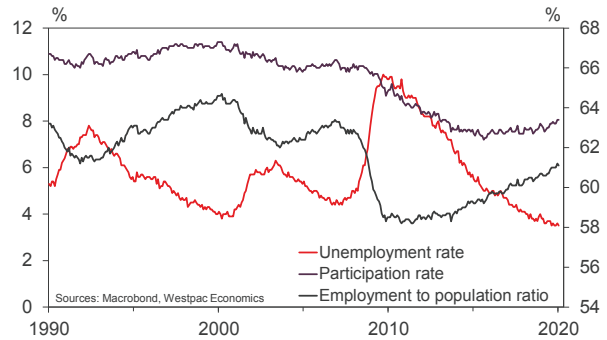
March US employment report

Apr 3, nonfarm payrolls: last: 273k, WBC: -150k

Apr 3, unemployment rate: last: 3.5%, WBC: 4.0%

- The coronavirus is set to result in a dramatic turn in the US labour market after a protracted period near 50-year lows for the unemployment rate. A 3 million increase in initial claims in the most-recent print to 3.3mn highlights both the speed and scale of the deterioration upon the US, particularly versus the prior peak of 695k in 1982.
- While most of the deterioration will be seen in the April employment report rather than March, this month is still likely to see a jolt higher in the unemployment rate to around 4.0%, depending on what happens to the participation rate.
- Hourly earnings will hold up in the near term, but as slack in the labour market increases in coming months, wage rates will also come under pressure. This will create a second shock for US households, in addition to job loss.

US' labour market strength to disappear

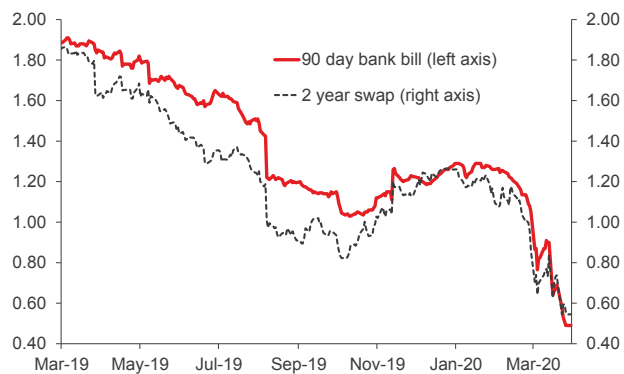


New Zealand forecasts.

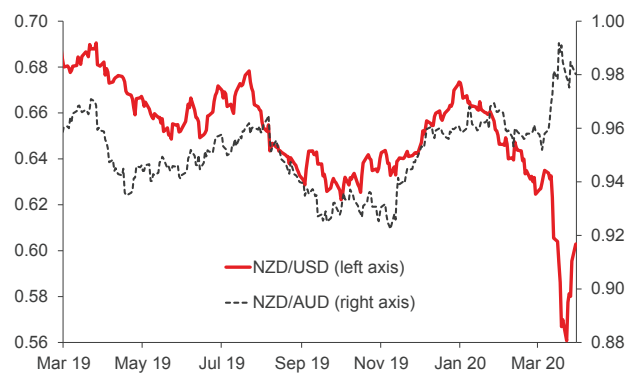
Economic forecasts	Quarterly				Annual			
	2019	2020			2018	2019	2020f	2021f
% change	Dec (a)	Mar	Jun	Sep				
GDP (Production)	0.5	-1.0	-14.0	9.9	3.2	2.3	-5.6	6.7
Employment	0.0	-0.9	-6.8	3.6	1.9	1.0	-2.4	3.6
Unemployment Rate % s.a.	4.0	4.7	9.0	8.0	4.3	4.0	7.0	5.6
CPI	0.5	0.5	0.4	0.9	1.9	1.9	2.3	1.0
Current Account Balance % of GDP	-3.0	-3.0	-3.5	-3.7	-3.8	-3.0	-4.1	-3.3

Financial forecasts	Jun-20	Sep-20	Dec-20	Mar-21	Jun-21	Sep-21
Cash	0.25	0.25	0.25	0.25	0.25	0.25
90 Day bill	0.40	0.40	0.40	0.40	0.40	0.40
2 Year Swap	0.60	0.60	0.60	0.65	0.70	0.80
5 Year Swap	0.70	0.75	0.80	0.90	1.00	1.10
10 Year Bond	1.00	1.00	1.00	1.05	1.10	1.20
NZD/USD	0.60	0.62	0.64	0.65	0.65	0.66
NZD/AUD	0.97	0.97	0.96	0.96	0.96	0.95
NZD/JPY	63.0	65.1	67.2	68.9	69.6	70.7
NZD/EUR	0.57	0.60	0.61	0.61	0.61	0.61
NZD/GBP	0.52	0.53	0.53	0.53	0.53	0.53
TWI	68.0	69.6	70.9	71.4	71.2	71.3

2 year day swap and 90 day bills



NZD/USD and NZD/AUD



NZ interest rates as at market open on 30 March 2020

Interest rates	Current	Two weeks ago	One month ago
Cash	0.25%	1.00%	1.00%
30 Days	0.36%	1.00%	1.08%
60 Days	0.43%	0.95%	1.07%
90 Days	0.49%	0.90%	1.05%
2 Year Swap	0.55%	0.84%	0.86%
5 Year Swap	0.66%	0.95%	0.89%

NZ foreign currency mid-rates as at 30 March 2020

Exchange rates	Current	Two weeks ago	One month ago
NZD/USD	0.6028	0.5961	0.6217
NZD/EUR	0.5421	0.5466	0.5635
NZD/GBP	0.4850	0.4854	0.4857
NZD/JPY	64.90	63.98	66.76
NZD/AUD	0.9802	0.9726	0.9594
TWI	68.90	68.55	69.87

Data calendar.

		Last	Market median	Westpac forecast	Risk/Comment
Mon 30					
Eur	Mar economic confidence	103.5	93.1	-	The hits to confidence to keep coming.
US	Feb pending home sales	5.2%	-1.8%	-	Demand and supply will restrict sales hence.
	Mar Dallas Fed index	1.2	-9.5	-	Manufacturing to be hit hard in coming months.
Tue 31					
Aus	Feb private sector credit	0.3%	0.3%	0.3%	Housing up off a low base, business volatile around subdued trend.
NZ	Feb building permits	-2.0%	-	4.0%	Broad based strength in planned home building.
	Mar ANZ business confidence	-19.4	-	-	Preliminary results signal a sharp fall in confidence.
Jpn	Feb industrial production	1.0%	0.1%	-	Bounce in activity to take time.
Chn	Mar manufacturing PMI	35.7	44.8	-	Through Mar, anecdotes have pointed to a...
	Mar non-manufacturing PMI	29.6	46.0	-	... gradual trend towards normal conditions.
Eur	Mar CPI %yr	1.2%	0.8%	-	Inflation to take a distant back seat to recession & instability.
UK	Mar GfK consumer sentiment	-7	-13	-	Will be hit hard by COVID-19's spread and restrictions.
	Q4 GDP, final	0.0%	0.0%	-	Recession a certainty in 2020.
US	Jan S&P/CS home price index	0.43%	0.40%	-	As unemployment rises, prices likely to decline.
	Mar Chicago PMI	49.0	44.0	-	Manufacturing to be hit hard in coming months.
	Mar consumer confidence index	130.7	115.0	-	Uni. of Michigan showed material deterioration.
Wed 01					
Aus	RBA Minutes	-	-	-	From Ad Hoc meeting on March 18th.
	Mar AiG PMI	44.3	-	-	Near 5 year low for manuf'g. Weak orders - drought, bushfires.
	Mar CoreLogic home value index	1.2%	-	0.7%	Uptrend continued pre shut-downs, but growth pace easing.
	Feb dwelling approvals	-15.3%	4.5%	-2.5%	Disruptions (bushfires and COVID-19) could see a further fall.
Jpn	Q1 Tankan large manuf'g index	0	-10	-	Japan's corporates to be highly cautious over outlook.
Chn	Mar Caixin China PMI	40.3	46.0	-	Return to 'normal' likely in Apr in China...
Asia	Mar Nikkei manufacturing PMI	-	-	- but it is set to take much longer elsewhere in Asia...
Eur	Mar Markit manufacturing PMI	44.8	44.6	-	... and all the more in Europe/ US.
	Feb unemployment rate	7.4%	7.4%	-	Job loss will turn the unemployment trend in months ahead.
US	Mar ADP employment change, '000	183	-100	-150	Claims points to a big shock in coming months
	Feb construction spending	1.8%	0.6%	-	Investment will deteriorate through 2020.
	Mar ISM manufacturing	50.1	46.0	-	Surprised in Feb, but will deteriorate in Mar.
Thu 02					
US	Feb trade balance US\$bn	-45.3	-43.6	-	COVID-19's effects will delay a clear read for many months.
	Initial jobless claims, '000	-3,283	-	-	A further deterioration is expected.
	Feb factory orders	-0.5%	-0.3%	-	Core durable orders remained weak in Feb.
Fri 03					
Aus	Mar AiG PCI	42.7	-	-	Construction contracting, led by housing.
	Feb retail sales	-0.3%	0.4%	0.2%	Preliminary reading was a 0.4%, final cou
Chn	Mar Caixin China PMI services	26.5	39.5	-	Restrictions remained in place in Mar, but will lift in Apr.
Eur	Mar Markit services PMI	28.4	28.2	-	Final estimate. Flash was a shock, well below GFC low.
US	Mar non-farm payrolls, '000'	273	-61	-150	The deterioration in employment and rise in unemployment...
	Mar unemployment rate	3.5%	3.8%	4.0%	... will be dramatic...
	Mar average hourly earnings %mth	0.3%	0.2%	-	... and, in time, will hit wage momentum as well.

International forecasts.

Economic forecasts (Calendar years)	2016	2017	2018	2019	2020f	2021f
Australia						
Real GDP % yr	2.8	2.5	2.7	1.8	-2.3	2.9
CPI inflation % annual	1.5	1.9	1.8	1.8	1.5	2.4
Unemployment %	5.7	5.5	5.0	5.2	9.6	8.1
Current Account % GDP	-3.1	-2.6	-2.1	0.5	-0.5	-1.8
United States						
Real GDP %yr	1.6	2.4	2.9	2.3	-1.0	1.1
Consumer Prices %yr	1.4	2.1	2.4	1.8	1.9	1.9
Unemployment Rate %	4.9	4.1	3.8	3.5	8.1	7.7
Current Account %GDP	-2.3	-2.3	-2.3	-2.6	-2.5	-2.4
Japan						
Real GDP %yr	0.6	1.9	0.8	0.7	-0.8	0.2
Euro zone						
Real GDP %yr	1.9	2.5	1.9	1.2	-2.0	0.5
United Kingdom						
Real GDP %yr	1.8	1.8	1.4	1.3	0.2	0.8
China						
Real GDP %yr	6.7	6.8	6.6	6.1	4.1	7.2
East Asia ex China						
Real GDP %yr	4.0	4.5	4.3	3.6	2.9	3.7
World						
Real GDP %yr	3.4	3.8	3.6	3.0	1.7	3.3

Forecasts finalised 20 March 2020

Interest rate forecasts	Latest	Jun-20	Sep-20	Dec-20	Mar-21	Jun-21	Sep-21	Dec-21
Australia								
Cash	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
90 Day BBSW	0.43	0.45	0.45	0.45	0.50	0.50	0.50	0.50
10 Year Bond	0.93	0.80	0.75	0.75	0.80	0.85	0.90	0.95
United States								
Fed Funds	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125
US 10 Year Bond	0.81	0.75	0.70	0.75	0.80	0.85	0.90	1.00

Exchange rate forecasts	Latest	Jun-20	Sep-20	Dec-20	Mar-21	Jun-21	Sep-21	Dec-21
AUD/USD	0.6075	0.62	0.64	0.67	0.68	0.68	0.69	0.70
USD/JPY	108.64	107	105	105	106	107	108	110
EUR/USD	1.1048	1.05	1.04	1.05	1.06	1.07	1.08	1.10
GBP/USD	1.2200	1.16	1.18	1.20	1.22	1.23	1.24	1.25
USD/CNY	7.0727	6.90	6.85	6.80	6.75	6.75	6.70	6.60
AUD/NZD	1.0168	1.03	1.03	1.05	1.05	1.05	1.05	1.06

Contact the Westpac economics team.

Dominick Stephens, Chief Economist

+64 9 336 5671

Michael Gordon, Senior Economist

+64 9 336 5670

Satish Ranchhod, Senior Economist

+64 9 336 5668

Paul Clark, Industry Economist

+64 9 336 5656

Any questions email:

electronics@westpac.co.nz

Past performance is not a reliable indicator of future performance. The forecasts given in this document are predictive in character. Whilst every effort has been taken to ensure that the assumptions on which the forecasts are based are reasonable, the forecasts may be affected by incorrect assumptions or by known or unknown risks and uncertainties. The ultimate outcomes may differ substantially from these forecasts.

Disclaimer.

Things you should know

Westpac Institutional Bank is a division of Westpac Banking Corporation ABN 33 007 457 141 ("Westpac").

Disclaimer

This material contains general commentary, and market colour. The material does not constitute investment advice. Certain types of transactions, including those involving futures, options and high yield securities give rise to substantial risk and are not suitable for all investors. We recommend that you seek your own independent legal or financial advice before proceeding with any investment decision. This information has been prepared without taking account of your objectives, financial situation or needs. This material may contain material provided by third parties. While such material is published with the necessary permission none of Westpac or its related entities accepts any responsibility for the accuracy or completeness of any such material. Although we have made every effort to ensure the information is free from error, none of Westpac or its related entities warrants the accuracy, adequacy or completeness of the information, or otherwise endorses it in any way. Except where contrary to law, Westpac and its related entities intend by this notice to exclude liability for the information. The information is subject to change without notice and none of Westpac or its related entities is under any obligation to update the information or correct any inaccuracy which may become apparent at a later date. The information contained in this material does not constitute an offer, a solicitation of an offer, or an inducement to subscribe for, purchase or sell any financial instrument or to enter a legally binding contract. Past performance is not a reliable indicator of future performance. Whilst every effort has been taken to ensure that the assumptions on which the forecasts are based are reasonable, the forecasts may be affected by incorrect assumptions or by known or unknown risks and uncertainties. The ultimate outcomes may differ substantially from these forecasts.

Country disclosures

Australia: Westpac holds an Australian Financial Services Licence (No. 233714). This material is issued for you solely for your own use and in your capacity as a wholesale client of Westpac.

New Zealand: In New Zealand, Westpac Institutional Bank refers to the brand under which products and services are provided by either Westpac or Westpac New Zealand Limited ("WNZL"). Any product or service made available by WNZL does not represent an offer from Westpac or any of its subsidiaries (other than WNZL). Neither Westpac nor its other subsidiaries guarantee or otherwise support the performance of WNZL in respect of any such product. The current disclosure statements for the New Zealand branch of Westpac and WNZL can be obtained at the internet address www.westpac.co.nz. For further information please refer to the Product Disclosure Statement (available from your Relationship Manager) for any product for which a Product Disclosure Statement is required, or applicable customer agreement. Download the Westpac NZ QF Group Financial Advisers Act 2008 Disclosure Statement at www.westpac.co.nz.

China, Hong Kong, Singapore and India: This material has been prepared and issued for distribution in Singapore to institutional investors, accredited investors and expert investors (as defined in the applicable Singapore laws and regulations) only. Recipients in Singapore of this material should contact Westpac Singapore Branch in respect of any matters arising from, or in connection with, this material. Westpac Singapore Branch holds a wholesale banking licence and is subject to supervision by the Monetary Authority of Singapore. Westpac Hong Kong Branch holds a banking licence and is subject to supervision by the Hong Kong Monetary Authority. Westpac Hong Kong branch also holds a license issued by the Hong Kong Securities and Futures Commission (SFC) for Type 1 and Type 4 regulated activities. This material is intended only to "professional investors" as defined in the Securities and Futures Ordinance and any rules made under that Ordinance. Westpac Shanghai and Beijing Branches hold banking licenses and are subject to supervision by the China Banking and Insurance Regulatory Commission (CBIRC). Westpac Mumbai Branch holds a banking license from Reserve Bank of India (RBI) and subject to regulation and supervision by the RBI.

UK: The contents of this communication, which have been prepared by and are the sole responsibility of Westpac Banking Corporation London and Westpac Europe Limited. Westpac (a) has its principal place of business in the United Kingdom at Camomile Court, 23 Camomile Street, London EC3A 7LL, and is registered at Cardiff in the UK (as Branch No. BR00106), and (b) authorised and regulated by the Australian Prudential Regulation Authority in Australia. Westpac is authorised in the United Kingdom by the Prudential Regulation Authority. Westpac is subject to regulation by the Financial Conduct Authority and limited regulation by the Prudential Regulation Authority. Details about the extent of our regulation by the Prudential Regulation Authority are available from us on request. Westpac Europe Limited is a company registered in England (number 05660023) and is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority.

This communication is being made only to and is directed at (a) persons who have professional experience in matters relating to investments who fall within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "Order") or (b) high net worth entities, and other persons to whom it may otherwise lawfully be communicated, falling within Article 49(2)(a) to (d) of the Order (all such persons together being referred to as "relevant persons"). Any person who is not a relevant person should not act or rely on this communication or any of its contents. The investments to which this communication relates are only available to and any invitation, offer or agreement to subscribe, purchase or otherwise acquire such investments will be engaged in only with, relevant persons. Any person who is not a relevant person should not act or rely upon this communication or any of its contents. In the same way, the information contained in this communication is intended for "eligible counterparties" and "professional clients" as defined by the Financial Conduct Authority and is not intended for "retail clients". With this in mind, Westpac expressly prohibits you from passing on the information in this communication to any third party. In particular this communication and, in each case, any copies thereof may not be taken, transmitted or distributed,

directly or indirectly into any restricted jurisdiction. This communication is made in compliance with the Market Abuse Regulation (Regulation(EU) 596/2014).

Investment Recommendations Disclosure

The material may contain investment recommendations, including information recommending an investment strategy. Reasonable steps have been taken to ensure that the material is presented in a clear, accurate and objective manner. Investment Recommendations for Financial Instruments covered by MAR are made in compliance with Article 20 MAR. Westpac does not apply MAR Investment Recommendation requirements to Spot Foreign Exchange which is out of scope for MAR.

Unless otherwise indicated, there are no planned updates to this Investment Recommendation at the time of publication. Westpac has no obligation to update, modify or amend this Investment Recommendation or to notify the recipients of this Investment Recommendation should any information, including opinion, forecast or estimate set out in this Investment Recommendation change or subsequently become inaccurate.

Westpac will from time to time dispose of and acquire financial instruments of companies covered in this Investment Recommendation as principal and act as a market maker or liquidity provider in such financial instruments.

Westpac does not have any proprietary positions in equity shares of issuers that are the subject of an investment recommendation.

Westpac may have provided investment banking services to the issuer in the course of the past 12 months.

Westpac does not permit any issuer to see or comment on any investment recommendation prior to its completion and distribution.

Individuals who produce investment recommendations are not permitted to undertake any transactions in any financial instruments or derivatives in relation to the issuers covered by the investment recommendations they produce.

Westpac has implemented policies and procedures, which are designed to ensure conflicts of interests are managed consistently and appropriately, and to treat clients fairly.

The following arrangements have been adopted for the avoidance and prevention of conflicts of interests associated with the provision of investment recommendations.

- (i) Chinese Wall/Cell arrangements;
- (ii) physical separation of various Business/Support Units;
- (iii) and well defined wall/cell crossing procedures;
- (iv) a "need to know" policy;
- (v) documented and well defined procedures for dealing with conflicts of interest;
- (vi) steps by Compliance to ensure that the Chinese Wall/Cell arrangements remain effective and that such arrangements are adequately monitored.

U.S.: Westpac operates in the United States of America as a federally licensed branch, regulated by the Office of the Comptroller of the Currency. Westpac is also registered with the US Commodity Futures Trading Commission ("CFTC") as a Swap Dealer, but is neither registered as, or affiliated with, a Futures Commission Merchant registered with the US CFTC. Westpac Capital Markets, LLC ("WCM"), a wholly-owned subsidiary of Westpac, is a broker-dealer registered under the U.S. Securities Exchange Act of 1934 ("the Exchange Act") and member of the Financial Industry Regulatory Authority ("FINRA"). This communication is provided for distribution to U.S. institutional investors in reliance on the exemption from registration provided by Rule 15a-6 under the Exchange Act and is not subject to all of the independence and disclosure standards applicable to debt research reports prepared for retail investors in the United States. WCM is the U.S. distributor of this communication and accepts responsibility for the contents of this communication. All disclaimers set out with respect to Westpac apply equally to WCM. If you would like to speak to someone regarding any security mentioned herein, please contact WCM on +1 212 389 1269. All disclaimers set out with respect to Westpac apply equally to WCM.

Investing in any non-U.S. securities or related financial instruments mentioned in this communication may present certain risks. The securities of non-U.S. issuers may not be registered with, or be subject to the regulations of, the SEC in the United States. Information on such non-U.S. securities or related financial instruments may be limited. Non-U.S. companies may not be subject to audit and reporting standards and regulatory requirements comparable to those in effect in the United States. The value of any investment or income from any securities or related derivative instruments denominated in a currency other than U.S. dollars is subject to exchange rate fluctuations that may have a positive or adverse effect on the value of or income from such securities or related derivative instruments.

The author of this communication is employed by Westpac and is not registered or qualified as a research analyst, representative, or associated person under the rules of FINRA, any other U.S. self-regulatory organisation, or the laws, rules or regulations of any State. Unless otherwise specifically stated, the views expressed herein are solely those of the author and may differ from the information, views or analysis expressed by Westpac and/or its affiliates.