

Economic Bulletin.

19 March 2020

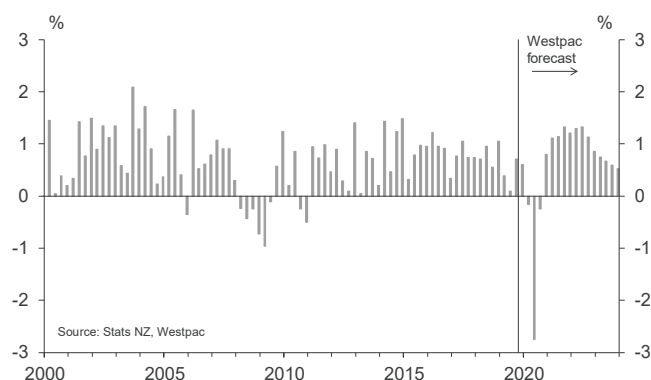


The coming recession: deep, but hopefully brief.

- The Covid-19 recession will be deeper than the GFC. We expect GDP to decline 3.1%, compared to 2.7% in 2008/09.
- We expect unemployment will rise from 4% to 5.5%, or by 45,000 people.
- This will be a briefer recession than the GFC so long as the banks and the Government remain in good financial shape.
- There is currently stress in financial markets. This could lead to an unintended increase in interest rates unless the RBNZ takes action.
- We predict that the RBNZ will begin quantitative easing (buying Government bonds) within a week in order to keep interest rates low.
- We further predict that the RBNZ will initiate a Term Auction Facility to ensure bank funding remains smooth.
- And we predict that the Government will create some form of loan guarantee scheme to slow potential company failures in the tourism and travel industries.
- Government debt is likely to rise above 30% of GDP in short order. That is an appropriate response, but the Government also needs a plan to bring debt down again later.
- Fortunately New Zealand's banks and Government are starting from a very strong position. With the above actions in place, they are well-placed to weather the coming storm, allowing for an orderly post-virus recovery.

The Covid-19 situation has escalated dramatically. New Zealand is inevitably heading for a severe recession – we are forecasting that the economy will shrink by 3.1% over the first three quarters of this year. In the June quarter alone we expect GDP to fall 2.7%. For comparison, during the Global Financial Crisis it took eighteen months for the economy to shrink by 2.7%. However, this recession will have a completely different character. Allowing people to congregate and travel again will lead to a rapid initial uplift in activity, meaning a briefer recession. However, it will take years for the economy to fully recover from the damage to business balance sheets. We are forecasting that unemployment will rise from 4% to 5.5%, less than the 6.5% reached in the GFC due to the temporary nature of the disruption and the Government's response. And we expect house prices to fall about 3%, compared to 10% during the GFC.

Quarterly GDP growth forecasts

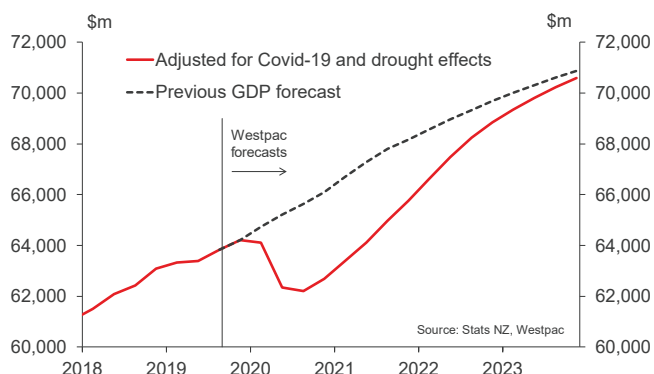


The crucial factor deciding how long this recession lasts is the health of the financial system. There are signs of stress emerging in markets. Left unchecked, this would cause an unintended increase in interest rates, which is the opposite of what the RBNZ wants. We predict that the RBNZ will counter with quantitative easing and a Term Auction Facility,

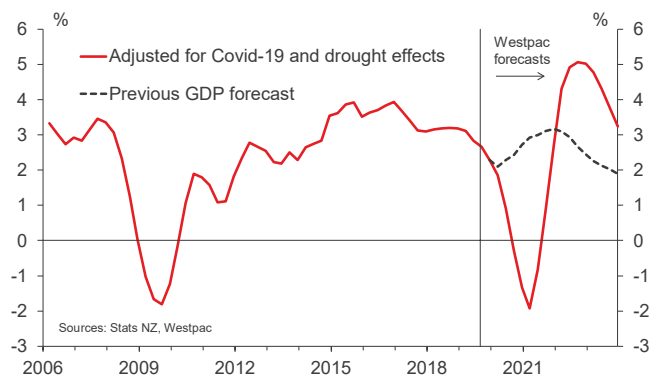


soon. Fortunately New Zealand's banks and Government are starting from a very strong position, so with the above RBNZ actions in place the situation should remain orderly.

Covid-19 impact on the New Zealand economy – level of GDP

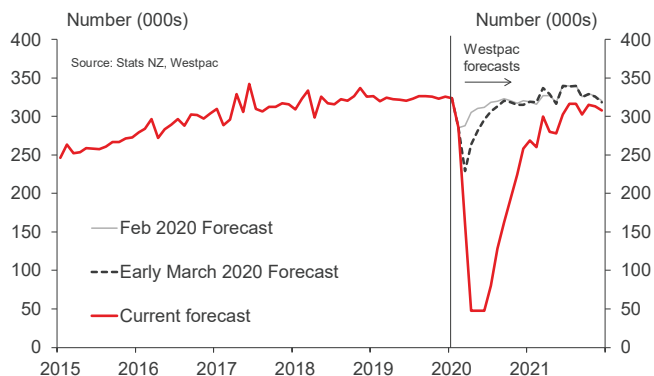


Covid-19 impact on the New Zealand economy – annual average GDP growth



The recent restrictions on travel around the world, including the near-closure of New Zealand's borders, is going to almost eliminate tourism and severely reduce foreign education. Nobody really knows how long travel will remain disrupted, but we are assuming an 85% drop in visitor arrivals from now until the end of September. After that, we would expect only a gradual recovery in tourism as traveller nervousness lingers for some time.

International visitor arrivals into New Zealand

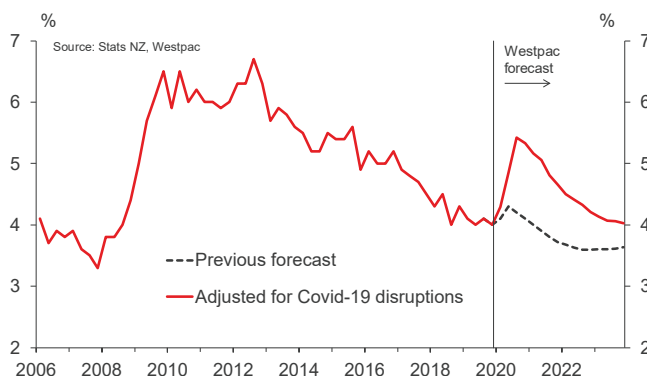


New Zealand's key goods exports will be impacted, albeit less severely than tourism and education. Exports to China were hit hard earlier this year but are now slowly starting to recover. However, the next hit will come from a general slowdown in the global economy which will particularly affect manufactured exports, and will create a renewed round of weakness for forestry. Prices of New Zealand's key food exports have already fallen, and may fall further yet, affecting farmer incomes.

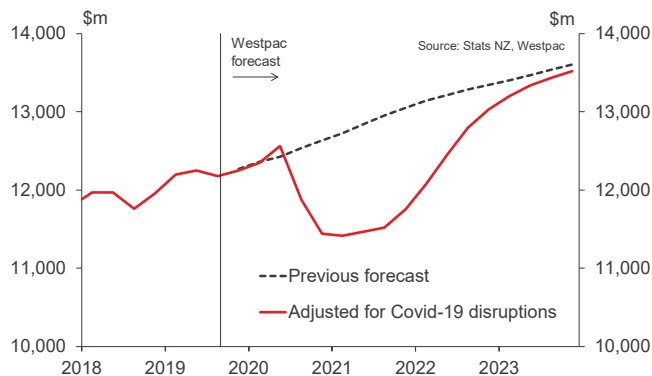
The next phase will be the business sector switching from expansion mode to survival. In sectors like tourism and hospitality most businesses will endure a savage reduction in revenue. In order to survive they will lay off staff, contributing to the lift in unemployment. We expect this, combined with a general slowing in the economy, will see the unemployment rate to rise from 4% now to 5.5% by September, equating to 45,000 additional unemployed people. Without the Government's massive wage subsidy package, we would be forecasting a bigger increase in unemployment.

The firms in affected industries that survive this downturn will only do so by borrowing to get through. This will weaken their balance sheets. Once the recovery begins, they will be more focused on debt repayment and balance sheet repair than expansion. That is why unemployment and business investment will recover more slowly than other parts of the economy.

Unemployment



Business investment spending – level

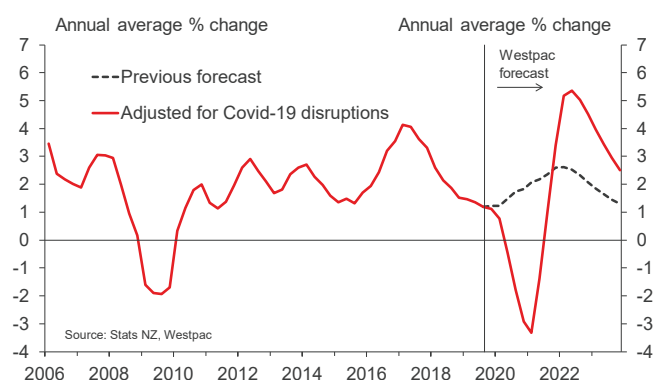


Covid-19 will disrupt the domestic economy and reduce consumer spending by about 4% within a few months.

Shutting down domestic travel, business meetings, large gatherings, and sporting events will have a huge impact. There will be a sudden decline in spending at the likes of cafes and in bricks-and-mortar shops. Workers laid off from severely affected sectors like tourism will be forced to curtail their spending, and other consumers will become more cautious as their KiwiSaver balances and house prices fall. Finally, disrupted supply chains will mean some products simply aren't readily available to be consumed. There will, however, be a few positive offsets. Fewer people travelling overseas might result in more money spent domestically. Online retailing, internet commerce and health-food sales will boom, if China's experience is anything to go by. We already have data showing that panic buying led to a sharp lift in consumer spending in February. And the Government's stimulus package(s) will tend to support consumer spending.

Consumer spending will partially bounce back as soon as gatherings and travel are allowed, leading to quite rapid rates of growth for a while. But a full recovery in consumption will take longer, as the labour market only slowly absorbs the unemployed and consumer confidence returns only gradually.

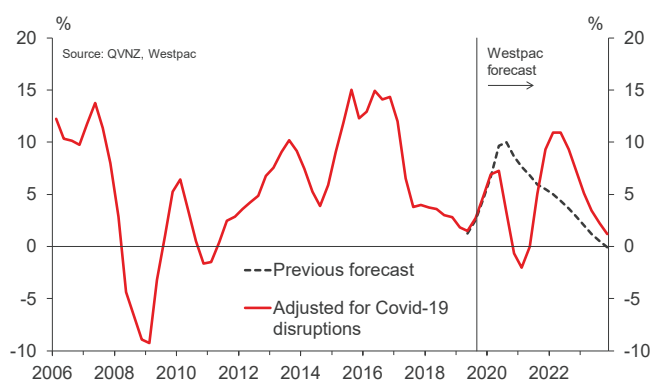
Household consumption spending – annual growth



The currently-red-hot housing market will soon screech to a halt as people become more cautious about investments and as layoffs affect demand. How far house prices fall is highly uncertain – it depends mainly on sentiment, which is extremely difficult to gauge. But at this stage we are pencilling in a 3% decline later this year, which would leave annual house price inflation for 2020 at about zero.

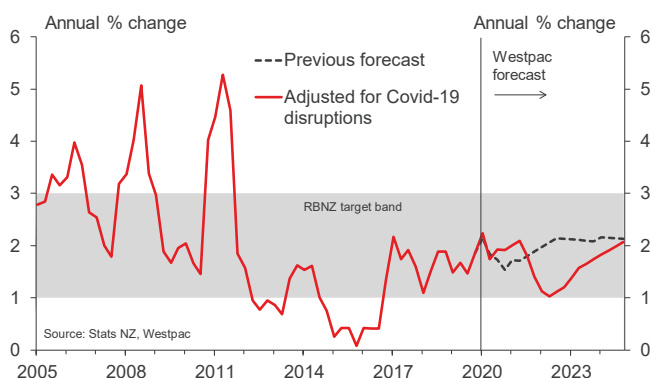
However, the Reserve Bank has responded to Covid-19 with an extremely aggressive OCR cut. Once the virus disruption passes, the fundamentals facing the market will be the same as today, only interest rates will be much lower. We think that will generate a very strong outlook for asset prices in general, including New Zealand house prices, once confidence returns. Consequently, we have lifted our longer-term house price forecast. We now expect house price inflation of 9% in 2021 and 7% in 2022, whereas previously we were expected a slowdown over this period.

House prices



What happens to inflation in the short run is uncertain – prices of goods that run short will go up, but prices for petrol, airfares and accommodation will plummet, as will the price of some food products that New Zealand exports. However, by late this year or early next inflation will fall to around 1% in a lagged response to the weak economy.

Consumer price inflation



Stress in financial markets and the Reserve Bank's likely response.

With inflation set to fall and unemployment to rise, it is little wonder that the Reserve Bank has responded by cutting the OCR aggressively. The RBNZ has said that its cut to 0.25% is as low as the OCR will go for now. The RBNZ said that its next step, if required, would be buying New Zealand Government bonds.¹ This is known as quantitative easing and works by reducing longer-term interest rates.

We think that the RBNZ will have to start quantitative easing very soon, possibly next week.

Certain financial markets are showing signs of stress. In particular, the interest rates on New Zealand Government bonds are shooting much higher. Globally, Mum and Dad investors are selling whatever assets they can in a headlong stampede for cash. This has caused the price of almost any investable asset to fall, from equities to New Zealand

¹ The RBNZ appears to have thrown out the playbook on alternative monetary policy that it issued just last week. In that document they said a negative OCR would be the first option.

Government bonds. Furthermore, the Treasury needs to issue more bonds to fund the Government's massive spending plans, creating another seller in the market. When a bond price falls its interest rate rises, so NZ Government bond rates have risen well above where they were before the Reserve Bank cut the OCR – 10-year bond yields have risen from 0.9% to 1.7% in ten days. Other New Zealand interest rates are being dragged up in sympathy. Left unchecked, this could in theory eventually cause an unintended increase in the interest rates experienced by ordinary households and businesses in New Zealand.

Interest rate on NZ Government bond maturing 2031



That would be unacceptable to the Reserve Bank on two fronts – the monetary policy arm of the RBNZ is trying to *reduce* interest rates, and the financial stability arm of the RBNZ needs to keep markets orderly. One way for the RBNZ to break the cycle is for it to start buying New Zealand Government bonds within the next few days.

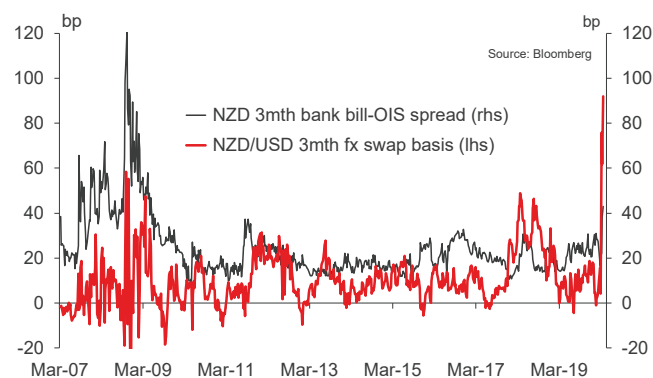
It is hard to predict how many bonds the RBNZ will buy. We think they will most likely announce a particular long-term interest rate that they are targeting, and then stand ready to buy as many bonds as is required to achieve that interest rate. 10-year Government bond rates are currently about 1.5%, so announcing a 1% target might be suitable. The RBNZ may not even have to actually buy that many bonds – merely signalling a readiness to do so may be enough to set a price in the market.

We predict that the Reserve Bank will also announce a Term Auction Facility to ensure the banking system remains well funded, within weeks. It is crucial that the banking system continues lending smoothly into the economy. Recessions are much worse if weak banks freeze up and stop lending – for example, it was banking system failures that made the GFC so severe. Conversely, recessions can be substantially moderated by a healthy banking system that is able to extend working capital to struggling businesses – for example, New Zealand's banking system was able to keep the dairy downturn of 2015 to an orderly slowdown.

New Zealand's banks are much better positioned than they were prior to the GFC, with more secure funding and more capital, which bodes well for the present episode. However, there is some stress in markets at present. The interest rate

at which banks lend to one another for 90 days has risen to 40 basis points above the OCR, compared to 20 basis points in normal times. The three-month FX basis swap, one element of banks' offshore funding costs, has risen from zero to 90 basis points. So far the RBNZ has attempted to ensure credit continues to flow by easing the regulatory burden on banks, including delaying the requirement to hold more capital. But that is not enough. The next step will be a Term Auction Facility (TAF), in which the RBNZ lends money to banks for as long as a year, taking Government bonds or Residential Mortgage Backed Securities as collateral. We think a TAF will be initiated within weeks. That should be enough to ensure credit continues to flow smoothly into the economy.

NZ short-term bank funding spreads



Finally, the Government is going to have to set up some form of loan guarantee scheme for businesses in the worst-affected sectors. The best-funded bank in the world is not going to lend to a business that is about to go bust, so the Government will have to take some risk onto its own balance sheet, and soon.

The Government response... and how much it will cost.

Government debt is likely to increase very quickly, to at least 30% of GDP by the end of this year or early next. The Government has already announced an aggressive fiscal stimulus package, which we wrote about earlier this week. Its best feature was a massive wage subsidy which will help keep some small businesses afloat and will limit the inevitable rise in unemployment. That was a necessary move, but subsidising the wages of up to a third of the country's workforce, alongside the other commitments that have been made, could prove incredibly expensive. The scheme is initially limited to 12 weeks, but we think the Government will have to extend that. The Government debt to GDP ratio is currently 18.5%. The wage subsidies alone will add roughly two percentage points to that number for each quarter that it is in place. Lower tax revenue, higher benefit expenditure, higher health expenditure and the other spending commitments that have already been made will further add to the debt/GDP ratio. And finally, as GDP shrinks the debt/GDP ratio will rise.

Fiscal stimulus is certainly necessary at this point, but it will reduce the Government's freedom to spend once the virus has passed. That is why we have emphasised that any stimulus

measures should be timely, targeted and temporary. Not all of the measures announced this week met those criteria – approximately a third of the announced spending was actually permanent, and some of it was poorly targeted.

With the predicted RBNZ and Government measures in place, we expect that the New Zealand banking system and Government will have the strength to weather the coming storm, allowing an orderly recovery the coming recession.

Dominick Stephens, Chief Economist

+64 9 336 5671

New Zealand economic and financial forecasts.

GDP components	Quarterly % change				Annual average % change			
	Sep-19	Dec-19	Mar-20	Jun-20	2018	2019	2020	2021
GDP (production)	0.7	0.6	-0.2	-2.7	3.2	2.3	-1.3	2.8
Private consumption	0.8	0.7	-0.3	-3.7	3.2	2.8	-1.6	4.8
Government consumption	1.3	1.0	1.6	2.1	3.7	3.8	4.8	1.8
Residential investment	-0.5	1.4	2.0	0.7	0.1	4.1	3.2	-6.3
Business investment	0.4	0.6	0.8	1.7	7.6	2.6	-1.0	-4.2
Stocks (% contribution)	1.8	-1.2	0.2	0.1	0.4	-0.9	0.3	0.0
Exports	-2.8	2.5	-3.4	-12.3	2.6	2.5	-9.0	8.4
Imports	2.3	-0.5	-0.7	-6.1	5.8	1.3	-3.5	5.1
Economic indicators	Quarterly % change				Annual % change			
	Sep-19	Dec-19	Mar-20	Jun-20	2018	2019	2020	2021
Consumer price index	0.7	0.5	0.5	0.1	1.9	1.9	1.9	1.4
Employment change	0.2	0.0	0.0	-0.7	1.9	1.0	-0.7	2.8
Unemployment rate (end of period)	4.1	4.0	4.3	4.9	4.3	4.0	5.3	4.7
Labour cost index (all sectors)	0.8	0.7	0.5	0.8	1.9	2.6	2.4	1.9
Current account balance (% of GDP)	-3.3	-3.0	-3.0	-3.6	-3.8	-3.0	-4.2	-3.3
Terms of trade	1.7	2.6	-1.1	-2.6	-4.8	6.9	-3.2	1.8
House price index	1.8	2.9	2.4	0.0	2.8	4.7	-0.7	9.3
Financial forecasts	End of quarter				End of year			
	Sep-19	Dec-19	Mar-20	Jun-20	2018	2019	2020	2021
90 day bank bill	1.32	1.17	0.40	0.40	1.87	1.17	0.40	0.55
5 year swap	1.14	1.18	0.75	0.70	2.40	1.18	0.80	1.20
TWI	72.0	71.4	71.4	68.5	73.5	71.4	71.4	71.0
NZD/USD	0.65	0.64	0.64	0.61	0.67	0.64	0.65	0.66

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 provided to 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 rules of 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.