ANZ Research

New Zealand Weekly Focus

3 February 2020

This is not personal advice. It does not consider your objectives or circumstances. Please refer to the Important Notice.

Contents

NZ Economics Team

Sharon Zollner
Chief Economist
Telephone: +64 9 357 4094
Sharon.Zollner@anz.com

Natalie Denne
Desktop Publisher
Telephone: +64 4 802 2217
Natalie.Denne@anz.com

Liz Kendall
Senior Economist
Telephone: +64 4 382 1995
Elizabeth.Kendall@anz.com

Susan Kilsby
Agriculture Economist
Telephone: +64 4 382 1992
Susan.Kilsby@anz.com

Kyle Uerata
Economic Statistician
Telephone: +64 4 802 2357
Kyle.Uerata@anz.com

Miles Workman
Senior Economist
Telephone: +64 4 382 1951
Miles.Workman@anz.com

Contact
research@anz.com

Follow us on Twitter
@sharon_zollner
@ANZ_Research (global)

Change is coming – 'weather' you like it or not

Economic overview

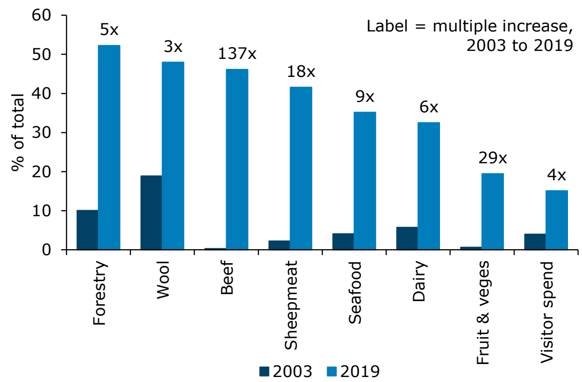
The human impact of the new coronavirus is very worrying and our thoughts are with those affected. From an economic perspective, it is far too early to gauge the impacts, but New Zealand could be affected through a range of channels and we are watching developments closely (see The Week Ahead, page 8).

Stepping back, this week we explore some of the possible channels through which climate change may impact our economy. In the short term, the most significant effects are being felt as a result of regulatory changes. But looking forward, changing consumer preferences and investment decisions will contribute to a changing economic landscape, and direct impacts of environmental conditions will be increasingly felt. Overall, the economic effects are highly uncertain, but change is inevitable, and the transition presents costs, opportunities and risks.

Chart of the week

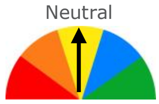
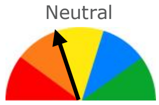
China accounts for a far greater proportion of New Zealand's exports than it did during the SARS outbreak of 2002/03.

Proportion of New Zealand's exports going to China



Source: Statistics NZ, ANZ Research

The ANZ heatmap

Variable	View	Comment	Risks around our view
GDP	2.4% y/y for 2021 Q1	The outlook for GDP is looking more positive. But downside global risks are salient.	Neutral Negative  Positive
Unemployment rate	3.9% for 2021 Q1	The labour market is "tight". Although the unemployment rate may be thrown around in coming quarters, trend deterioration is looking less likely.	Neutral Down (better)  Up (worse)
OCR	1% in March 2021	We expect the RBNZ to be on hold for the foreseeable future, but downside risks remain. Market pricing for a small chance of cuts is appropriate.	Neutral Down  Up
CPI	1.9% y/y for 2021 Q1	Inflation is around where it needs to be. The domestic picture is positive, but again risks are important.	Neutral Negative  Positive

Economic overview

Summary

The impact of the new coronavirus is very worrying.

The human impact of the new coronavirus is very worrying and our thoughts are with those affected. From an economic perspective, it is far too early to gauge the impacts, but New Zealand could be affected through a range of channels and we are watching developments closely (see The Week Ahead, page 8).

Climate change presents costs, opportunities and risks.

Stepping back, this week we explore some of the possible channels through which climate change may impact our economy. In the short term, the most significant effects are being felt as a result of regulatory changes. But looking forward, changing consumer preferences and investment decisions will contribute to a changing economic landscape, and direct impacts of environmental conditions will be increasingly felt. Overall, the economic effects are highly uncertain, but change is inevitable, and the transition presents costs, opportunities and risks.

This week, we will be watching the labour market data for assurance that the economy remains near full employment, and that it has been reasonably resilient to the growth slowdown last year. Notwithstanding salient global risks, we think the RBNZ can hold fire with the OCR for a while. A still-tight labour market would provide further grounds for patience.

Forthcoming data

Building Consents – December (Tuesday 4 February, 10:45am). Consents have been holding at a high level. While downside risks remain, recent resurgence in the housing market provides some offset.

Labour market and GDT data will be watched this week.

GlobalDairyTrade auction (Wednesday 5 February, early am). Prices are expected to fall approximately 5% at this week's GDT event on reduced demand from China.

ANZ Commodity Price Index – January (Wednesday 5 February, 1:00pm).

Labour Market Statistics – Q4 (Wednesday 5 February, 10:45am). We expect the labour market moved broadly sideways in Q4, with the unemployment rate unchanged at 4.2%.

What's the view?

Climate change impacts are highly uncertain.

With the new decade underway, it seems a fitting time to look towards the future. When doing so, one theme that dominates our conversations, media and politics is climate change.

Over the past century, human activity has launched our world into a state of environmental uncertainty that will impact the global economy in coming decades. Climate change impacts are highly uncertain, and we cannot comprehensively analyse them within these few pages. Rather, we put forward some thoughts on the trends at play, and discuss where different costs and benefits may arise.[1]

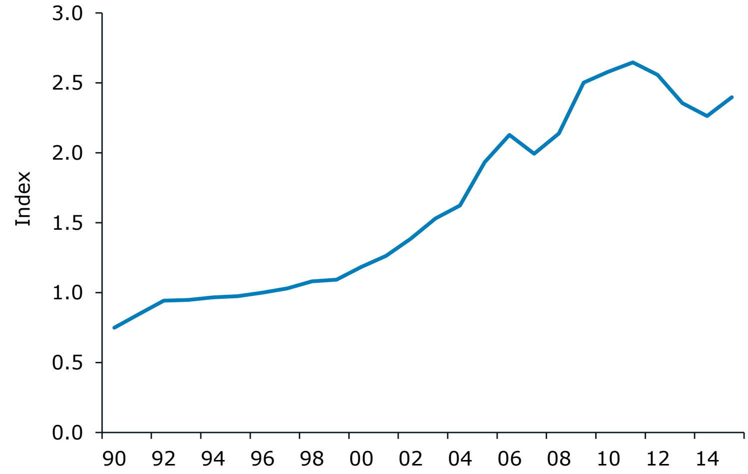
The changing regulatory landscape

Impacts are being felt from regulatory change.

Currently, the most material economic impacts from climate change are being felt as a result of environmental regulatory change. Internationally and domestically, policy is being implemented in an effort to mitigate and adapt to climate change. The OECD Environmental Policy Stringency Index reveals that there has been a substantial move toward more stringent environmental policy globally in the past two decades (figure 1).

[1] With many thanks to Rebecca Newman for her work on this topic during her time in ANZ Research.

Figure 1. Environmental Policy Stringency Index (average 32 countries)



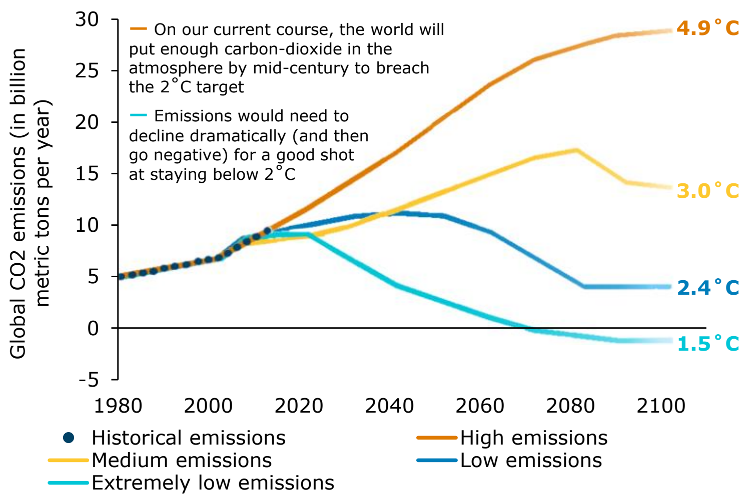
Source: OECD, ANZ Research

Policy change is vital.

The Paris Agreement (2016) has prompted a move toward reducing greenhouse gas emissions (GHG) – with policy change vital to countries fulfilling their commitments. In Paris, it was agreed that the world must make a concerted effort to keep temperatures within 2 degrees of pre-industrial levels. There is uncertainty about the trajectory of emissions and temperatures from here, but it is widely accepted that this "2 degree" target is a 'tipping point', beyond which seas will begin rising rapidly, widespread crop failure will occur and human health will be compromised, according to climate scientists.

To have a good shot at adhering to this target, net global emissions will not only need to go to zero, but they will eventually need to go (and remain) negative. This isn't entirely impossible, but, globally, it will likely require some combination of rapid decarbonisation, a whole lot of afforestation and some pretty incredible technological advances.

Figure 2. Predicted temperature increases under various emissions scenarios



Source: Sanford et al. (2014)

So too is international cooperation.

International co-operation is crucial in ensuring that global emissions can be reduced. New Zealand only represents a small portion of global emissions (0.17%). But with the 7th highest emissions per capita in the world on a production basis,[2] we have an important role to play in contributing to the effort, particularly if we want to retain our "clean, green" image internationally. 70% of New Zealand's export earnings are directly reliant on natural capital, including tourism. A healthy natural environment is important for the quality and

[2] https://www.mfe.govt.nz/sites/default/files/media/Climate%20Change/snapshot-nzs-greenhouse-gas-inventory-1990-2017.pdf

marketability of our traded goods, and insufficient action or environmental degradation could see that image eroded.

New Zealand is playing a part.

New Zealand has introduced the Zero Carbon Bill, which aims to limit emissions by committing to set GHG targets for 2050. The Productivity Commission has suggested that increased emission prices in the emissions trading scheme (ETS), a transport 'feebate' system, land-use diversification, a shift to low-emission agricultural practices and building on the renewable energy supply are the sorts of measures that should be utilised to reach our targets. These, of course, will have a ripple effect through the economy.

New Zealand is unusual in that a higher share of our GHG emissions come from agriculture than other countries. This means we face unique challenges and effects in responding to rising temperatures and making regulatory changes.

Impacts of changing regulation

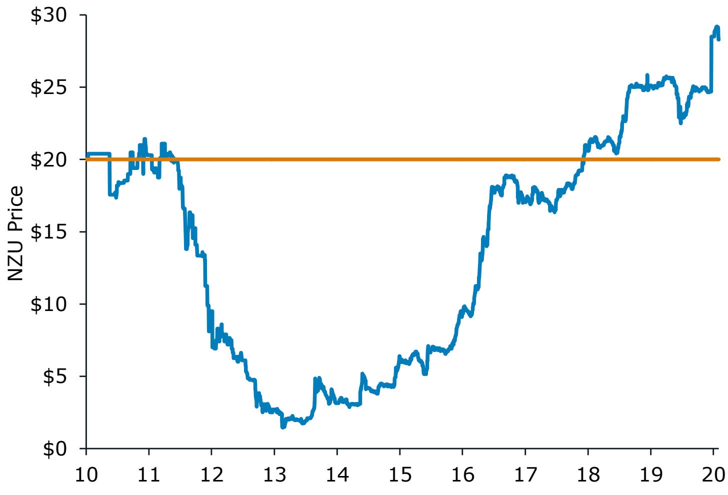
The agricultural sector is being impacted already.

Changing environmental regulation is already impacting the agricultural sector (we have written about this in our ANZ Agri Focus). Farmers have improved their emissions efficiency and work is being done in the industry to increase afforestation and the like. But it is an ongoing challenge as industries such as meat and dairy adjust. The eventual introduction of agriculture into the ETS will see the cost felt by farmers more directly. As a response, a levy/rebate scheme has been proposed by the Interim Climate Change Commission as a pathway to align agricultural emissions with the ETS. Farmers would pay a set price for their emissions each year, which would be adjusted annually to reflect price changes in the ETS. Further, farmers would be rewarded with a rebate if they emit less than their allocation. This enables the industry to continue production without the risks and costs of trading emissions units.

Industries will be affected differently.

More broadly, an increase in the carbon price in the ETS would be beneficial for some industries and detrimental to others, with a 'price floor' of NZD20/tonne proposed by the Government. Airlines, for example, would face increased costs as high emitters, which would erode their profit margins and/or reduce demand if costs were passed through to consumers. On the other hand, the forestry industry would receive greater revenue from the carbon credits they generate. A price floor would also give land-owners the certainty needed to invest in afforestation, certainty that has been lacking under the current ETS.

Figure 3: Historical carbon prices



Source: Bloomberg

The cost of living will be impacted.

Proposed reform to the ETS will not only impact businesses, but also the cost of living for New Zealanders. This is because the prices for items such as gas, electricity and food will be impacted. Table 1 shows estimates from the Ministry for the Environment of what the cost of increased emission pricing could be on households' weekly spending. Because lower-income households spend a greater proportion of their income on emission-intensive goods, albeit less in dollar-value terms, the reform would hit them slightly harder. And with fewer resources, they have less wiggle-room to shift to less emission-intensive consumption if it is more expensive. In the longer term, some of these increased costs may be eroded as industries adapt their production to become less carbon-intensive, but the short-term price jump would be the real kicker.

Table 1: Weekly change in household spending based on increases in emissions price

Emissions price (NZD per tonne CO_2-e)	Quintile 1 (Low income households)	Quintile 2	Quintile 3 (Middle income)	Quintile 4	Quintile 5 (High income households)
$25	0	0	0	0	0
$30	0.1% ($0.40)	0.1% ($0.50)	0.1% ($0.70)	0.1% ($0.70)	0.1% ($0.80)
$35	0.2% ($0.80)	0.1% ($1.10)	0.1% ($1.40)	0.1% ($1.50)	0.1% ($1.60)
$40	0.3% ($1.20)	0.2% ($1.60)	0.2% ($2.00)	0.1% ($2.20)	0.1% ($2.40)
$45	0.4% ($1.60)	0.3% ($2.10)	0.2% ($2.70)	0.2% ($2.90)	0.1% ($3.20)
$50	0.4% ($2.00)	0.3% ($2.70)	0.3% ($3.40)	0.2% ($3.60)	0.2% ($4.00)
$75	0.9% ($4.00)	0.6% ($5.40)	0.6% ($6.80)	0.5% ($7.30)	0.3% ($8.10)
$100	1.3% ($6.00)	1.0% ($8.00)	0.9% ($10.20)	0.7% ($10.90)	0.5% ($12.10)

Preliminary analysis only, based on 2013 data, including key assumptions of 100% emissions price pass through, that households will not adjust their level of consumption in response to rising prices, and a $25 baseline price. Confidence levels are not included in this table for brevity. The Treasury considers the advice given to have moderate reliability and moderate risk. Figures do not include any measures to mitigate impact on households.

Source: MFE

Overall, estimates of the net economic costs of regulatory changes vary widely. Landcare Research suggest that if New Zealand is to reduce GHG emissions by 10% from 1990 levels by 2030 (current commitment is -11%), real GDP will be 0.23% lower than otherwise.[3]

Shaping decisions

Preferences are shifting.

Indirect economic effects such as changing consumer preferences, the rise of 'green' investment and shifting opportunities for business investment will become increasingly prominent over time.

Consumer behaviour is adapting.

Concern for the state of the environment is increasingly being reflected in consumer behaviour. A recent survey by Accenture found that 72%[4] of consumers are buying more environmentally-friendly products than they were five years ago; this is putting increased pressure on producers to stand for issues of 'greater good'. In 2018, products that were sustainability-marketed grew 5.6 times faster than those that were not[5] – showing that consumer intent is flowing through into their purchasing decisions.

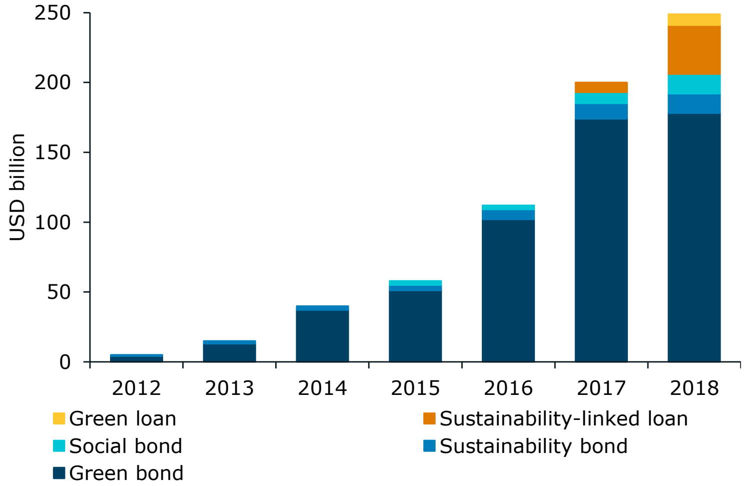
Demand for "green" investment has increased.

In parallel, investor demands are expanding outside the realms of purely financial returns. With the rise of sustainability reporting, green bonds and social impact funds, investors are demanding sustainability. Investment in these products has risen rapidly in recent times, up 34% in 2019 from 2016, to the value of USD30.7 trillion according to Bloomberg (figure 4).[6] This means businesses are being socially and financially motivated to take action.

Nonetheless, there are fears that environmental uncertainty could put a brake on some forms of investment. Will fuel cars be banished with a breakthrough in transport technology? Are consumers still going to use air travel? Could sea level rise infiltrate waterfront infrastructure? The inability to answer such questions may be making investors wary, resulting in less risk-taking. On the other hand, there are new opportunities in mitigating and adapting technologies, opportunities that could gain traction the worse climate change becomes – such as electric vehicles and renewable power storage. It is, of course, uncertain how these investment forces will balance out to support growth in the long term.

[3] https://www.mfe.govt.nz/sites/default/files/media/Climate%20Change/economic%20impact%20of%20NZ%20post-2020%20climate%20change%20contribution.pdf
[4] https://www.businesswire.com/news/home/20190604005649/en
[5] https://hbr.org/2019/06/research-actually-consumers-do-buy-sustainable-products
[6] https://www.bloomberg.com/graphics/2019-green-finance/

Figure 4. A New Green Market: Sustainable debt issued by instrument type



Source: BloombergNEF

This is shaping the financial landscape.

As green bonds become more widespread, there is increasing discussion and debate around the possibility of "green QE", ie central banks stepping in to encourage investment to mitigate climate change. However, this would be complex and could have big costs. Overall, monetary policy can't do much to influence the trajectory of the economy in the face of climate change, as these changes are structural – these types of policies are really fiscal policy in disguise. That said, central banks will need to be conscious of the changing landscape to the extent that they could impact the economic cycle and financial stability risks. These risks relate to both the direct physical impacts of climate change (discussed below), and the transitional impacts on businesses as they adapt. Such financial stability risks are directly relevant for the RBNZ, given its role in regulating the financial system; the RBNZ has initiated a climate-change strategy to consider these wide-ranging issues.[7]

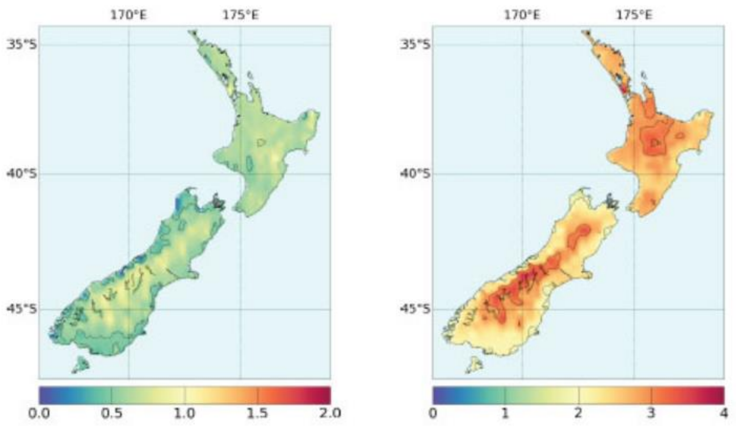
Direct impacts

We must brace for direct impacts.

More directly, the economy must brace for the impacts of changing environmental conditions, which are increasingly being felt. Projections for climate change impacts vary a lot, depending on where emissions head from here. Figures 5 & 6 shows the difference between the projected impacts of a low versus high emissions scenario – with even a low scenario producing notable changes, especially in temperature.

Figure 5. Annual average temperature changes by 2090

Under a low emissions scenario (left) and a high emissions scenario (right) compared to 1995 baseline

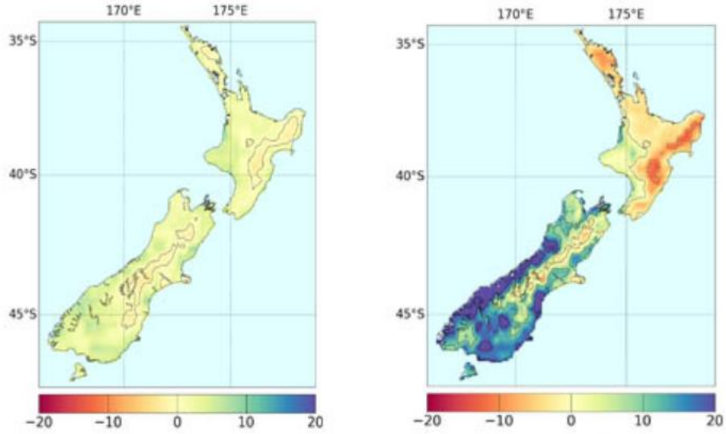


Source: MFE

[7] https://www.rbnz.govt.nz/financial-stability/climate-change

Figure 6. Annual average rainfall changes by 2090

Under a low emissions scenario (left) and a high emissions scenario (right) compared to 1995 baseline



Source: MFE

Environmental change will have costs and benefits.

Sea level rise, more rain in wet areas and less in dry, increased frequency and severity of extreme weather events (such as storms, droughts and fires), ocean acidification, biodiversity loss and glacial melt are all environmental effects that are expected to arise in some form. These will come at a cost, but some may also have benefits.

Environmental changes are likely to put a strain on key infrastructure across the country, particularly in coastal areas. With more extreme rainfall, flooding and storm surges, our wastewater and storm water infrastructure is facing mounting pressure. Most of New Zealand's piping infrastructure is designed to handle a 1-in-10 year flood, yet by 2050 some vulnerable coastal zones could experience a 1-in-100 year flood almost every single year.[8]

Strain on infrastructure.

The Edgecumbe floods in 2017 gave us insight into how extreme rainfall in conjunction with unprepared infrastructure can harm an economic community. It is also estimated, based on modelling by NIWA and the Deep South National Science Challenge, that for every 10cm of sea level rise an additional 7,000 buildings are at risk of flooding during a storm throughout the country, with a potential 1 metre rise expected by the end of the century. In this scenario, $38 billion worth of buildings (currently inhabited by 150,000 people) would be at risk. The precise impact is highly uncertain, but we can expect a loss of valuable private and public assets – local councils themselves are looking at a loss of up to $14 billion in infrastructure, in addition to the value of at risk homes, businesses, roads, schools or hospitals. Disruption and productivity costs as communities adjust could be important.

Financial stability risks.

The threat of coastal inundation is likely to have its own financial stability implications. These risks are already being assessed by insurance companies and included in property LIMs, and securing insurance (especially in coastal areas) may become more difficult. In cases where insurance is available, costs may be higher – making financial security a far-fetched prospect for some low-income families. Moreover, credit to purchase property may become more difficult to obtain in vulnerable areas. This could impact house prices, which have historically been inflated by their seaside appeal. On the flip side, less vulnerable inland areas could experience a boost to economic activity as they become more attractive places to live, resulting in population growth, rising house values and increased business presence.

Land use may change.

Land may become much less suited to its traditional agricultural or horticultural use. On some land, climate change could extend the growing season or introduce new product opportunities. But in less fortunate cases, areas might become too hot, or too wet, or too volatile to support stock or crops. This could force a change in land use at substantial costs (new infrastructure, lost revenue and new skill development). Moreover, policy changes may make it more profitable to switch land-use, regardless of suitability factors. This has been

[8] https://www.deepsouthchallenge.co.nz/projects/national-flood-risks-climate-change

New Zealand is expected to see benign impacts compared to others.

Change is inevitable.

seen on the East Coast where planting trees for carbon credits is proving more profitable than stock farming in some areas. The longer-term economic costs and benefits of shifting land use depend on the ability of land owners to adapt and invest at the appropriate time.

The effects of climate change are expected to be relatively benign in New Zealand compared to the globe as a whole. This, as well as our close proximity to highly vulnerable nations, makes us particularly susceptible to 'climate migration'. In some Pacific nations, such as Kiribati, people are increasingly acknowledging that relocation may be inevitable. There is also a possibility that we see higher voluntary immigration if people perceive New Zealand to be safer (or simply more comfortable) in this changing climate. Economic growth would be boosted from increased migration, as it drives greater spending and brings additional skills to the labour force, but it would also put pressure on housing and infrastructure. The risk is that we could face more rapid immigration than we are equipped to handle.

We can expect some substantial changes to our environmental and economic landscapes at the hand of climate change over the coming decades. And it's hard to say exactly what that will look like. What we do know, is that positive environmental action from households, businesses and government has the potential to reduce the feared economic adversity. But it'll take a global effort.

The week ahead

The human toll of the new coronavirus is causing great concern.

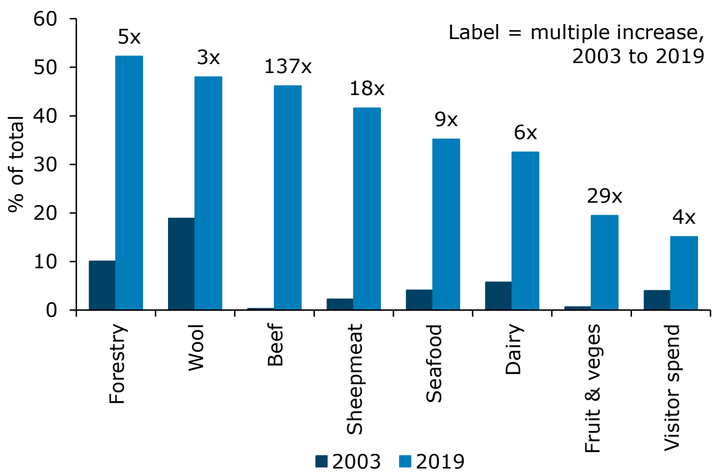
Developments associated with the novel coronavirus originating in Wuhan, China are causing great concern. The cost to human life is worrying and our thoughts are with those affected. The economic impacts are looking like they will be significant too, though it is far too early to estimate them with any certainty. However, the more widespread the outbreak becomes and the longer it goes on, the greater the risks are to the Chinese economy, the global economy and to New Zealand. We are currently assuming that the outbreak will have only a modest dampening impact on our export volumes and prices, with the hope that the virus is contained soon. However, the possibility of a larger impact cannot be ruled out.

Economic effects could be significant.

It's far too early to know the extent of the impact.

There are similarities between the new coronavirus and the 2003 outbreak of SARS, but also some important differences. One key difference is that New Zealand's trade exposure to China is massively higher than it was in 2003 (figure 7).

Figure 7. Proportion of New Zealand's commodity exports going to China



Source: Statistics NZ, ANZ Research

But New Zealand may be impacted through a number of channels.

Economic effects are largely expected to arise from measures being taken to contain the virus, rather than the virus itself. This includes official efforts to contain the spread (eg unprecedented travel restrictions in China), firms' responses (such as closing workplaces), and people's individual responses, such as avoiding crowds. There are a few channels that could be important for New Zealand that we will be watching.

Economic overview

Services exports

Tourism and education exports will be affected.

China is an important source of demand for travel, tourism and education. The outbreak will curb arrivals to some extent (as we saw following the SARS outbreak in 2002/3), even if it is temporary. Chinese visitors account for around 10% of visitor arrivals and 13% of visitor spending, with their contribution to travel services accounting for about 1% of New Zealand's nominal GDP. This contribution has grown over time and the impact will be larger for tourism than SARS was (back then China only accounted for 3% of visitor arrivals). The impact on New Zealand tourism is no-doubt being felt already: Chinese authorities have halted bookings of international tours and travel to contain the spread of the virus, and New Zealand has stopped arrivals of non-residents from China. This comes on the back of a decline in visitor arrivals that had started before the outbreak began. More generalised caution about travelling globally may also weigh.

Education exports will likely also be affected to the extent that students from China have not yet arrived in the country. Prices for our services exports may fall as a result, which may partially offset increased demand from New Zealand and other countries. We will be watching visitor arrivals and tourism anecdotes carefully.

Goods exports and trade

Reduced demand for our goods exports will weigh on prices.

China imports a large portion of our goods exports (accounting for 4.9% of nominal GDP), especially luxury food, which is typically in high demand during the current Lunar New Year holiday, but will have been consumed at a much lower rate than normal this year due to cancelled travel and celebrations. For dairy, some weakness usually occurs in GDT auctions at this time of year, with a pause in buying over the Chinese holiday period, but export prices will potentially be even softer across a range of commodities.

GDT prices are expected to fall this week.

Prices are expected to fall approximately 5% at this week's GDT event on reduced demand from China. There is 11% less whole milk powder on offer due to the normal seasonal reduction, but this isn't expected to be enough to offset reduced demand. Reduced supply as dry conditions weigh on production is yet to be factored into GDT offer volumes, but may help to partially offset the expected slide in prices.

Trade is being disrupted, impacting volumes.

Adding to the reduction in demand, trade is currently being disrupted to some extent at Chinese ports; it is unclear how big of a problem this will be, depending on whether it will be for a matter of days or longer lasting. But such disruption could flow through into lower export prices as exporters hold onto product or divert it to lower-value markets. Export volumes tend to be supply driven, so a fall in demand would usually be reflected predominantly in prices. Nonetheless, we could see lower volumes as a result of disruption, if other countries cannot fill the demand gap, if there is product spoilage, if production decisions are affected, or if global demand is affected significantly. We will be watching GDT auctions, broader commodity prices, export volumes and exporter anecdotes to gauge the impact.

Imports will likely be affected too.

Disruption at Chinese ports and to global trade more broadly could also impact our imports, with imports coming from China accounting for 4.1% of nominal GDP. So from a trade balance perspective, this could provide a partial offset.

Confidence

General economic confidence may reduce.

Business confidence may take a hit as a result of uncertainty, particularly amongst those firms directly affected. If households become more worried about spread to (or worse, within) New Zealand, this could also affect consumer confidence and spending patterns (eg less eating out). For now, this seems a lesser risk. But the risks of confidence effects increase the longer the outbreak goes on and the more widespread it becomes. Survey data will be watched. Moreover, confidence effects in other counties could weigh on global demand and flow though to trade.

Economic overview

Markets

This will weigh on the NZD.

More stimulus is possible.

Nervousness is clearly being felt in markets and rightly so, with fears about the possible implications for global demand. This nervousness has a direct effect on New Zealand through a lower NZD, which typically trades as a proxy for China risk (although AUD even more so). A lower NZD may provide a shock absorber for exporters and boost net exports, despite negative implications for import-competing firms and household purchasing power. But benefits to exporters would be mitigated to some degree if the yuan and AUD are even lower. Heightened risk aversion could also affect market funding availability and increase costs. Chinese authorities may need to provide more fiscal and monetary stimulus to support their economy in the face of potential economic impacts. And if the global outlook was sufficiently affected, other governments and central banks (including the RBNZ) may respond. But for now, it's very much wait and see.

GDP, inflation and monetary policy

The total impact is highly uncertain.

The magnitude of the total economic impact is highly uncertain and will depend on the outbreak's reach and persistence, the size of the various channels described above, and the extent of any policy response should the outbreak persist. But the overall direction of risk is clear.

GDP would be impacted negatively at least in the short term.

Overall, the channels above would be expected to have a negative impact on GDP in the short term (the first half of this year) at least, primarily as a result of the impact on soft commodity prices, trade channel disruption, and reduced tourism and travel exports. The impact on GDP growth will be temporary, but could be sharp if the disruption is severe. The impact of a more persistent outbreak would depend crucially on the resilience of global and domestic demand, confidence effects, and possible NZD and policy responses. There could also be flow-on effects over time to a range of industries, the labour market and spending.

Same with inflation.

For inflation, we would expect to see a dampening impact in the short term at least. Food prices, for example, will be lower, with reduced supply to China potentially causing an increase in product available domestically. Oil prices are also being weighed down by the trifecta of risk aversion, concerns about Chinese growth, and continued news that transportation demand is being curbed. WTI oil prices fell 18% over the month of January and this will be expected to weigh on petrol prices, with this weakness expected to persist as disruption continues, although the possibility of more production cuts by OPEC could stem further declines. The impacts on non-oil import prices are less clear, depending on possible disruption to imports (upside for prices) and impacts on demand and the NZD (downside for prices). For domestic inflation, the impact will hinge on domestic GDP impacts. Overall, the impact on inflation is negative; the question is how big and how long the impact is.

The RBNZ look through temporary shocks.

The RBNZ can be expected to look through temporary effects. In a bad/prolonged scenario, OCR cuts could be judged necessary in order to shore up confidence and the inflation and labour market outlooks. But it is early days and there is much uncertainty, so that certainly won't be on the cards at this stage.

But they would cut the OCR if necessary.

For the February MPS, the RBNZ will likely acknowledge the tragic developments associated with the outbreak, the huge uncertainty it presents, and potentially the channels through which New Zealand may be affected, drawing parallels with the 2003 SARS outbreak. These risks will temper the RBNZ's optimism regarding the domestic outlook. The medium-term domestic outlook would otherwise have been more positive, with a stronger outlook for the housing market and fiscal spending. For now, the RBNZ can be patient – and will watch, worry and wait.

And are in a position to be patient.

December labour market statistics will be released on Wednesday. We expect the unemployment rate will be stable at 4.2%, although monthly noise could throw this around. More broadly, we see the labour market sitting comfortably near the RBNZ's assessment of maximum sustainable employment. On the wages side, we expect to see a 0.1%pt lift in LCI adjusted private sector wages to 2.3% y/y, as underlying wage inflation to continues to rise gradually.

Economic overview

The labour market is expected to be stable.

The Q4 labour market suite will be the last piece of the quarterly data puzzle before the February MPS is published. But it is unlikely to be a game changer. A labour market read in the ball park of our expectation, alongside the fact that core inflation is close to the target mid-point, is consistent with our view that the OCR will be on hold at 1%, notwithstanding salient global risks.

Local data

Overseas Merchandise trade – December. The unadjusted trade balance saw a surplus of $547 million, above expectations, due to softer imports, but this may be timing related. Exports lifted on the back of the usual seasonal increase in production, with prices elevated.

ANZ Roy Morgan Consumer Confidence – January. Consumer confidence was unchanged, holding onto its recent gains. Significantly, the proportion of households who think it's a good time to buy a major household item lifted another 5 points to 49%.

What you may have missed

Please contact us if you would like to be added to the distribution list for any of these publications. Otherwise click on the links below to view reports.

- ANZ Roy Morgan Consumer Confidence: Steady as she goes
- NZ Labour Market Preview: Offsetting forces
- Quarterly Economic Outlook: Through the looking glass

Data calendar

Date	Country	Data/event	Mkt.	Last	NZ time
3-Feb	AU	CoreLogic House Px MoM - Jan	--	1.2%	12:00
	AU	Melbourne Institute Inflation MoM - Jan	--	0.3%	13:00
	AU	Melbourne Institute Inflation YoY - Jan	--	1.4%	13:00
	AU	Building Approvals MoM - Dec	-5.0%	11.8%	13:30
	AU	Building Approvals YoY - Dec	-1.4%	-3.8%	13:30
	AU	ANZ Job Advertisements MoM - Jan	--	-6.7%	13:30
	JN	Jibun Bank PMI Mfg - Jan F	--	49.3	13:30
	CH	Industrial Profits YoY - Dec	--	5.4%	14:30
	CH	Caixin PMI Mfg - Jan	51.0	51.5	14:45
	GE	Markit/BME Manufacturing PMI - Jan F	45.2	45.2	21:55
	EC	Markit Manufacturing PMI - Jan F	47.8	47.8	22:00
	UK	Markit PMI Manufacturing SA - Jan F	49.8	49.8	22:30
4-Feb	US	Markit Manufacturing PMI - Jan F	51.7	51.7	03:45
	US	Construction Spending MoM - Dec	0.5%	0.6%	04:00
	US	ISM Manufacturing - Jan	48.5	47.8	04:00
	NZ	Building Permits MoM - Dec	--	-8.5%	10:45
	AU	ANZ-RM Consumer Confidence Index - 2-Feb	--	108.0	11:30
	AU	RBA Cash Rate Target - Feb	0.75%	0.75%	16:30
	UK	Markit/CIPS UK Construction PMI - Jan	47.1	44.4	22:30
	EC	PPI MoM - Dec	0.0%	0.2%	23:00
	EC	PPI YoY - Dec	-0.7%	-1.4%	23:00
5-Feb	US	Factory Orders - Dec	1.2%	-0.7%	04:00
	US	Factory Orders Ex Trans - Dec	0.1%	0.3%	04:00
	US	Durable Goods Orders - Dec F	2.4%	2.4%	04:00
	US	Durables Ex Transportation - Dec F	-0.1%	-0.1%	04:00
	US	Cap Goods Orders Nondef Ex Air - Dec F	--	-0.9%	04:00
	US	Cap Goods Ship Nondef Ex Air - Dec F	--	-0.4%	04:00
	NZ	QV House Prices YoY - Jan	--	4.0%	05:00
	AU	Ai Group Perf of Construction Index - Jan	--	38.9	10:30
	NZ	Unemployment Rate - Q4	4.2%	4.2%	10:45
	NZ	Employment Change QoQ - Q4	0.3%	0.3%	10:45
	NZ	Employment Change YoY - Q4	1.2%	1.0%	10:45
	NZ	Participation Rate - Q4	70.4%	70.4%	10:45
	NZ	Pvt Wages Ex Overtime QoQ - Q4	0.5%	0.6%	10:45
	NZ	Pvt Wages Inc Overtime QoQ - Q4	0.5%	0.6%	10:45
	NZ	Average Hourly Earnings QoQ - Q4	0.5%	0.6%	10:45
	AU	CBA PMI Composite - Jan F	--	48.6	11:00
	AU	CBA PMI Services - Jan F	--	48.9	11:00
	NZ	ANZ Commodity Price - Jan	--	-2.8%	13:00
	JN	Jibun Bank PMI Composite - Jan F	--	51.1	13:30
	JN	Jibun Bank PMI Services - Jan F	--	52.1	13:30
	CH	Caixin PMI Composite - Jan	--	52.6	14:45
	CH	Caixin PMI Services - Jan	52.0	52.5	14:45
	GE	Markit Services PMI - Jan F	54.2	54.2	21:55
	GE	Markit/BME Composite PMI - Jan F	51.1	51.1	21:55
	EC	Markit Services PMI - Jan F	52.2	52.2	22:00
	EC	Markit Composite PMI - Jan F	50.9	50.9	22:00
	UK	Official Reserves Changes - Jan	--	$2143M	22:30

Continued on following page

Data calendar

Date	Country	Data/event	Mkt.	Last	NZ time
5-Feb	UK	Markit/CIPS Services PMI - Jan F	52.9	52.9	22:30
	UK	Markit/CIPS Composite PMI - Jan F	52.4	52.4	22:30
	EC	Retail Sales MoM - Dec	-1.1%	1.0%	23:00
	EC	Retail Sales YoY - Dec	2.3%	2.2%	23:00
6-Feb	US	MBA Mortgage Applications - 31-Jan	--	7.2%	01:00
	US	ADP Employment Change - Jan	158k	202k	02:15
	US	Trade Balance - Dec	-$48.1B	-$43.1B	02:30
	US	Markit Services PMI - Jan F	53.2	53.2	03:45
	US	Markit Composite PMI - Jan F	--	53.1	03:45
	US	ISM Non-Manufacturing Index - Jan	55.1	54.9	04:00
	AU	Trade Balance - Dec	A$5600M	A$5800M	13:30
	AU	Retail Sales MoM - Dec	-0.2%	0.9%	13:30
	AU	Retail Sales Ex Inflation QoQ - Q4	0.3%	-0.1%	13:30
	AU	NAB Business Confidence - Q4	--	-2	13:30
	GE	Factory Orders MoM - Dec	0.7%	-1.3%	20:00
	GE	Factory Orders WDA YoY - Dec	-6.6%	-6.5%	20:00
	GE	Markit Construction PMI - Jan	--	53.8	21:30
7-Feb	US	Challenger Job Cuts YoY - Jan	--	-25.2%	01:30
	US	Unit Labor Costs - Q4 P	1.2%	2.5%	02:30
	US	Nonfarm Productivity - Q4 P	1.5%	-0.2%	02:30
	US	Initial Jobless Claims - 1-Feb	215k	216k	02:30
	US	Continuing Claims - 25-Jan	1710k	1703k	02:30
	AU	Ai Group Perf of Services Index - Jan	--	48.7	10:30
	AU	RBA's Lowe Semi-annual Testimony to Parliament Committee			11:30
	AU	RBA Statement on Monetary Policy	--	--	13:30
	NZ	2Yr Inflation Expectation - Q1	--	1.8%	15:00
	AU	Foreign Reserves - Jan	--	A$83.8B	18:30
	GE	Trade Balance - Dec	€15.0B	€18.6B	20:00
	GE	Current Account Balance - Dec	€23.5B	€24.9B	20:00
	GE	Exports SA MoM - Dec	0.6%	-2.3%	20:00
	GE	Imports SA MoM - Dec	0.3%	-0.5%	20:00
	GE	Industrial Production SA MoM - Dec	-0.2%	1.1%	20:00
	GE	Industrial Production WDA YoY - Dec	-3.7%	-2.6%	20:00
	CH	Exports YoY - Jan	-4.5%	7.9%	UNSPECIFIED
	CH	Imports YoY - Jan	2.0%	16.5%	UNSPECIFIED
	CH	Trade Balance - Jan	$36.75B	$47.21B	UNSPECIFIED
	CH	Foreign Reserves - Jan	$3095.00B	$3107.92B	UNSPECIFIED
8-Feb	US	Change in Nonfarm Payrolls - Jan	160k	145k	02:30
	US	Unemployment Rate - Jan	3.5%	3.5%	02:30
	US	Average Hourly Earnings MoM - Jan	0.3%	0.1%	02:30
	US	Average Hourly Earnings YoY - Jan	3.0%	2.9%	02:30
	US	Average Weekly Hours All Employees - Jan	34.3	34.3	02:30
	US	Wholesale Inventories MoM - Dec F	-0.1%	-0.1%	04:00
	US	Wholesale Trade Sales MoM - Dec	0.1%	1.5%	04:00
	US	Consumer Credit - Dec	$15.000B	$12.513B	09:00

Key: AU: Australia, EC: Eurozone, GE: Germany, JN: Japan, NZ: New Zealand, UK: United Kingdom, US: United States, CH: China.
Source: Dow Jones, Reuters, Bloomberg, ANZ Bank New Zealand Limited. All $ values in local currency.
Note: All surveys are preliminary and subject to change

Local data watch

Domestic data has turned upward and growth looks like it will improve gradually from here. Although capacity pressures have eased a little, the medium term outlook is now looking more assured. We see the OCR on hold for the foreseeable future. Global risks are salient and could change this entirely.

Date	Data/event	Economic signal	Comment
Tue 4 Feb (10:45am)	Building Consents – December	Wary	Consents have been holding at a high level. While downside risks remain, recent resurgence in the housing market provides some offset.
Wed 5 Feb (early am)	GlobalDairyTrade auction	Falling	Prices are expected to fall approximately 5% at this week's GDT event on reduced demand from China.
Wed 5 Feb (10:45am)	Labour Market Statistics – Q4	Tight	The labour market is tight, but the recent slowdown in economic momentum is yet to filter through.
Wed 5 Feb (1:00pm)	ANZ Commodity Price Index – January	--	--
Mon 10 Feb (10-15 Feb)	REINZ Housing Data – January	Rebound	The housing market rebounded over the second half of 2019, and more strength seems likely, given market tightness.
Tue 11 Feb (10:00am)	ANZ Truckometer – January	--	--
Wed 12 Feb (2:00pm)	RBNZ Monetary Policy Statement – February	Hold the door	The RBNZ can afford to be patient. Inflation appears close to target and the data pulse has improved. We expect the OCR to remain unchanged at 1%.
Fri 14 Feb (10:45am)	Food Price Index – January	Rebound	A seasonal rebound in food prices is expected.
Fri 14 Feb (10:45am	Rental Price Index – January	Small rise	Continued increases in rental prices should support a quarterly rise in CPI rents.
Mon 17 Feb (10:45am)	Net Migration – December	Down	The vibe is certainly that migration has been heading downwards, but data can – and does – throw up wildcards.
Mon 17 Feb (1:00pm)	ANZ Monthly Inflation Gauge – January	--	--
Wed 19 Feb (early am)	GlobalDairyTrade auction	Easing	Dairy prices are expected to continue to ease due to market uncertainty relating to the coronavirus outbreak.
Mon 24 Feb (10:45am)	Retail Sales – Q4	Bright spot	A robust household sector is one of the economy's bright spots. Don't fail us now.
Thu 27 Feb (10:45am)	Overseas Merchandise Trade – January	Easing	Dairy export volumes are expected to ease and a relatively slow start to the meat-processing season will keep export volumes in check.
Thu 27 Feb (1:00pm)	ANZ Business Outlook – February	--	--
Fri 28 Feb (10:00am)	ANZ Roy Morgan Consumer Confidence – February	--	--
Mon 2 Mar (10:45am)	Terms of Trade – Q4		The terms of trade may recoil slightly on a q/q basis, but are expected to remain at a high level.
Wed 4 Mar (early am)	GlobalDairyTrade auction	Easing	Reduced demand from China will weigh, potentially partially offset by reduced supply on the back of dry conditions.
Wed 4 Mar (10:45am)	Building Consents –January	Hi there	Consents have been holding at a high level. While downside risks remain, recent resurgence in the housing market is expected to provide continued support.
Wed 4 Mar (1:00pm)	ANZ Commodity Price Index – February	--	--
Fri 6 Mar (10:45am)	Work Put In Place – Q4	Build me up	Another nudge up is expected, with building consents having pushed higher.
Tue 10 Mar (10:00am)	ANZ Truckometer – February	--	--
On balance		**Data watch**	**The vibe has improved and we now see the OCR flat for the foreseeable future. Global risks are salient.**

Key forecasts and rates

	Sep-19	Dec-19	Mar-20	Jun-20	Sep-20	Dec-20	Mar-21	Jun-21	Sep-21
GDP (% qoq)	0.7	**0.5**	**0.7**	**0.6**	**0.6**	**0.6**	**0.6**	**0.7**	**0.7**
GDP (% yoy)	2.3	**1.7**	**2.0**	**2.5**	**2.4**	**2.5**	**2.4**	**2.5**	**2.6**
CPI (% qoq)	0.7	0.5	**0.5**	**0.5**	**0.5**	**0.2**	**0.6**	**0.5**	**0.6**
CPI (% yoy)	1.5	1.9	**2.2**	**2.1**	**2.0**	**1.7**	**1.9**	**2.0**	**2.0**
LCI Wages (% qoq)	0.6	**0.5**	**0.4**	**0.8**	**0.5**	**0.6**	**0.4**	**0.8**	**0.5**
LCI Wages (% yoy)	2.3	**2.3**	**2.3**	**2.3**	**2.2**	**2.2**	**2.2**	**2.3**	**2.4**
Employment (% qoq)	0.2	**0.4**	**0.3**	**0.5**	**0.5**	**0.5**	**0.4**	**0.4**	**0.4**
Employment (% yoy)	0.9	**1.3**	**1.6**	**1.5**	**1.7**	**1.7**	**1.8**	**1.7**	**1.7**
Unemployment Rate (% sa)	4.2	**4.2**	**4.2**	**4.1**	**4.1**	**4.0**	**3.9**	**3.9**	**3.8**
Current Account (% GDP)	-3.3	**-3.3**	**-3.4**	**-3.5**	**-3.5**	**-3.6**	**-3.7**	**-3.7**	**-3.7**
Terms of Trade (% qoq)	1.9	**-0.1**	**1.7**	**-0.6**	**0.5**	**0.1**	**0.1**	**0.1**	**0.1**
Terms of Trade (% yoy)	1.0	**4.3**	**5.0**	**2.9**	**1.6**	**1.8**	**0.2**	**0.9**	**0.4**

	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20
Retail ECT (% mom)	1.0	-0.6	0.3	0.0	1.2	0.3	-0.5	2.9	-0.8	--
Retail ECT (% yoy)	5.0	3.4	1.5	2.0	3.1	0.6	1.6	5.1	3.9	--
Car Registrations (% mom)	1.9	-2.0	-2.7	5.2	-0.1	6.3	-6.5	-1.3	2.3	--
Car Registrations (% yoy)	-0.5	-12.6	-11.0	-5.4	-5.2	4.7	-6.6	3.0	5.6	--
Building Consents (% mom)	-7.3	14.5	-4.2	-1.2	0.8	6.9	-1.3	-8.4	--	--
Building Consents (% yoy)	-3.0	8.2	9.4	18.6	12.3	23.4	18.4	7.9	--	--
REINZ House Price Index (% yoy)	1.4	1.7	1.8	1.6	2.7	3.2	3.8	5.6	6.6	--
Household Lending Growth (% mom)	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.6	0.6	--
Household Lending Growth (% yoy)	5.9	6.0	5.9	5.9	6.0	6.1	6.2	6.3	6.5	--
ANZ Roy Morgan Consumer Conf.	123.2	119.3	122.6	116.4	118.2	113.9	118.4	120.7	123.3	122.7
ANZ Business Confidence	-37.5	-32.0	-38.1	-44.3	-52.3	-53.5	-42.4	-26.4	-13.2	--
ANZ Own Activity Outlook	7.1	8.5	8.0	5.0	-0.5	-1.8	-3.5	12.9	17.2	--
Trade Balance ($m)	361	175	330	-732	-1642	-1310	-1043	-791	547	--
Trade Bal ($m ann)	-5578	-5602	-4987	-5516	-5591	-5321	-5060	-4847	-4309	--
ANZ World Comm. Price Index (% mom)	2.6	0.1	-3.9	-1.4	0.3	0.0	1.2	4.3	-2.8	--
ANZ World Comm. Price Index (% yoy)	2.2	0.7	-2.4	-0.5	0.9	3.4	7.2	12.4	9.4	--
Net Migration (sa)	3250	3750	3330	3740	3520	2810	3400	2610	--	--
Net Migration (ann)	46396	46144	45657	45361	44688	43217	42980	41478	--	--
ANZ Heavy Traffic Index (% mom)	2.6	0.8	-2.4	2.3	-3.5	3.3	2.8	-1.6	-2.5	--
ANZ Light Traffic Index (% mom)	0.2	0.8	-2.0	1.4	0.3	-0.3	0.2	1.2	-2.0	--
ANZ Monthly Inflation Gauge (% mom)	-0.1	0.2	0.5	0.5	0.3	0.3	0.3	0.1	0.4	--

Figures in bold are forecasts. mom: Month-on-Month; qoq: Quarter-on-Quarter; yoy: Year-on-Year

Key forecasts and rates

	Actual			Forecast (end month)					
FX rates	Dec-19	Jan-20	Today	Mar-20	Jun-20	Sep-20	Dec-20	Mar-21	Jun-21
NZD/USD	0.674	0.646	0.648	0.67	0.66	0.66	0.65	0.65	0.65
NZD/AUD	0.961	0.966	0.967	0.97	0.97	0.97	0.97	0.97	0.97
NZD/EUR	0.600	0.583	0.584	0.62	0.60	0.60	0.58	0.58	0.57
NZD/JPY	73.10	70.04	70.20	74.4	73.9	73.9	72.8	72.8	72.8
NZD/GBP	0.511	0.489	0.491	0.51	0.50	0.49	0.48	0.47	0.47
NZ$ TWI	73.70	71.63	71.67	74.6	73.4	73.3	72.0	71.8	71.6
Interest rates	Dec-19	Jan-20	Today	Mar-20	Jun-20	Sep-20	Dec-20	Mar-21	Jun-21
NZ OCR	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
NZ 90 day bill	1.29	1.26	1.26	1.28	1.28	1.28	1.28	1.28	1.28
NZ 10-yr bond	1.65	1.30	1.30	1.55	1.67	1.65	1.30	1.30	1.25
US Fed funds	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75
US 3-mth	1.91	1.75	1.75	1.90	1.90	1.90	1.90	1.90	1.90
AU Cash Rate	0.75	0.75	0.75	0.75	0.50	0.25	0.25	0.25	0.25
AU 3-mth	0.92	0.88	0.88	0.70	0.45	0.45	0.45	0.45	0.45

	31-Dec	27-Jan	28-Jan	29-Jan	30-Jan	31-Jan
Official Cash Rate	1.00	1.00	1.00	1.00	1.00	1.00
90 day bank bill	1.29	1.28	1.26	1.26	1.26	1.26
NZGB 05/21	1.12	1.03	1.01	1.01	1.01	1.00
NZGB 04/23	1.19	1.06	0.98	1.04	0.98	1.00
NZGB 04/27	1.52	1.34	1.23	1.29	1.20	1.21
NZGB 04/33	1.91	1.66	1.52	1.60	1.49	1.50
2 year swap	1.26	1.19	1.15	1.17	1.13	1.09
5 year swap	1.45	1.27	1.21	1.24	1.18	1.16
RBNZ TWI	73.82	72.60	72.31	72.26	72.18	71.86
NZD/USD	0.6735	0.6565	0.6527	0.6522	0.6503	0.6464
NZD/AUD	0.9606	0.9694	0.9677	0.9661	0.9661	0.9667
NZD/JPY	73.10	71.47	71.05	71.15	70.84	70.05
NZD/GBP	0.5111	0.5014	0.5015	0.5011	0.4999	0.4897
NZD/EUR	0.6003	0.5953	0.5923	0.5928	0.5904	0.5827
AUD/USD	0.7010	0.6773	0.6745	0.6751	0.6732	0.6692
EUR/USD	1.1217	1.1028	1.1019	1.1002	1.1014	1.1093
USD/JPY	108.54	108.86	108.86	109.09	108.92	108.35
GBP/USD	1.3175	1.3094	1.3015	1.3014	1.3009	1.3206
Oil (US$/bbl)	61.06	53.14	53.48	53.33	52.14	51.56
Gold (US$/oz)	1522.77	1585.49	1579.39	1570.54	1580.35	1589.16
NZX 50	11492	11807	11685	11677	11666	11717
Baltic Dry Freight Index	1090	546	539	525	498	487
NZX WMP Futures (US$/t)	3070	3300	3240	3185	3100	3000

Important notice

This document is intended for ANZ's Institutional, Markets and Private Banking clients. It should not be forwarded, copied or distributed. The information in this document is general in nature, and does not constitute personal financial product advice or take into account your objectives, financial situation or needs.

This document may be restricted by law in certain jurisdictions. Persons who receive this document must inform themselves about and observe all relevant restrictions.

Disclaimer for all jurisdictions: This document is prepared and distributed in your country/region by either: Australia and New Zealand Banking Group Limited (ABN11 005 357 522) (**ANZ**); or its relevant subsidiary or branch (each, an **Affiliate**), as appropriate or as set out below.

This document is distributed on the basis that it is only for the information of the specified recipient or permitted user of the relevant website (**recipients**).

This document is solely for informational purposes and nothing contained within is intended to be an invitation, solicitation or offer by ANZ to sell, or buy, receive or provide any product or service, or to participate in a particular trading strategy.

Distribution of this document to you is only as may be permissible by the laws of your jurisdiction, and is not directed to or intended for distribution or use by recipients resident or located in jurisdictions where its use or distribution would be contrary to those laws or regulations, or in jurisdictions where ANZ would be subject to additional licensing or registration requirements. Further, the products and services mentioned in this document may not be available in all countries.

ANZ in no way provides any financial, legal, taxation or investment advice to you in connection with any product or service discussed in this document. Before making any investment decision, recipients should seek independent financial, legal, tax and other relevant advice having regard to their particular circumstances.

Whilst care has been taken in the preparation of this document and the information contained within is believed to be accurate, ANZ does not represent or warrant the accuracy or completeness of the information Further, ANZ does not accept any responsibility to inform you of any matter that subsequently comes to its notice, which may affect the accuracy of the information in this document.

Preparation of this document and the opinions expressed in it may involve material elements of subjective judgement and analysis. Unless specifically stated otherwise: they are current on the date of this document and are subject to change without notice; and, all price information is indicative only. Any opinions expressed in this document are subject to change at any time without notice.

ANZ does not guarantee the performance of any product mentioned in this document. All investments entail a risk and may result in both profits and losses. Past performance is not necessarily an indicator of future performance. The products and services described in this document may not be suitable for all investors, and transacting in these products or services may be considered risky.

ANZ expressly disclaims any responsibility and shall not be liable for any loss, damage, claim, liability, proceedings, cost or expense (Liability) arising directly or indirectly and whether in tort (including negligence), contract, equity or otherwise out of or in connection with this document to the extent permissible under relevant law. Please note, the contents of this document have not been reviewed by any regulatory body or authority in any jurisdiction.

ANZ and its Affiliates may have an interest in the subject matter of this document. They may receive fees from customers for dealing in the products or services described in this document, and their staff and introducers of business may share in such fees or remuneration that may be influenced by total sales, at all times received and/or apportioned in accordance with local regulatory requirements. Further, they or their customers may have or have had interests or long or short positions in the products or services described in this document, and may at any time make purchases and/or sales in them as principal or agent, as well as act (or have acted) as a market maker in such products. This document is published in accordance with ANZ's policies on conflicts of interest and ANZ maintains appropriate information barriers to control the flow of information between businesses within it and its Affiliates.

Your ANZ point of contact can assist with any questions about this document including for further information on these disclosures of interest.

Country/region specific information: Unless stated otherwise, this document is distributed by Australia and New Zealand Banking Group Limited (**ANZ**).

Australia. ANZ holds an Australian Financial Services licence no. 234527. For a copy of ANZ's Financial Services Guide please or request from your ANZ point of contact.

Brazil, Brunei, India, Japan, Kuwait, Malaysia, Switzerland, Taiwan. This document is distributed in each of these jurisdictions by ANZ on a cross-border basis.

Cambodia. This document is distributed in Cambodia by ANZ Royal Bank (Cambodia) Limited (**ANZ Royal Bank**). The recipient acknowledges that although ANZ Royal Bank is a subsidiary of ANZ, it is a separate entity to ANZ and the obligations of ANZ Royal Bank do not constitute deposits or other liabilities of ANZ and ANZ is not required to meet the obligations of ANZ Royal Bank.

European Economic Area (EEA): ***United Kingdom.*** ANZ is authorised in the United Kingdom by the Prudential Regulation Authority (**PRA**) and is subject to regulation by the Financial Conduct Authority (**FCA**) and limited regulation by the PRA. Details about the extent of our regulation by the PRA are available from us on request. This document is distributed in the United Kingdom by Australia and New Zealand Banking Group Limited ANZ solely for the information of persons who would come within the FCA definition of "eligible counterparty" or "professional client". It is not intended for and must not be distributed to any person who would come within the FCA definition of "retail client". Nothing here excludes or restricts any duty or liability to a customer which ANZ may have under the UK Financial Services and Markets Act 2000 or under the regulatory system as defined in the Rules of the Prudential Regulation Authority (**PRA**) and the FCA. ANZ is authorised in the United Kingdom by the PRA and is subject to regulation by the FCA and limited regulation by the PRA. Details about the extent of our regulation by the PRA are available from us on request.

Fiji. For Fiji regulatory purposes, this document and any views and recommendations are not to be deemed as investment advice. Fiji investors must seek licensed professional advice should they wish to make any investment in relation to this document.

Hong Kong. This publication is issued or distributed in Hong Kong by the Hong Kong branch of ANZ, which is registered at the Hong Kong Monetary Authority to conduct Type 1 (dealing in securities), Type 4 (advising on securities) and Type 6 (advising on corporate finance) regulated activities. The contents of this publication have not been reviewed by any regulatory authority in Hong Kong.

India. If this document is received in India, only you (the specified recipient) may print it provided that before doing so, you specify on it your name and place of printing.

Myanmar. This publication is intended to be general and part of ANZ's customer service and marketing activities when implementing its functions as a licensed bank. This publication is not Securities Investment Advice (as that term is defined in the Myanmar Securities Transaction Law 2013).

Important notice

New Zealand. This document is intended to be of a general nature, does not take into account your financial situation or goals, and is not a personalised adviser service under the Financial Advisers Act 2008 (**FAA**).

Oman. ANZ neither has a registered business presence nor a representative office in Oman and does not undertake banking business or provide financial services in Oman. Consequently ANZ is not regulated by either the Central Bank of Oman or Oman's Capital Market Authority. The information contained in this document is for discussion purposes only and neither constitutes an offer of securities in Oman as contemplated by the Commercial Companies Law of Oman (Royal Decree 4/74) or the Capital Market Law of Oman (Royal Decree 80/98), nor does it constitute an offer to sell, or the solicitation of any offer to buy non-Omani securities in Oman as contemplated by Article 139 of the Executive Regulations to the Capital Market Law (issued vide CMA Decision 1/2009). ANZ does not solicit business in Oman and the only circumstances in which ANZ sends information or material describing financial products or financial services to recipients in Oman, is where such information or material has been requested from ANZ and the recipient understands, acknowledges and agrees that this document has not been approved by the CBO, the CMA or any other regulatory body or authority in Oman. ANZ does not market, offer, sell or distribute any financial or investment products or services in Oman and no subscription to any securities, products or financial services may or will be consummated within Oman. Nothing contained in this document is intended to constitute Omani investment, legal, tax, accounting or other professional advice.

People's Republic of China (PRC). This document may be distributed by either ANZ or Australia and New Zealand Bank (China) Company Limited (**ANZ China**). Recipients must comply with all applicable laws and regulations of PRC, including any prohibitions on speculative transactions and CNY/CNH arbitrage trading. If this document is distributed by ANZ or an Affiliate (other than ANZ China), the following statement and the text below is applicable: No action has been taken by ANZ or any affiliate which would permit a public offering of any products or services of such an entity or distribution or re-distribution of this document in the PRC. Accordingly, the products and services of such entities are not being offered or sold within the PRC by means of this document or any other document. This document may not be distributed, re-distributed or published in the PRC, except under circumstances that will result in compliance with any applicable laws and regulations. If and when the material accompanying this document relates to the products and/or services of ANZ China, the following statement and the text below is applicable: This document is distributed by ANZ China in the Mainland of the PRC.

Qatar. This document has not been, and will not be:

- lodged or registered with, or reviewed or approved by, the Qatar Central Bank (**QCB**), the Qatar Financial Centre (**QFC**) Authority, QFC Regulatory Authority or any other authority in the State of Qatar (**Qatar**); or
- authorised or licensed for distribution in Qatar,

and the information contained in this document does not, and is not intended to, constitute a public offer or other invitation in respect of securities in Qatar or the QFC. The financial products or services described in this document have not been, and will not be:

- registered with the QCB, QFC Authority, QFC Regulatory Authority or any other governmental authority in Qatar; or
- authorised or licensed for offering, marketing, issue or sale, directly or indirectly, in Qatar.

Accordingly, the financial products or services described in this document are not being, and will not be, offered, issued or sold in Qatar, and this document is not being, and will not be, distributed in Qatar. The offering, marketing, issue and sale of the financial products or services described in this document and distribution of this document is being made in, and is subject to the laws, regulations and rules of, jurisdictions outside of Qatar and the QFC. Recipients of this document must abide by this restriction and not distribute this document in breach of this restriction. This document is being sent/issued to a limited number of institutional and/or sophisticated investors (i) upon their request and confirmation that they understand the statements above; and (ii) on the condition that it will not be provided to any person other than the original recipient, and is not for general circulation and may not be reproduced or used for any other purpose.

Singapore. This document is distributed in Singapore by the Singapore branch of ANZ solely for the information of "accredited investors", "expert investors" or (as the case may be) "institutional investors" (each term as defined in the Securities and Futures Act Cap. 289 of Singapore). ANZ is licensed in Singapore under the Banking Act Cap. 19 of Singapore and is exempted from holding a financial adviser's licence under Section 23(1)(a) of the Financial Advisers Act Cap. 100 of Singapore.

United Arab Emirates (UAE). This document is distributed in the UAE or the Dubai International Financial Centre (**DIFC**) (as applicable) by ANZ. This document does not, and is not intended to constitute: (a) an offer of securities anywhere in the UAE; (b) the carrying on or engagement in banking, financial and/or investment consultation business in the UAE under the rules and regulations made by the Central Bank of the UAE, the Emirates Securities and Commodities Authority or the UAE Ministry of Economy; (c) an offer of securities within the meaning of the Dubai International Financial Centre Markets Law (DIFCML) No. 12 of 2004; and (d) a financial promotion, as defined under the DIFCML No. 1 of 200. ANZ DIFC Branch is regulated by the Dubai Financial Services Authority (**DFSA**) ANZ DIFC Branch is regulated by the Dubai Financial Services Authority (**DFSA**). The financial products or services described in this document are only available to persons who qualify as "Professional Clients" or "Market Counterparty" in accordance with the provisions of the DFSA rules. In addition, ANZ has a representative office (**ANZ Representative Office**) in Abu Dhabi regulated by the Central Bank of the UAE. The ANZ Representative Office is not permitted by the Central Bank of the UAE to provide any banking services to clients in the UAE.

United States. Except where this is a FX- related document, this document is distributed in the United States by ANZ Securities, Inc. (**ANZ SI**) which is a member of the Financial Regulatory Authority (**FINRA**) (www.finra.org) and registered with the SEC. ANZSI's address is 277 Park Avenue, 31st Floor, New York, NY 10172, USA (Tel: +1 212 801 9160 Fax: +1 212 801 9163). ANZSI accepts responsibility for its content. Information on any securities referred to in this document may be obtained from ANZSI upon request. This document or material is intended for institutional use only – not retail. If you are an institutional customer wishing to effect transactions in any securities referred to in this document you must contact ANZSI, not its affiliates. ANZSI is authorised as a broker-dealer only for institutional customers, not for US Persons (as "US person" is defined in Regulation S under the US Securities Act of 1933, as amended) who are individuals. If you have registered to use this website or have otherwise received this document and are a US Person who is an individual: to avoid loss, you should cease to use this website by unsubscribing or should notify the sender and you should not act on the contents of this document in any way. Non-U.S. analysts: Non-U.S. analysts may not be associated persons of ANZSI and therefore may not be subject to FINRA Rule 2242 restrictions on communications with the subject company, public appearances and trading securities held by the analysts. Where this is an FX-related document, it is distributed in the United States by ANZ's New York Branch, which is also located at 277 Park Avenue, 31st Floor, New York, NY 10172, USA (Tel: +1 212 801 916 0 Fax: +1 212 801 9163).

Vietnam. This document is distributed in Vietnam by ANZ or ANZ Bank (Vietnam) Limited, a subsidiary of ANZ.

This document has been prepared by ANZ Bank New Zealand Limited, Level 26, 23-29 Albert Street, Auckland 1010, New Zealand,
Ph 64-9-357 4094, e-mail nzeconomics@anz.com, http://www.anz.co.nz