ANZ Research

New Zealand Weekly Focus

28 April 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 27 664 3554
sharon.zollner@anz.com

David Croy
Strategist
Telephone: +64 27 432 2769
david.croy@anz.com

Natalie Denne
Desktop Publisher
Telephone: +64 21 253 6808
natalie.denne@anz.com

Liz Kendall
Senior Economist
Telephone: +64 27 240 9969
elizabeth.kendall@anz.com

Susan Kilsby
Agriculture Economist
Telephone: +64 21 633 469
susan.kilsby@anz.com

Kyle Uerata
Economic Statistician
Telephone: +64 21 633 894
kyle.uerata@anz.com

Miles Workman
Senior Economist
Telephone: +64 21 661 792
miles.workman@anz.com

Contact
research@anz.com

Follow us on Twitter
@sharon_zollner
@ANZ_Research (global)

Fallout

Economic overview

New Zealand is ahead of the curve in terms of curbing the COVID-19 outbreak, and that progress puts us in a good position to open up our economy, albeit cautiously. This progress has not gone unnoticed by markets, with the NZD finding support. Yet even if New Zealand is in a relatively fortunate position, as an exporting and net borrowing nation we won't escape the global fallout of this crisis. The global outlook is grim – worse than markets are currently pricing in – and the recovery will be protracted. This weakness in demand will weigh on our export prices and the NZD. In addition, we expect to see some rise in global credit defaults, which tends to happen in downturns. This could cause a repricing of credit spreads and risk in general, weighing on the NZD. That said, positive factors are expected to stem the extent of depreciations relative to previous episodes. We are fortunate; the virus situation on our shores is enviable. But we still need to brace for economic impact.

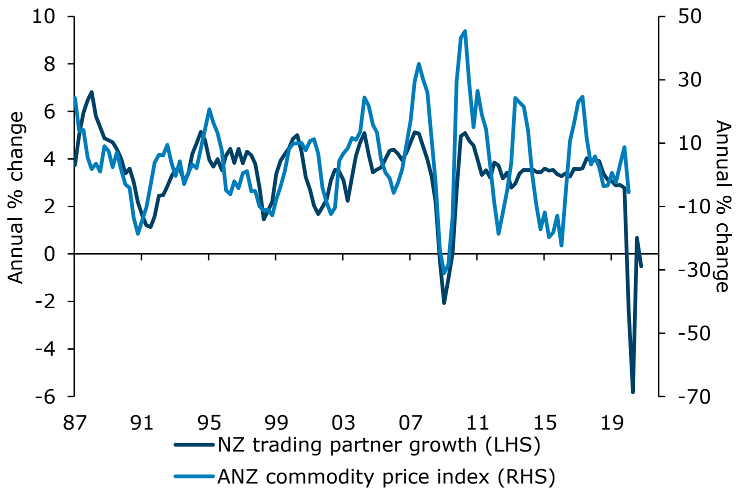
FX/rates overview

New Zealand yield curves continue to grind lower and flatter, taking their lead from less volatile US Treasury bond yields while shrugging off the recent steepening of the Australian government bond curve. We expect the gradual flattening of the NZGB curve here to continue, with RBNZ QE still targeting the longer end. This should help to continue flattening the swap curve too. The tone of RBNZ comments remains very dovish. As we noted last week, we expect the size of the QE programme to be at least doubled next month, adding further downward pressure to the NZGB curve. Monetisation of the fiscal deficit has been raised as a possibility here. It's possible, but we wouldn't expect an imminent leap to it.

Chart of the week

Although New Zealand is ahead of the curve in terms of containing the virus and reopening the economy, it will not be immune to the global fallout.

ANZ Commodity prices and outlook for trading-partner growth



Source: Haver Analytics, RBNZ, ANZ Research

Economic overview

We see the NZD depreciating in time.

Summary

New Zealand is ahead of the curve in terms of curbing the COVID-19 outbreak, and that progress puts us in a good position to open up our economy, albeit cautiously. This progress has not gone unnoticed by markets, with the NZD finding support. Yet even if New Zealand is in a relatively fortunate position, as an exporting and net borrowing nation we won't escape the global fallout of this crisis. The global outlook is grim – worse than markets are currently pricing in – and the recovery will be protracted. This weakness in demand will weigh on our export prices and the NZD. In addition, we expect to see some rise in global credit defaults, which tends to happen in downturns. This could cause a repricing of credit spreads and risk in general, weighing on the NZD. That said, positive factors are expected to stem the extent of depreciations relative to previous episodes. We are fortunate; the virus situation on our shores is enviable. But we still need to brace for economic impact.

Forthcoming data

Overseas Merchandise Trade – March (Wednesday 29 April). A trade surplus of approximately $975m is anticipated for the month as exports continue to grow while imports ease. Dairy continues to outperform while meat exports have rebounded, offsetting the weakness in forestry exports.

ANZ Business Outlook – April (Thursday 30 April, 1:00pm).

ANZ Roy Morgan Consumer Confidence (Friday 1 May).

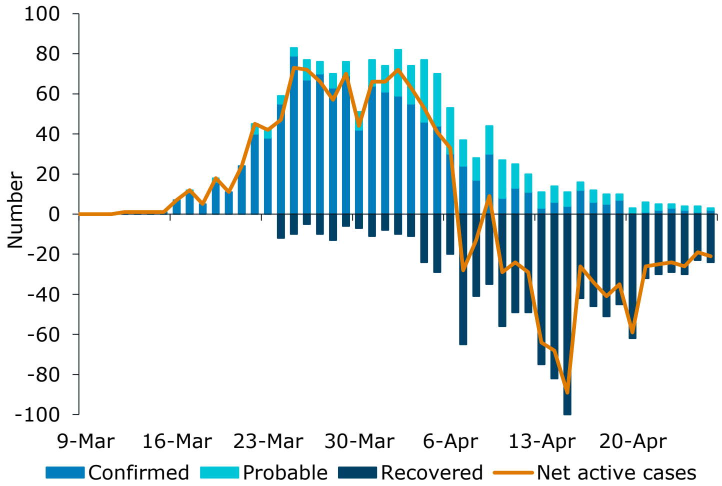
What's the view?

Our case numbers continue to shrink.

New Zealand remains ahead of the curve in curbing the COVID-19 outbreak

New Zealand continues to make substantial progress in containing the spread of COVID-19. Our new case numbers continue to be in the single digits, with recoveries far exceeding that. That means our active case count is fast diminishing (figure 1). Australia is also making great progress.

Figure 1. COVID-19 cases



Source: Ministry of Health, ANZ Research

We expect that we will stay ahead of the curve.

Our current assumption is that New Zealand and Australia will remain ahead of the curve in terms of containing the spread and will be able to reopen their economies sooner than elsewhere. A possible trans-Tasman 'bubble' has even been suggested should both countries continue to successfully beat this thing back, which would have economic benefits on both sides of the Tasman while other borders remained closed.

Economic overview

Today we move to Alert Level 3.

Our forecasts still look about right.

In other countries the blow will be worse.

Long-lasting economic impacts are unavoidable.

But it could be a lot worse.

We think more stimulus will be needed.

Today we move to Alert Level 3 – this first step towards opening up the economy is our hard-earned reward for the steady progress that has been made. The Alert Level will be reviewed again in two weeks, with further easing hopefully signalled thereafter. Case counts will remain highly important to the trajectory of our economic reopening. We have been highly successful in our approach so far, but we cannot become complacent, as just one super-spreader event could unwind weeks of hard work. Even with continued progress, it is possible that sporadic clusters may emerge in coming weeks, which would slow the pace of opening, at least regionally.

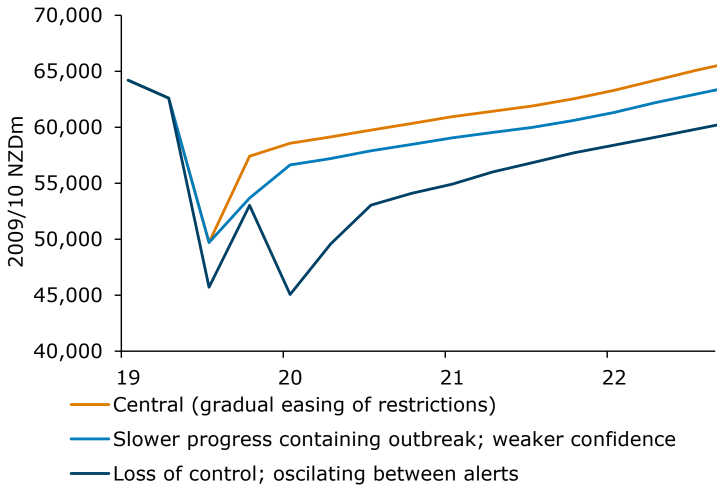
There are worse scenarios than what we are likely facing

Our forecast for a 22½% drop in GDP over the first half of the year assumes that we are in Alert Level 3 for four weeks. However, the outlook isn't particularly sensitive to small changes in that assumption, given broader uncertainty at present and the fact that effective lockdowns will be a mix of mandated and voluntary changes in behaviour. There's uncertainty on both sides. On the one hand, two weeks at Level 3 may indeed prove sufficient – here's hoping. But on the other hand, the GDP impacts of the lockdown could be greater than we expect. A range of 20-25% is about right, with much of this drop already "baked in".

The impact is huge, exaggerated by the strictness of our lockdown measures, but the reward is that hopefully we can move past this peak impact quickly. Other countries may not be so fortunate. In some economies where the virus is well established, long-lasting, widespread lockdown measures are a real possibility. Oscillating in and out of lockdown is also possible. It's hard to imagine a more devastating environment for business confidence than that.

Even if we can open up our economy again in a slow but steady way, we will not be returning to life as it was. For many firms, the damage is already done. Jobs have been lost. Financial positions will need to be repaired. And there will be a big hole in demand, particularly for industries like tourism. Borders will remain closed for a long time, and we expect some form of activity restrictions for the rest of the year at least. These more longer-lasting economic impacts are hugely important. They are unavoidable, but if we can eliminate the virus we have a fighting chance of limiting their impact. At present, we expect that GDP will be 8-10% lower over 2020. But the impact depends on the path of lockdown, which depends on case numbers.

Figure 2. GDP levels in under possible scenarios



Source: Statistics NZ, ANZ Research

Figure 2 shows some alternative scenarios to our central view.

Economic overview

- In the first, the economy is opened more slowly than assumed, due, say, to ongoing evidence of low-level community transmission. This sees greater caution and reinforces social distancing, causing more permanent economic damage.
- In the second scenario, the economy moves out of lockdown as assumed but we see a resurgence in the outbreak down the track. This scenario involves returning to lockdown later in the year, with a much slower recovery and much more permanent damage.

The NZD has found favour, with the market trading on themes.

These scenarios illustrate how high the stakes are. And even if the outlook proceeds as we expect and we can steadily move towards reopening, the economy will still need a lot of support. Our expectations are predicated on enormous monetary and fiscal stimulus, both of which we expect to see expanded. We expect that the RBNZ will roughly double its QE programme to $60bn. We think the RBNZ will do 'whatever it takes', and they remain open minded about stimulus options, including even direct monetisation of the fiscal deficit (see page 12 for a discussion on this).

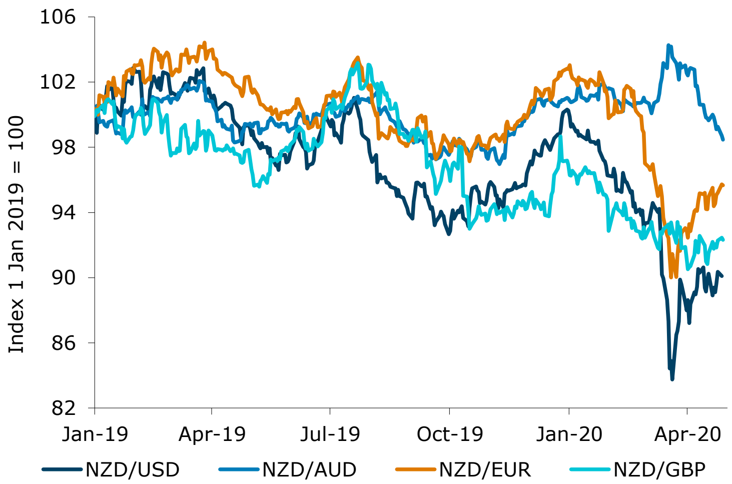
Our recent ANZ Quarterly Economic Outlook has more details on the outlook, including what the eventual recovery might look like and how the economy may be reshaped.

Markets have been paying attention, with NZD finding support

Getting new case numbers down to such low levels is very encouraging – and it has not gone unnoticed by markets. In recent weeks, the focus for markets generally has been on how the health crisis is evolving around the world. Economic data has taken a back seat – particularly since much of the (enormous) economic impact hasn't been seen in the data yet.

Instead, the market has taken to trading on themes. Many of these have had a 'feel-good' impact on the NZD, like our success containing COVID-19, our position as a food exporter and ability to pivot to supply products like red meat as US production is disrupted. These themes have been a factor supporting the NZD of late (figure 3). We saw an initial depreciation of the NZD against the USD and EUR when the crisis intensified, particularly through March. But since then NZD and AUD have found support, on the back of our progress containing the virus.

Figure 3. NZD against selected currency pairs



Source: Bloomberg

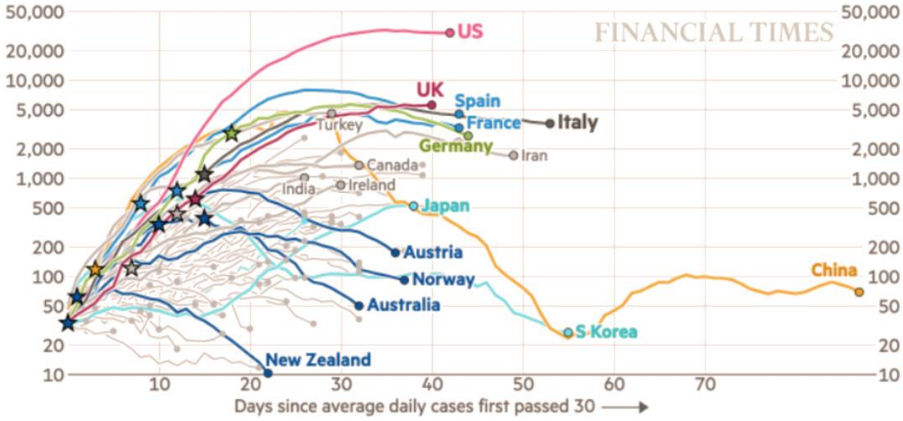
Our success is a stark contrast to elsewhere.

Economic overview

Our scope for recovery is promising, and scores well when compared to others.

Figure 4. How well is COVID-19 being managed? A global comparison (log scale)

Daily confirmed cases (7-day rolling average), since 30 daily cases first recorded. ★= national lockdowns



FT graphic: John Burn-Murdoch/@jburnmurdoch. Source: FT analysis of European Centre for Disease Prevention and Control; FT research. Data updated April 19 © FT

Our success in containing the virus promptly has contrasted starkly with how things have panned out in the US (figure 4, above). New Zealand and Australia certainly rank well in analyses that compare how different countries have been impacted and responded (table 1).

Table 1: Dimensions of virus impact and policy response (as at April 24 April)

	Currency	Sector risk[1]	Export markets[2]	Days since peak infection	Direct fiscal stimulus[3]	Valuation[4]	Final rank
Australia	AUD	54	51.2	26	11.4	-5.3	1
South Korea	KRW	68	41.2	54	7.9	-9.2	2
Norway	NOK	48	6.9	27	4.3	-26.1	3
Vietnam	VND	53	31.8	32	1.2	-	3
New Zealand	NZD	61	39.4	18	5.1	-8.1	5
Japan	JPY	67	39.5	10	20.1	-16.2	6
United Kingdom	GBP	55	13.1	13	18.8	-17.0	7
Malaysia	MYR	66	26.6	28	2.8	-16.9	9
Sweden	SEK	53	9.3	15	2.2	-18.0	9
Switzerland	CHF	60	20.1	31	8.5	7.5	8
Indonesia	IDR	62	34.1	9	1.8	-20.0	11
US	USD	59	15.0	13	10.9	8.2	15
Canada	CAD	60	6.6	18	5.4	-10.4	12
Germany	EUR	68	15.1	27	10.6	-3.3	12
Thailand	THB	69	26.5	32	10.0	2.0	12
Singapore	SGD	65	30.5	3	11.1	-2.9	16
China	CNY	65	14.1	70	2.5	-2.1	17
Italy	EUR	60	5.0	33	1.2	-3.3	18
Spain	EUR	63	7.3	29	2.1	-3.3	19
Hong Kong	HKD	62	0.0	26	5.0	-	19
France	EUR	57	14.7	20	0.7	-3.3	21
South Africa	ZAR	58	13.3	5	0.6	-	22

But there are other things to consider.

[1] Measured as share of economy exposed to high risk sectors (mfg, retail, tourism, hospitality etc)
[2] Share of total exports that go to countries with days since infection > 25
[3] Combined above and below-the-line fiscal measures reported in the IMF Fiscal Monitor
[4] Deviation from ANZ Measure of fair value (%)

We expect global credit stresses will emerge.

Such comparisons are inevitably incomplete for many reasons and the table doesn't attempt to capture the overall scale of the impact. Rather, it is designed with the FX outlook in mind, which is by its nature forward-looking, taking today's situation as given. It is best interpreted as an indicator of how soon and how spirited the recovery is likely to be, all else equal, given a) progress towards virus containment and b) the economy's make-up.

Solvency concerns are expected to emerge.

As an example, the UK ranks #7 in our dimensional comparison (table 1) not far behind New Zealand, yet the UK has around 9 times as many cases per capita. Also the measure of progress of virus containment isn't flattering to New Zealand – we may be only 18 days from the peak, but with daily cases in the low single digits it's clear we have a better shot of avoiding a second wave.

All that said, the simple analysis captures the recovery themes well: NZ's vulnerabilities include our dependence on international tourism, while our strengths include our trading relationship with China. And there's clearly more to come on the fiscal side. Thinking about the outlook for the NZD in particular, there is perhaps some latent upside versus fair value.

But this comparison is only part of the picture. The idea that New Zealand and Australia may re-open sooner than elsewhere could keep the NZD and AUD buoyed in the near term. And yet, to us it seems that the currency outlook is more complicated than that. We expect that other themes will start to gain traction in time. We're watching credit markets, in particular.

We see global credit stresses emerging, leading to downward pressure.

While not necessarily imminent, we expect that global credit stresses will start to emerge and weigh on NZD. Markets (particularly equities) appear to be pricing in a quick bounce-back in the global economy that is more optimistic than our forecasts. Oil markets are perhaps the exception, where the extent of the demand slowdown has become apparent in pricing.

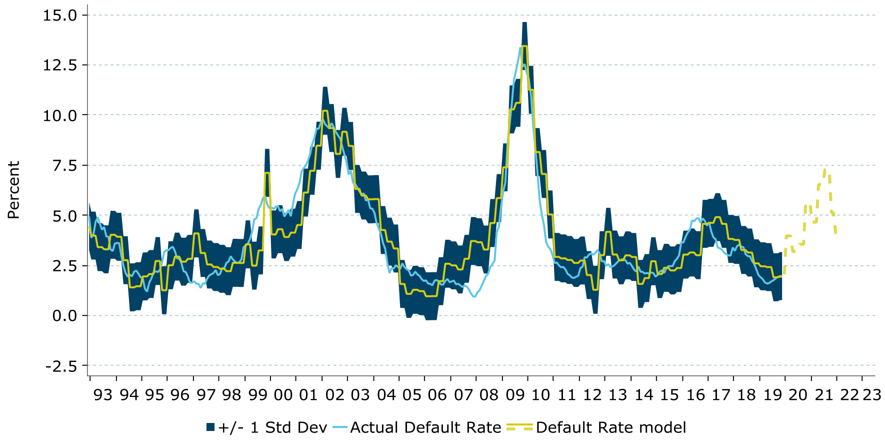
Leading to wider credit spreads.

Our view is that the global recovery will be slower than markets currently anticipate, with questions around solvency expected to come into focus. In time, firm difficulties and the severity and length of the global slump will become apparent.

In the past, rising default rates and solvency concerns have triggered a re-pricing of risk and often set off a chain-reaction of events that has been difficult to contain. Default rates rose after the GFC, but that crisis was primarily about liquidity, and central bank actions ultimately succeeded in arresting the trend and restoring some order.

This time around, some global companies are facing liquidity concerns, but many more are facing solvency concerns. Central banks are buying an enormous amount of assets, including corporate paper. But providing liquidity in this way can only go so far. It reduces risk premia, lowers debt-servicing costs and expands credit. But it can't solve fundamental solvency issues where they exist. And with central bank balance sheet is already stretched, we question whether they have the resources and willingness to intervene in these markets, let alone succeed. Our modelling points to a larger and more rapid spike in US defaults than in the GFC if the global economy is slow to recovery as we expect. And not surprisingly, our models therefore point to a substantial widening in credit spreads (figure 5).

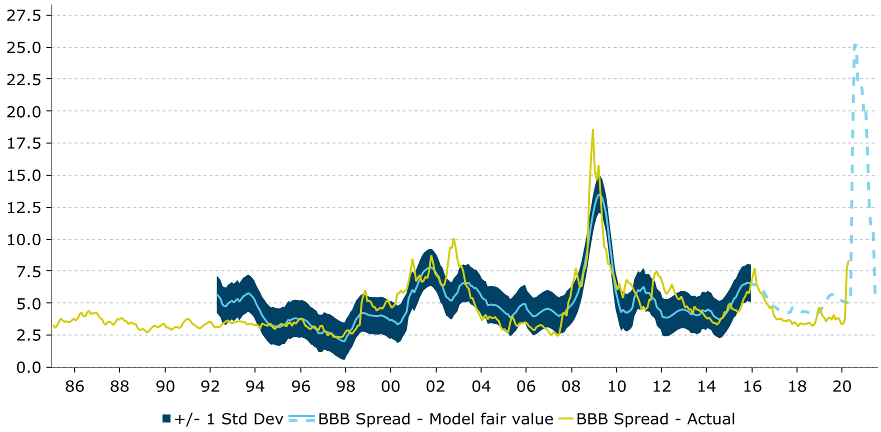
Figure 5. Modelled US default rate



Source: Fed, BEA, Macrobond, ANZ Research

The world is riskier; pricing will adjust to reflect that.

Figure 6. Modelled global credit spreads



Source: Federal Reserve Bank of Dallas, ISM, BOJ, Ifo, BLS, DESTATIS, Japanese Statistics Bureau, Ministry of Internal Affairs & Communications, CaO, BEA, Macrobond, ANZ Research

When? Hard to say.

In short, the world has gotten a lot riskier, but lenders aren't yet getting what's historically been considered reasonable compensation for that fact. If we assume that the recovery is swift and feeds through to some easing of lending standards, then our modelled move in spreads is relatively inverted-V-shaped. For now, it looks like investors are assuming as much, with some liquidity provision by central banks helping bridge the gap.

We are picking a depreciation in the middle of the year.

But this spread is the modelled spread on the credits that survive. If defaults rise, as our models indicate, then the borrowers that go under will leave losses in their wake. That'll change the mood. And our modelling may be too optimistic: actual spreads may recover more gradually than our model indicates, as fear and sour memories often take some time to fade. A longer recovery, with a higher unemployment rate, would add risk to current pricing, which assumes a short duration and benign default cycle.

If we are right that markets are too optimistic about the economic outlook, the question then becomes: when will the chickens come home to roost? We can't say exactly – picking the timing of such things is notoriously difficult. Our hunch is that it will happen when (a) a big borrower unexpectedly defaults; or (b) when shock revaluations in correlated markets like real estate lead investors to question asset-allocation strategies. At the moment, there is heightened demand for credit. And if we see a significant sell off in credit markets that swamp the market's ability to absorb it, this could set off a chain reaction.

We are very trade dependent.

We see scope for this dynamic to rear its head through the middle of the year. This would weigh on risk- and trade-sensitive currencies like the NZD and AUD, and could also see upward pressure on yields in domestic credit markets. This would put more pressure on the RBNZ to provide further stimulus and soothe markets. Increased volatility is also very likely. We are forecasting the NZD lower through the middle of this year – on a trade-weighted basis, against the USD and to a lesser extent against the AUD (table 2).

Table 2. End-month forecasts for NZD-TWI, NZD/AUD and NZD/USD

	Today	Jun-20	Sep-20	Dec-20	Mar-21	Jun-21	Sep-21	Dec-21
NZD/USD	0.605	0.57	0.53	0.55	0.57	0.59	0.60	0.60
NZD/AUD	0.936	0.95	0.98	0.98	0.95	0.97	0.97	0.97
NZ$ TWI	68.72	67.8	65.0	67.0	68.4	70.1	70.9	70.9

Source: Bloomberg, ANZ Research

Our export commodity prices are expected to fall, perhaps sharply.

We can't escape the global fallout.

New Zealand's legendary food-producing ability has also been a strong theme in markets – and it is a strength. However, the fact is, we are a very trade-dependent nation. Our tourism sector is very large, for example, and has been decimated. And although our goods exports have been robust, pockets of weakness exist there too. While dairy and fruit exports are doing very well, forestry and seafood have had a tougher time of it due to disruption in China (figures 7 & 8). Reduced activity in the forestry sector due to lockdown measures has helped prices improve, and anecdotes out of the seafood sector are improving, but returns are still relatively weak.

Figure 7. Cumulative weekly forestry export values since end-January

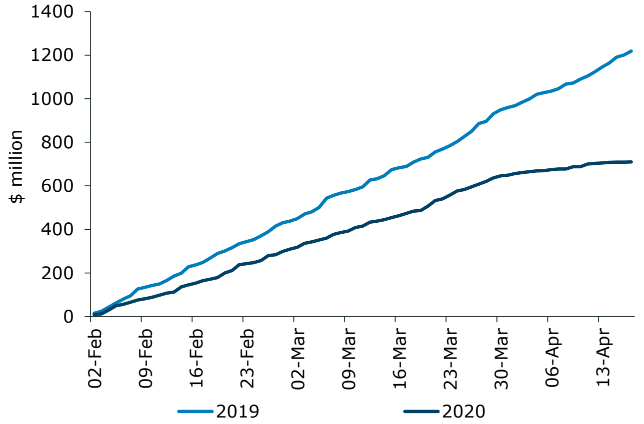
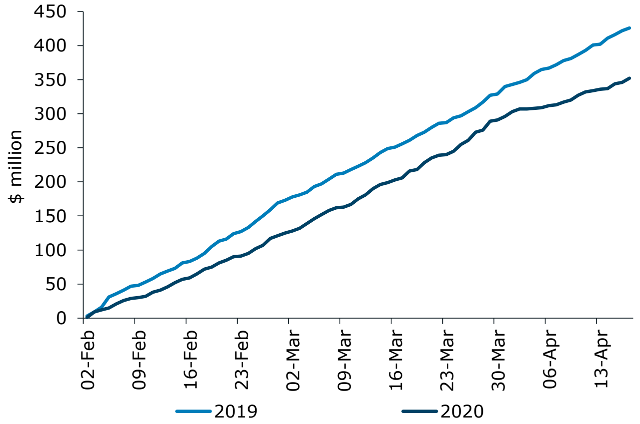


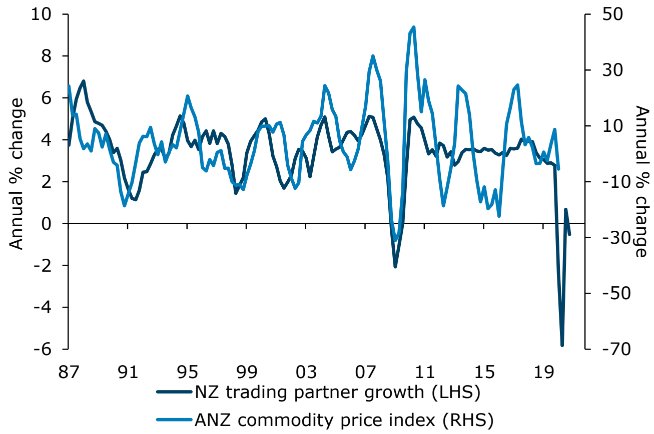
Figure 8. Cumulative weekly seafood export values since end-January



Source: Statistics NZ

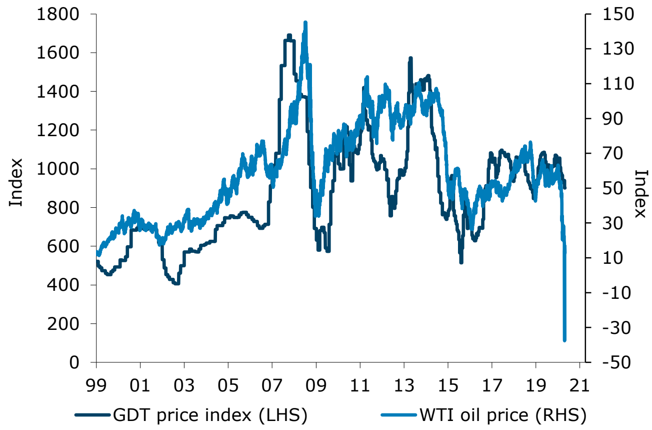
We simply can't escape the global fallout, even if we can reopen our economy faster than most. As the global impact becomes apparent, our export prices will fall. So far, our export commodity prices have been relatively resilient, but it won't last. Some of our food exports are at the luxury end, and weaker demand from our trading partners will weigh on prices significantly. Figure 9 and 10 give a sense of the downside risk. On the other hand, global food supply disruptions are going to be significant this year, which should put a floor under things and potentially open new opportunities.

Figure 9. ANZ commodity prices and outlook for trading-partner growth[1]



Source: Haver Analytics, RBNZ, ANZ Research

Figure 10. ANZ GDT index and Brent oil prices



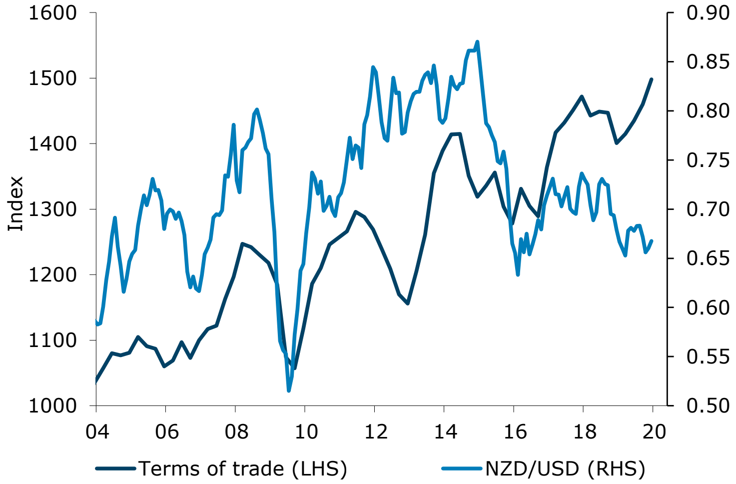
Source: Bloomberg, ANZ Research

A weaker terms of trade will weigh on NZD.

New Zealand's terms of trade are expected to be supported in the near term, with weaker import prices – especially oil – supporting our purchasing power. But the balance will change in due course as weaker export prices emerge. This dynamic is expected to put downward pressure on the NZD, even without the re-pricing of risk we expect to see in global markets. Where the terms of trade go, the NZD often follows (figure 11).

[1] Note: New Zealand trading partner growth is constructed as a weighted index of historical GDP, using RBNZ trade-weighted index weights. To construct forecasts of this, ANZ forecasts have been used where applicable, with IMF forecasts used for the remainder. ANZ forecasts represent 63% of the index.

Figure 11. NZD/USD and OTI terms of trade



Source: Statistics NZ, Bloomberg

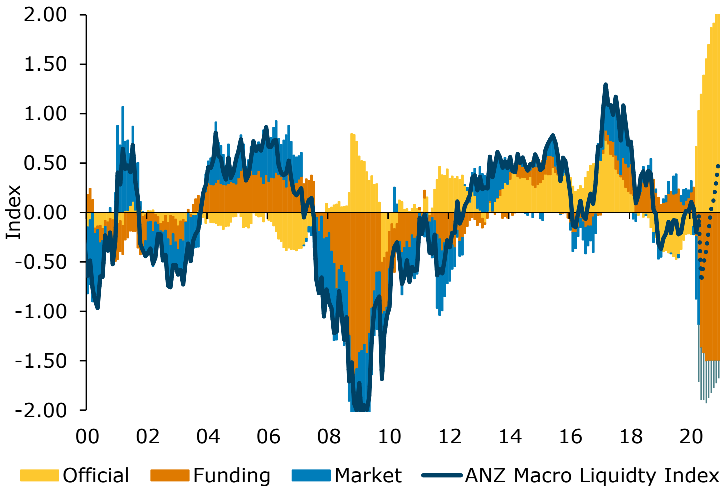
Supportive factors will stem the extent of the fall in the NZD

Although we expect the NZD to fall in time, relative to previous crises we do not expect it to fall as far. We expect the NZD will recover back towards current levels eventually, reflecting a number of supportive factors:

We see the extent of depreciation as limited by supporting factors.

- Our progress in containing the virus is expected to bear fruit, with less economic fallout than elsewhere;
- Time under lockdown is the real killer, and 5-8 weeks is better than 12 weeks (or more) that some countries are considering;
- Our goods export volumes are expected to hold up, with food still in strong demand;
- Despite weaker export prices, an export-led recovery is still on the cards, with food a necessity when it comes to it. This will be a positive for the current account, even as our services trade surplus goes to zero;
- Our fiscal position is strong and well placed to support the recovery;
- The RBNZ may be able to pare back stimulus more quickly than other central banks if the economy can open sooner – supporting carry trades; and
- Huge liquidity injections from other central banks (figure 12), particularly the Federal Reserve, will support buying of risk assets like the NZD, once the recovery is underway.

Figure 12. ANZ Macro liquidity index



Source: Bloomberg, ANZ Research

Economic overview

The outlook is clearly uncertain.

The outlook is very uncertain, and how a range of unknowns play out will affect the direction of currency markets. So far, New Zealand has been very fortunate in its ability to contain the spread of the virus, albeit at enormous cost, and we are gradually re-opening the economy with strong hopes of avoiding backsliding.

But we are all in this together.

However, it should be emphasised that to some extent we – as a global economy – are all in this together. New Zealand may return to something approaching normality faster than most, but as a small, open trading nation we will not escape the fallout. Gravity is expected to come calling for our export prices and the NZD in due course. And our financial markets will likely be impacted to some degree by a re-pricing in credit, too.

Historically, at extreme moments, the USD has been the safe-haven currency of choice no matter the economic environment, and we don't think we'll see a structural change to that thinking in markets just yet.

Local data

Consumer Price Index – Q1. Lifted 0.8% q/q in Q1, stronger than anyone expected. Annual inflation was 2.5%, above the RBNZ's 2% target midpoint. But inflation is set to soften markedly from here.

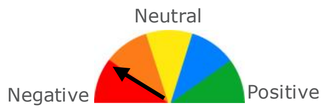
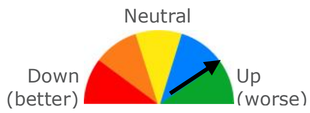
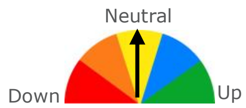
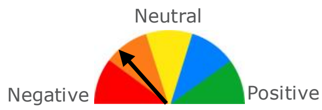
GlobalDairyTrade Auction. Fell 4.2%, with weak global demand expected to weigh further in coming auctions. Whole milk powder prices were down 3.9% and skim milk powder down 4.9%.

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 Economic Outlook – Black swan
- ANZ CPI Review – Going out with a bang

The ANZ heatmap

Variable	View	Comment	Risks around our view
GDP	-5.5% y/y for 2021 Q1	Highly uncertain, but we know the coming domestic recession will be deep. We expect a bounce, even if some activity is never regained.	
Unemployment rate	8.7% for 2021 Q1	The labour market is set to deteriorate rapidly, with the unemployment rate set to rise significantly.	
Monetary policy	OCR at 0.25% in June 2020	A 0.25% OCR is here for at least 12 months. We expect QE to be roughly doubled to $60bn to keep bond curves low and flat.	
CPI	0.9% y/y for 2021 Q1	Inflation is currently around where it needs to be, but is set to slip and remain weak as the slowdown takes hold.	

Summary

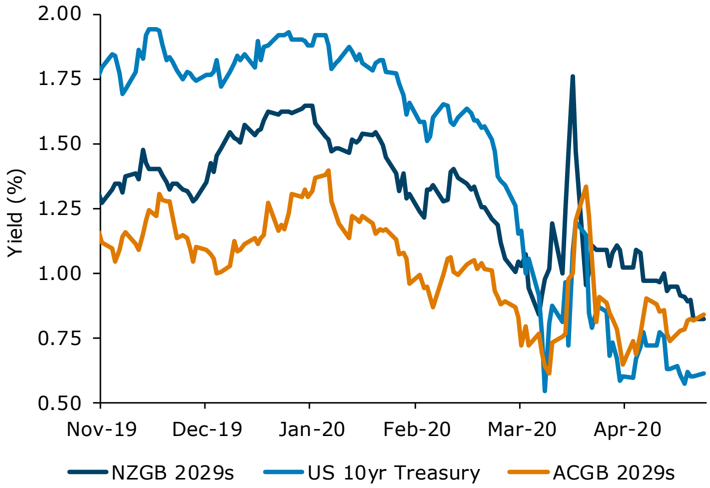
NZGB curve to continue flattening.

New Zealand yield curves continue to grind lower and flatter, taking their lead from less volatile US Treasury bond yields while shrugging off the recent steepening of the Australian government bond curve. We expect the gradual flattening of the NZGB curve here to continue, with RBNZ QE still targeting the longer end. This should help to continue flattening the swap curve too. The tone of RBNZ comments remains very dovish. As we noted last week, we expect the size of the QE programme to be at least doubled next month, adding further downward pressure to the NZGB curve. Monetisation of the fiscal deficit has been raised as a possibility here. It's possible, but we wouldn't expect an imminent leap to it.

US and NZ bond yields are lower but Australia's are higher.

US Treasury bond yields continue to gravitate towards historic lows (figure 1), with yield volatility also down and markets responding to the unprecedented scale of Fed easing and policy support for markets.

Figure 1: NZ, US and Australian 10-year bond yields

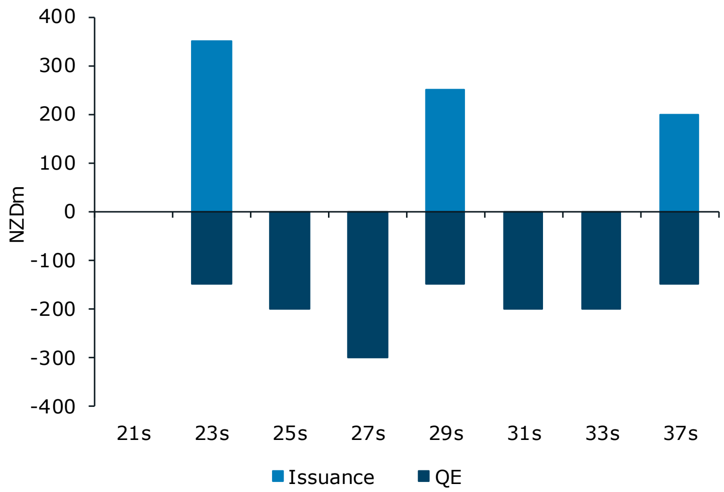


Source: Bloomberg

RBNZ QE remains focussed on longer bonds.

This week's RBNZ QE purchases remain targeted at the longer end of the curve. $700m of the $1.35bn scheduled to be purchased this week are aimed at the 2029s – considered the 10-year bond – and longer. Meanwhile, issuance is more tilted towards the shorter end (figure 2).

Figure 2: NZ Treasury Issuance versus RBNZ QE Purchases



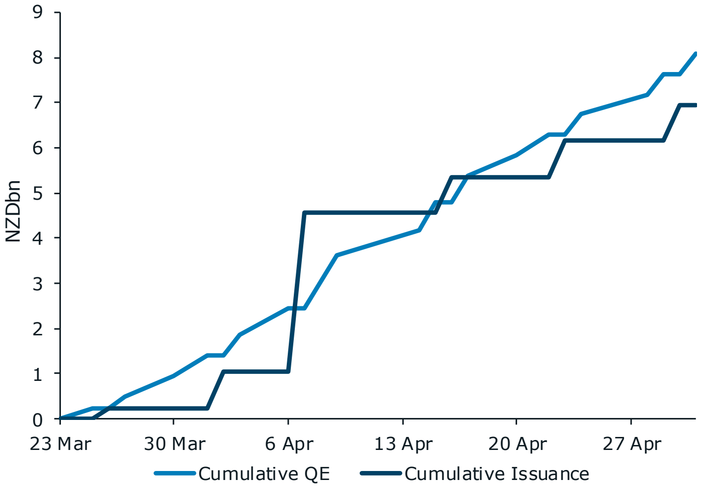
Sources: NZ Treasury (NZDM), RBNZ

Of note though, whereas NZGB 2029s are gradually grinding lower, the same cannot be said of the Australian ACGB 2029s, which have drifted higher. While both the RBA and RBNZ have pared back the pace of their respective bond purchases, the RBNZ has done so by less and perhaps more importantly, has remained more focused on the very long end. The yield on our longest bond – the 2037 – is still almost 1% above the OCR and the commensurate swap rate.

QE outpacing issuance remains a key pillar of our forecasts.

Nonetheless, QE continues to outpace issuance (figure 3), and our forecasts are built on an assumption that this will continue; hence our expectation that the NZGB curve will continue to gradually flatten. We believe it is crucial that QE gets the risk-free benchmark yield curve (ie the NZGB curve) as low and as flat as possible to loosen financial conditions. This will drive down the cost of borrowing for the Crown and dampen spreads for other borrowers.

Figure 3: NZDM bond issuance vs RBNZ QE (NZGBs only) to the end of this week



Source: NZ Treasury (NZDM), RBNZ

Recent comments by RBNZ Governor Orr about being open-minded regarding the possibility of directly monetising the fiscal deficit have received a lot of airtime. By that we think he means buying bonds directly from NZDM, rather than purchasing in the secondary market. We have a bit of sympathy for the Governor's view since: (a) given the scale of the crisis we can't see the point of ruling anything out, and (b) whether the RBNZ directly or indirectly funds the fiscal deficit would make very little difference in the short term. In both cases, the RBNZ buys the bonds and the Treasury receives the proceeds, and in both cases the money supply is expanded. However, in theory, bonds bought by the RBNZ in the secondary market could be sold (or not rolled over) in future, and it is this (and the RBNZ's independence) which help preserve the perceived value of money and the NZD as a currency.

Monetisation? Maybe, but not yet. In the near term it would make very little difference anyway.

Issues arise when central bank purchases enable governments to run otherwise unsustainable deficits, eroding market discipline. In this case, it is difficult to determine whether more rapid money supply growth leads to more government bond issuance than otherwise or vice versa. But one has to assume that the Treasury and the central bank would be independently pursuing their objectives at the same time if such policy was used here – and it is that independence that matters most. Proponents of monetisation argue that so long as the RBNZ remains committed to price stability, there is no harm in it (it's more complex than that but that's what it boils down to). Either way, at this point there is no suggestion that the RBNZ is abandoning either its independence or its price stability mandate.

With the RBNZ purchasing bonds in the secondary market and the Treasury also selling them to the market, for the Crown overall that does involve crossing bid/offer spreads (ie the difference between the offer price the market is willing to sell the RBNZ bonds and the bid price the price the market is willing to buy bonds off the Treasury) but it also promotes liquidity. This is crucial if the Government intends to continue using bond markets as its primary means of financing future deficits, which remains international best practice. Separating monetary policy from fiscal policy and requiring the RBNZ and the Treasury to pursue their objectives in an independent and transparent manner form the foundations on which a lot of trust in markets now sits, and stepping back from that isn’t something one would do lightly. So in short, while monetisation is possible, we see no immediate need to leap into it.

Data calendar

Date	Country	Data/event	Mkt.	Last	NZ time
28-Apr	AU	ANZ-RM Consumer Confidence Index - 26-Apr	--	84.2	11:30
	UK	Nationwide House PX MoM - Apr	-0.3%	0.8%	28 Apr-4 May
	UK	Nationwide House Px NSA YoY - Apr	2.5%	3.0%	28 Apr-4 May
29-Apr	US	Advance Goods Trade Balance - Mar	-$55.0B	-$59.9B	00:30
	US	Wholesale Inventories MoM - Mar P	-0.50%	-0.70%	00:30
	US	S&P CoreLogic CS 20-City MoM SA - Feb	0.35%	0.30%	01:00
	US	S&P CoreLogic CS 20-City YoY NSA - Feb	3.13%	3.08%	01:00
	US	Conf. Board Consumer Confidence - Apr	87.9	120.0	02:00
	US	Richmond Fed Manufact. Index - Apr	-40	2	02:00
	NZ	Trade Balance NZD - Mar	686M	594M	10:45
	NZ	Trade Balance 12 Mth YTD NZD - Mar	-3400M	-3258M	10:45
	NZ	Exports NZD - Mar	5.80B	4.92B	10:45
	NZ	Imports NZD - Mar	5.10B	4.33B	10:45
	AU	CPI QoQ - Q1	0.2%	0.7%	13:30
	AU	CPI YoY - Q1	1.9%	1.8%	13:30
	AU	CPI Trimmed Mean QoQ - Q1	0.3%	0.4%	13:30
	AU	CPI Trimmed Mean YoY - Q1	1.6%	1.6%	13:30
	AU	CPI Weighted Median QoQ - Q1	0.4%	0.4%	13:30
	AU	CPI Weighted Median YoY - Q1	1.5%	1.3%	13:30
	GE	Import Price Index MoM - Mar	-2.5%	-0.9%	18:00
	GE	Import Price Index YoY - Mar	-4.0%	-2.0%	18:00
	EC	M3 Money Supply YoY - Mar	5.5%	5.5%	20:00
	EC	Economic Confidence - Apr	75.0	94.5	21:00
	EC	Industrial Confidence - Apr	-25.0	-10.8	21:00
	EC	Services Confidence - Apr	-25.6	-2.2	21:00
	EC	Consumer Confidence - Apr F	--	-22.7	21:00
	US	MBA Mortgage Applications - 24-Apr	--	-0.3%	23:00
30-Apr	GE	CPI EU Harmonized MoM - Apr P	0.1%	0.1%	00:00
	GE	CPI EU Harmonized YoY - Apr P	0.6%	1.3%	00:00
	GE	CPI MoM - Apr P	0.1%	0.1%	00:00
	GE	CPI YoY - Apr P	0.7%	1.4%	00:00
	US	GDP Annualized QoQ - Q1 A	-3.9%	2.1%	00:30
	US	Personal Consumption - Q1 A	-2.7%	1.8%	00:30
	US	GDP Price Index - Q1 A	1.0%	1.3%	00:30
	US	Core PCE QoQ - Q1 A	1.7%	1.3%	00:30
	US	Pending Home Sales MoM - Mar	-13.0%	2.4%	02:00
	US	Pending Home Sales NSA YoY - Mar	--	11.5%	02:00
	US	FOMC Rate Decision - Apr	0.25%	--	06:00
	JN	Retail Sales MoM - Mar	-4.5%	0.5%	11:50
	JN	Retail Sales YoY - Mar	-4.7%	1.6%	11:50
	JN	Industrial Production MoM - Mar P	-5.0%	-0.3%	11:50
	JN	Industrial Production YoY - Mar P	-7.3%	-5.7%	11:50
	NZ	ANZ Business Confidence - Apr F	--	-73.1	13:00
	NZ	ANZ Activity Outlook – Apr F	--	-61.2	13:00
	CH	Composite PMI - Apr	--	53.0	13:00
	CH	Manufacturing PMI - Apr	51.0	52.0	13:00
	CH	Non-manufacturing PMI - Apr	52.0	52.3	13:00
	AU	Import Price Index QoQ - Q1	1.0%	0.7%	13:30

Continued on following page

Data calendar

Date	Country	Data/event	Mkt.	Last	NZ time
	AU	Export Price Index QoQ - Q1	3.0%	-5.2%	13:30
	AU	Private Sector Credit MoM - Mar	0.3%	0.4%	13:30
	AU	Private Sector Credit YoY - Mar	2.8%	2.8%	13:30
	GE	Retail Sales MoM - Mar	-8.0%	0.8%	18:00
	GE	Retail Sales NSA YoY - Mar	-4.3%	6.5%	18:00
	GE	Unemployment Change (000's) - Apr	77.0k	1.0k	19:55
	GE	Unemployment Claims Rate SA - Apr	5.2%	5.0%	19:55
	EC	Unemployment Rate - Mar	7.7%	7.3%	21:00
	EC	GDP SA QoQ - Q1 A	-3.5%	0.1%	21:00
	EC	GDP SA YoY - Q1 A	-3.3%	1.0%	21:00
	EC	CPI MoM - Apr P	0.1%	0.5%	21:00
	EC	CPI Core YoY - Apr P	0.7%	1.0%	21:00
	EC	CPI Estimate YoY - Apr	0.1%	0.7%	21:00
	EC	ECB Main Refinancing Rate - Apr	0.00%	0.00%	23:45
	EC	ECB Marginal Lending Facility - Apr	0.25%	0.25%	23:45
	EC	ECB Deposit Facility Rate - Apr	-0.50%	-0.50%	23:45
1-May	US	Personal Income - Mar	-1.6%	0.6%	00:30
	US	Personal Spending - Mar	-5.0%	0.2%	00:30
	US	PCE Core Deflator MoM - Mar	-0.1%	0.2%	00:30
	US	PCE Core Deflator YoY - Mar	1.6%	1.8%	00:30
	US	PCE Deflator MoM - Mar	-0.3%	0.1%	00:30
	US	PCE Deflator YoY - Mar	1.3%	1.8%	00:30
	US	Initial Jobless Claims - 25-Apr	3500k	4427k	00:30
	US	Continuing Claims - 18-Apr	19000k	15976k	00:30
	US	Employment Cost Index - A1	0.6%	0.7%	00:30
	US	MNI Chicago PMI - Apr	38.2	47.8	01:45
	NZ	ANZ Consumer Confidence Index - Apr	--	106.3	10:00
	AU	Ai Group Perf of Mfg Index - Apr	--	53.7	10:30
	AU	CBA PMI Mfg - Apr F	--	45.6	11:00
	JN	Tokyo CPI YoY - Apr	0.2%	0.4%	11:30
	JN	Tokyo CPI Ex-Fresh Food YoY - Apr	0.1%	0.4%	11:30
	AU	CoreLogic House Px MoM - Apr	--	0.7%	12:00
	JN	Jibun Bank PMI Mfg - Apr F	--	43.7	12:30
	AU	PPI QoQ - Q1	--	0.3%	13:30
	AU	PPI YoY - Q1	--	1.4%	13:30
	UK	Markit PMI Manufacturing SA - Apr F	32.7	32.9	20:30
	UK	Net Consumer Credit - Mar	£0.7B	£0.9B	20:30
	UK	Consumer Credit YoY - Mar	--	5.7%	20:30
	UK	Net Lending Sec. on Dwellings - Mar	£3.5B	£4.0B	20:30
	UK	Mortgage Approvals - Mar	59.0k	73.5k	20:30
	UK	Money Supply M4 MoM - Mar	--	0.3%	20:30
	UK	M4 Money Supply YoY - Mar	--	4.9%	20:30
2-May	US	Markit Manufacturing PMI - Apr F	36.7	36.9	01:45
	US	Construction Spending MoM - Mar	-3.5%	-1.3%	02:00
	US	ISM Manufacturing - Apr	36.1	49.1	02:00
	US	ISM New Orders - Apr	--	42.2	02:00
	US	ISM Prices Paid - Apr	28.9	37.4	02:00
	US	ISM Employment - Apr	--	43.8	02:00

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

Date	Data/event	Economic signal	Comment
Wed 29 Apr (10:45am)	Overseas Merchandise Trade – March	Holding up	Goods exports have proven resilient. Imports have tailed off owing to supply disruptions and a weak domestic demand pulse. We see this theme continuing.
Thu 31 Apr (1:00pm)	ANZ Business Outlook – April	--	--
Fri 1 May (10:00am)	ANZ Roy Morgan Consumer Confidence – April	--	--
Tue 5 May (10:45am)	Building Consents – March	For now	Recent resurgence in the housing market is expected to provide continued support – for now.
Tue 5 May (1:00pm)	ANZ Commodity Price Index – March	--	--
Wed 6 May (early am)	GlobalDairyTrade auction	Weaker	Global economic weakness and a surplus of milk in the United States and Europe will put downward pressure on prices.
Wed 6 May (10:45am)	Labour Market Statistics – Q1	Already	Expect deterioration in the labour market, with job losses already being seen.
Thu 7 May (3:00pm)	RBNZ Inflation Expectations Survey – Q2	Lower	Likely to move lower, especially with oil prices having fallen and demand dropping.
11-15 May	REINZ housing data – April	Stopped	The housing market will have ground to a halt in April. Expect some volatility, with a trend deterioration forming overall.
Mon 11 May (10:45am)	Electronic Card Transactions – April	Noisy	Retail spend was down 3.9% in March, with strong growth in consumables offset by weak hospitality, apparel and services.
Tue 12 May (10:00am)	ANZ Truckometer – April	--	--
Wed 13 May (10:45am)	Food Price Index – April	Uncertain	Higher demand for groceries and necessities; zero supply of restaurant meals. It's all pretty uncertain.
Wed 13 May (10:45am)	Rental Price Index – April	Wither	Fewer students and rent freezes. Is this historically significant driver of domestic inflation about to wither? Probably.
Wed 13 May (2:00pm)	RBNZ Monetary Policy Statement – May	Hold	With the OCR on hold "for at least the next 12 months" it's all about QE and the RBNZ's assessment of how the situation is likely to evolve. We see QE roughly doubling to $60bn.
Thu 14 May (1:00pm)	ANZ Monthly Inflation Gauge – April	--	--
Thu 14 May	NZ Budget	Massive	A spike in debt, huge deficits, and a new fiscal strategy. The Government is taking on COVID-19 head on. It's still early days, but hopefully the Budget will mark the end of the beginning and the beginning of the recovery.
Wed 20 May (early am)	GlobalDairyTrade auction	Weaker	Further downward pressure is expected due to weak demand from food service sector, although reduced end of season volumes will limit the fall in price of NZ supplied commodities.
Fri 22 May (10:45am)	Retail Sales – Q1	On a cliff edge	Q1 sales volumes will likely show a few cracks around the edges, but nothing compared to what's coming in Q2.
Tue 26 May (10:45am)	Overseas Merchandise Trade – April	Holding up	Goods exports have been holding up well. Imports have tailed off owing to supply disruptions and a weak domestic demand pulse. We see this theme continuing.
Wed 27 May (09:00am)	RBNZ Financial Stability Report – May	Changed	The global economy is materially weaker, and that could expose financial market vulnerabilities. Weakness in the property market and associated risks may also be a theme. At least the NZD is down and dairy prices haven't fallen too much, yet.
Thu 28 May (1:00pm)	ANZ Business Outlook – May	--	--
Fri 29 May (10:00am)	ANZ Roy Morgan Consumer Confidence – May	--	--
Tue 2 Jun (10:45am)	Terms of Trade – Q1	Up a little	The terms of trade are expected to improve slightly in Q1, as export returns held relatively well, while import prices eased.
Tue 2 Jun (10:45am)	Building Consents – April	Drop	Building consents look set to drop considerably in the short term due to lockdown. Weak demand will weigh medium term.
On balance		**Data watch**	**Risks are clearly tilted to the downside, with global developments evolving rapidly.**

Key forecasts and rates

	Dec-19	Mar-20	Jun-20	Sep-20	Dec-20	Mar-21	Jun-21	Sep-21	Dec-21
GDP (% qoq)	0.5	**-2.5**	**-20.6**	**15.5**	**2.0**	**1.0**	**1.0**	**1.0**	**1.0**
GDP (% yoy)	1.8	**-1.2**	**-21.6**	**-10.1**	**-8.8**	**-5.5**	**20.2**	**5.1**	**4.1**
CPI (% qoq)	0.5	0.8	**0.1**	**0.3**	**0.0**	**0.5**	**0.1**	**0.2**	**0.0**
CPI (% yoy)	1.9	2.5	**1.8**	**1.4**	**1.0**	**0.9**	**0.9**	**0.8**	**0.8**
Employment (% qoq)	0.0	**-1.0**	**-8.0**	**0.0**	**3.0**	**2.0**	**0.7**	**0.9**	**1.0**
Employment (% yoy)	1.0	**-0.1**	**-8.7**	**-8.9**	**-6.2**	**-3.3**	**5.8**	**6.7**	**4.7**
Unemployment Rate (% sa)	4.0	**5.4**	**10.7**	**11.1**	**10.1**	**8.7**	**8.6**	**8.3**	**7.8**

	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20
Retail ECT (% mom)	0.3	-0.1	1.2	0.4	-0.5	2.6	-0.5	-0.2	0.5	-3.9
Retail ECT (% yoy)	1.5	2.0	3.1	0.6	1.6	5.1	3.9	4.2	8.6	-1.8
Car Registrations (% mom)	-2.3	5.5	-0.5	5.5	-5.7	-1.6	2.0	-4.9	6.7	-31.6
Car Registrations (% yoy)	-11.0	-5.4	-5.2	4.7	-6.6	3.0	5.6	-3.5	-0.3	-31.1
Building Consents (% mom)	-4.1	-0.9	1.0	7.5	-1.2	-8.0	10.4	-2.8	4.7	--
Building Consents (% yoy)	9.5	18.6	12.3	24.2	18.9	9.0	17.9	1.7	5.4	--
REINZ House Price Index (% yoy)	1.8	1.6	2.7	3.2	3.8	5.5	6.5	6.9	8.6	9.3
Household Lending Growth (% mom)	0.5	0.5	0.6	0.5	0.5	0.6	0.6	0.6	0.6	--
Household Lending Growth (% yoy)	5.9	5.9	6.0	6.1	6.2	6.3	6.5	6.6	6.7	--
ANZ Roy Morgan Consumer Conf.	122.6	116.4	118.2	113.9	118.4	120.7	123.3	122.7	122.1	106.3
ANZ Business Confidence	-38.1	-44.3	-52.3	-53.5	-42.4	-26.4	-13.2	..	-19.4	-63.5
ANZ Own Activity Outlook	8.0	5.0	-0.5	-1.8	-3.5	12.9	17.2	..	12.0	-26.7
Trade Balance ($m)	330	-732	-1642	-1310	-1038	-786	380	-414	594	--
Trade Bal ($m ann)	-4987	-5516	-5591	-5321	-5055	-4837	-4467	-3946	-3258	--
ANZ World Comm. Price Index (% mom)	-3.9	-1.4	0.3	0.0	1.2	4.3	-3.4	-0.9	-2.1	-2.1
ANZ World Comm. Price Index (% yoy)	-2.4	-0.5	0.9	3.4	7.2	12.4	8.7	5.6	0.6	-5.5
Net Migration (sa)	4210	5030	5310	5150	5620	4920	6090	6860	8250	--
Net Migration (ann)	50684	51765	52799	53424	55025	55543	57259	61053	65211	--
ANZ Heavy Traffic Index (% mom)	-2.2	2.3	-3.5	3.4	2.7	-1.5	-2.6	4.7	-3.2	-8.0
ANZ Light Traffic Index (% mom)	-2.0	1.4	0.3	-0.3	0.2	0.9	-2.2	2.9	-0.8	-29.3
ANZ Monthly Inflation Gauge (% mom)	0.5	0.5	0.3	0.3	0.3	0.1	0.4	0.6	0.2	0.1

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	Feb-20	Mar-20	Today	Jun-20	Sep-20	Dec-20	Mar-21	Jun-21	Sep-21
NZD/USD	0.624	0.594	0.605	0.57	0.53	0.55	0.57	0.59	0.60
NZD/AUD	0.958	0.976	0.936	0.95	0.98	0.98	0.95	0.97	0.97
NZD/EUR	0.566	0.543	0.559	0.55	0.53	0.56	0.58	0.59	0.60
NZD/JPY	67.79	64.55	64.87	63.8	59.4	61.6	63.8	66.1	67.2
NZD/GBP	0.484	0.481	0.487	0.54	0.49	0.49	0.48	0.49	0.49
NZ$ TWI	70.01	68.40	68.72	67.8	65.0	67.0	68.4	70.1	70.9
Interest rates/QE	Feb-20	Mar-20	Today	Jun-20	Sep-20	Dec-20	Mar-21	Jun-21	Sep-21
NZ OCR	1.00	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
LSAP ($bn)	--	30	33	60	60	60	60	60	60
NZ 90 day bill	1.06	0.49	0.31	0.43	0.43	0.43	0.43	0.43	0.43
NZ 10-yr bond	1.06	1.08	1.01	0.75	1.00	1.25	1.50	1.50	1.50
US Fed funds	1.75	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
US 3-mth	1.46	1.45	0.89	0.40	0.40	0.40	0.40	0.40	0.40
AU Cash Rate	0.75	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
AU 3-mth	0.81	0.37	0.11	0.20	0.20	0.20	0.25	0.28	0.28

	24-Mar	20-Apr	21-Apr	22-Apr	23-Apr	24-Apr
Official Cash Rate	0.25	0.25	0.25	0.25	0.25	0.25
90 day bank bill	0.53	0.37	0.35	0.33	0.32	0.31
NZGB 05/21	0.30	0.23	0.23	0.23	0.22	0.23
NZGB 04/23	0.45	0.30	0.30	0.28	0.26	0.21
NZGB 04/27	0.81	0.72	0.72	0.69	0.70	0.63
NZGB 04/33	1.38	1.13	1.14	1.15	1.17	1.07
2 year swap	0.60	0.33	0.34	0.34	0.33	0.29
5 year swap	0.70	0.48	0.49	0.49	0.48	0.46
RBNZ TWI	67.47	68.60	68.52	68.22	67.88	68.35
NZD/USD	0.5807	0.6059	0.5970	0.6002	0.5982	0.6017
NZD/AUD	0.9779	0.9512	0.9498	0.9465	0.9427	0.9441
NZD/JPY	64.16	65.27	64.11	64.61	64.34	64.68
NZD/GBP	0.4926	0.4861	0.4839	0.4854	0.4843	0.4866
NZD/EUR	0.5337	0.5578	0.5512	0.5521	0.5552	0.5560
AUD/USD	0.5939	0.6370	0.6285	0.6342	0.6346	0.6371
EUR/USD	1.0882	1.0864	1.0832	1.0871	1.0776	1.0823
USD/JPY	110.48	107.72	107.38	107.64	107.56	107.51
GBP/USD	1.1786	1.2464	1.2338	1.2365	1.2351	1.2367
Oil (US$/bbl)	24.01	-37.63	10.01	13.78	16.50	16.94
Gold (US$/oz)	1593.55	1683.03	1678.95	1703.45	1727.76	1729.60
NZX 50	9109	10763	10536	10418	10446	10419
Baltic Dry Freight Index	603	757	728	694	672	665
NZX WMP Futures (US$/t)	2490	2705	2705	2560	2525	2520

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.

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).

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**).

Important notice

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