ANZ Research

New Zealand Weekly Focus

26 August 2019

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Losing traction?

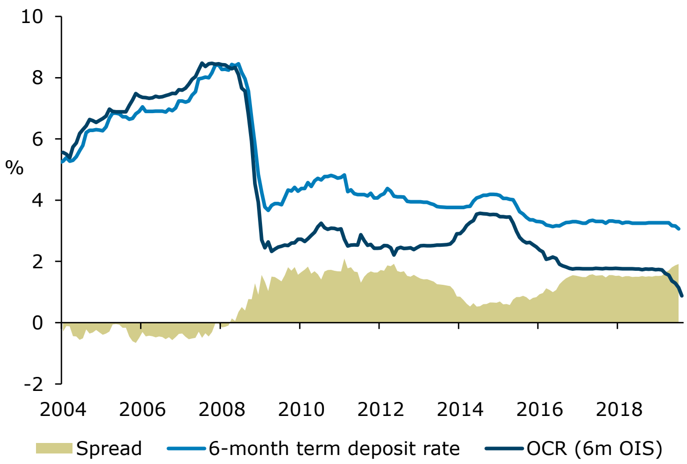
Economic overview

The OCR has already been cut 75bp this year to 1.00%. We expect a further cut to 0.75% in November, with the risks being skewed towards sooner and/or more. But there are signs that the OCR is already losing a degree of traction on bank lending and deposit rates – one of the key channels through which monetary policy affects the economy. Diminishing pass-through to bank funding costs/deposit rates (and hence lending rates) adds to the risk that interest rates in New Zealand may already be approaching the effective lower bound in terms of their impact on mortgage and other borrowing interest rates, though not via other important channels such as the exchange rate.

Chart of the week

The spread between deposit (and lending) rates and the OCR has varied inversely with the OCR since the GFC. The pass-through from policy rates to bank lending and deposit rates has diminished as interest rates have moved lower.

Official Cash Rate and deposit rates



Source: Bloomberg

The ANZ heatmap

Variable	View	Comment	Risks around our view
GDP	2.2% y/y for 2020 Q1	Growth has slowed, but we expect it is finding a floor. OCR cuts should support a gradual acceleration, but risks are skewed to the downside.	Neutral Negative  Positive
Unemployment rate	4.2% for 2020 Q1	The labour market is "tight", but the weaker economy will push up unemployment. Wage and employment growth to remain modest.	Neutral Negative  Positive
OCR	0.75% in March 2020	The RBNZ cut the OCR to 1% in August. We expect a further cut in November 2019.	Neutral Down  Up
CPI	1.8% y/y for 2020 Q1	Domestic inflation appears near its peak for now, but OCR cuts should support a gradual rise over the longer term.	Neutral Negative  Positive

Economic overview

Summary

Are OCR cuts losing traction?

The OCR has already been cut 75bp this year to 1.00%. We expect a further cut to 0.75% in November, with the risks being skewed towards sooner and/or more. But there are signs that the OCR is already losing a degree of traction on bank lending and deposit rates – one of the key channels through which monetary policy affects the economy. Diminishing pass-through to bank funding costs/deposit rates (and hence lending rates) adds to the risk that interest rates in New Zealand may already be approaching the effective lower bound in terms of their impact on mortgage and other borrowing interest rates, though not via other important channels such as the exchange rate.

Forthcoming data

ANZ Business Outlook – August (Thursday 29 August, 1:00pm).

ANZ Roy Morgan Consumer Confidence – August (Friday 30 August, 10:00am).

Building Consents – July (Friday 30 August, 10:45am). Consents have held at a high level recently, but we see downside risk looming.

What's the view?

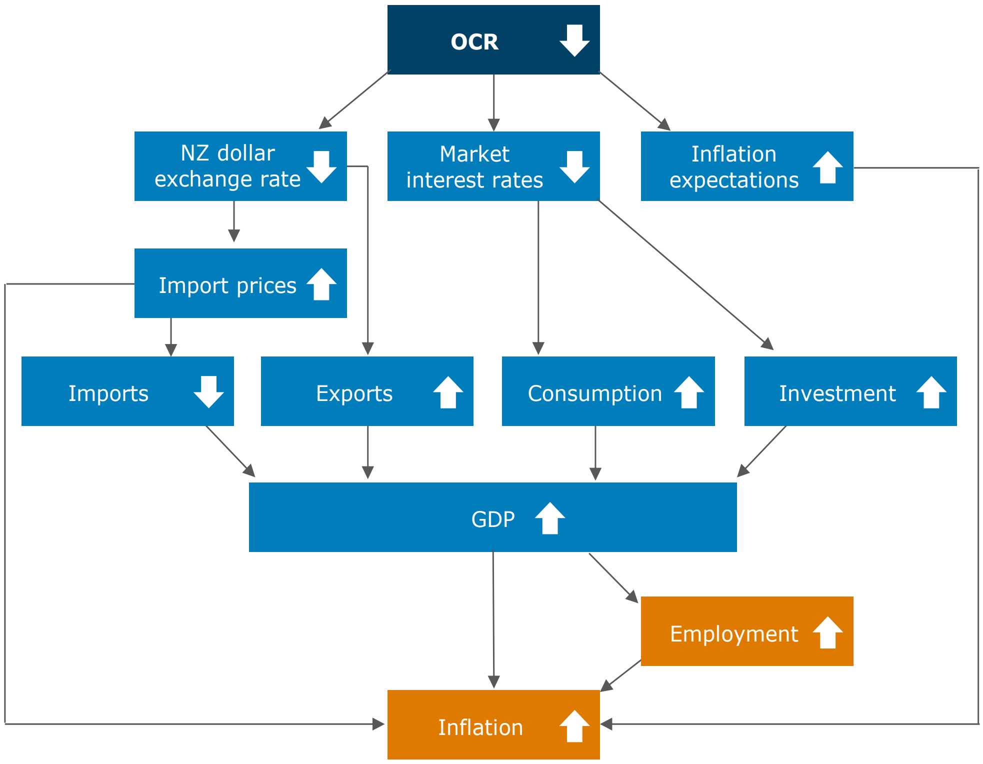
Monetary policy operates through many channels.

There are many channels through which monetary policy operates (figure 1). The OCR cuts over the past six months have put downward pressure on the NZD, seen NZ wholesale interest rates fall to record lows, and resulted in sharp falls in fixed and floating mortgage rates. These developments will help support inflation and employment over time.

We explore a crucial one; the pass-through to bank lending rates.

A key transmission channel of monetary policy is the link from the OCR to market interest rates, such as mortgage and term deposit rates. This week, we zoom into the transmission from the OCR to bank lending rates and highlight some concerns over the effectiveness of the pass-through of a lower OCR from here.

Figure 1. The monetary policy transmission mechanism



Source: RBNZ, ANZ Research

The RBNZ has cut the OCR from 1.75% to 1.00% this year. But theory and evidence suggests there is a point below which the credit channel of lower interest rates can, *Below the ELB, the negative impact of rate cuts on credit availability may win out.*

perversely, become contractionary. That is, as rates get ever lower, the effect of low or negative wholesale interest rates on retail lending and borrowing rates becomes negligible. And beyond some point not only that; declining credit availability as a result of compressed margins more than offsets the benefits of the lower price of credit. This is known as the 'reversal rate', the 'economic lower bound', or the 'effective lower bound'.[1]

Below the effective lower bound (ELB), lower interest rates may actually reduce net stimulus to the economy once impacts on the quantity of credit are taken into account. And even the impact on the price of credit may not always be what you might expect: there have been cases overseas where interest rates on loans have *increased* when policy rates have been reduced from already very low levels as banks attempt to recoup margins.

…and the OCR may already be close to that.

Where this effective lower bound may be is not a simple thing to ascertain, since observed credit growth is always a mix of both demand and supply factors, and also there are other channels for monetary policy to take into account as well (in particular, the exchange rate). But in New Zealand, the movement of lending and deposit rate spreads in this low rate environment suggests that the OCR may already be not too far from the limits of its impact on short-term retail interest rates at least.

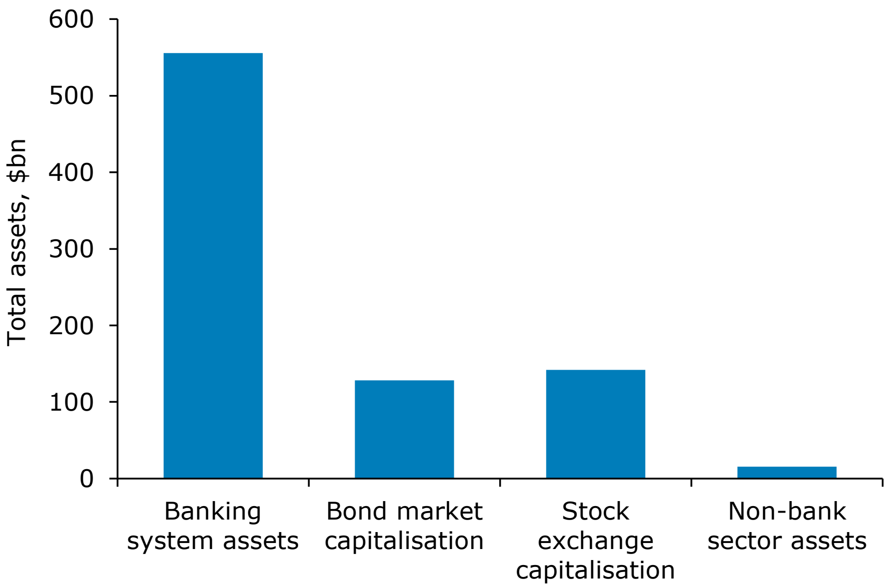
The banking system is crucial for monetary policy transmission…

The New Zealand banking system is heavily bank-based.

Banks dominate the New Zealand financial system (figure 2), while New Zealand's capital markets are small relative to the banking sector. The banking system is larger relative to the size of the economy than in most other OECD economies, with bank credit relative to GDP sitting at the 93rd percentile of OECD peers.

The unique structure of New Zealand's financial system means that bank lending and deposit rates are a very important channel for the transmission of monetary policy decisions into the real economy. It is not the only channel of course: the impact on the exchange rate is also key. But the importance of this channel may pose challenges for the effectiveness of very low, or negative, interest rates.

Figure 2. Size of New Zealand's financial sectors



Source: RBNZ

…but the OCR is only part of the bank funding story

Prior to the global financial crisis (GFC), the Official Cash Rate (OCR) was a reasonable

[1] Brunnermeier and Koby (2019), 'The Reversal Interest Rate', IMES Discussion Paper Series, Bank of Japan, and Cœuré (2016), 'Assessing the implications of negative interest rates', Speech, European Central Bank.

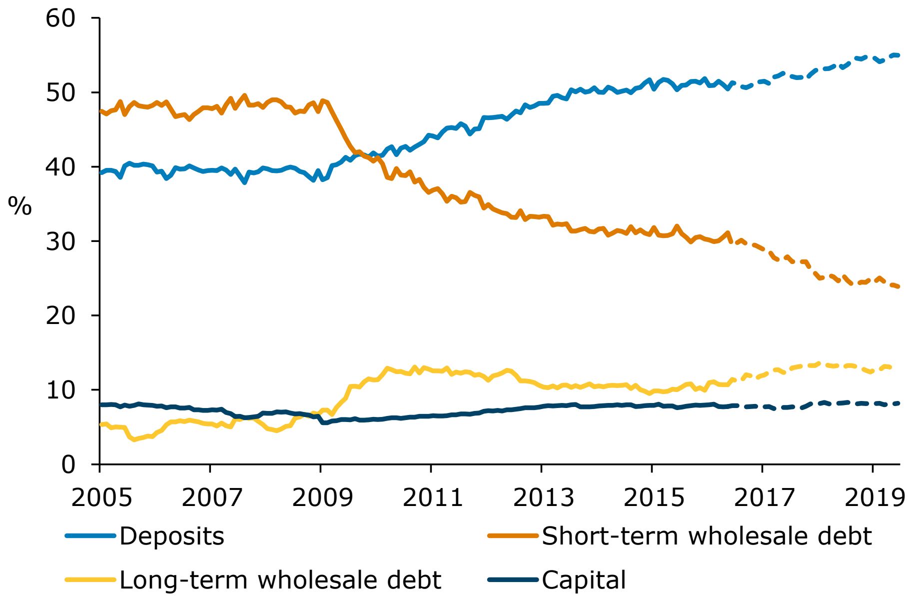
proxy for bank funding costs, and so there was a relatively stable relationship between the OCR and retail mortgage rates. However, this relationship has not been as close in the past ten years, and the OCR on its own has not been a good proxy for bank funding costs.[2]

There are several sources of funding for banks.

The change in relationship between the OCR and bank funding costs has, not coincidentally, occurred alongside a significant shift in the composition and pricing of bank funding (figure 3). Banks obtain funding from several sources:

- **Deposits** from households and corporates
- **Short-term wholesale debt** (eg commercial paper issued overseas or domestically)
- **Long-term wholesale debt** (ie corporate bank bonds issued overseas or domestically)
- **Capital** (ie equity from shareholders)

Figure 3. New Zealand banks' funding composition



Source: RBNZ, ANZ Research

A change in bank funding composition and pricing occurred after the GFC, initially driven by a blow-out in wholesale debt funding costs and a move of deposits out of finance companies into banks. But the change was given permanence by new regulations, in particular, the minimum core funding ratio requirement (CFR, figure 4).

The Core Funding Ratio was implemented post-GFC…

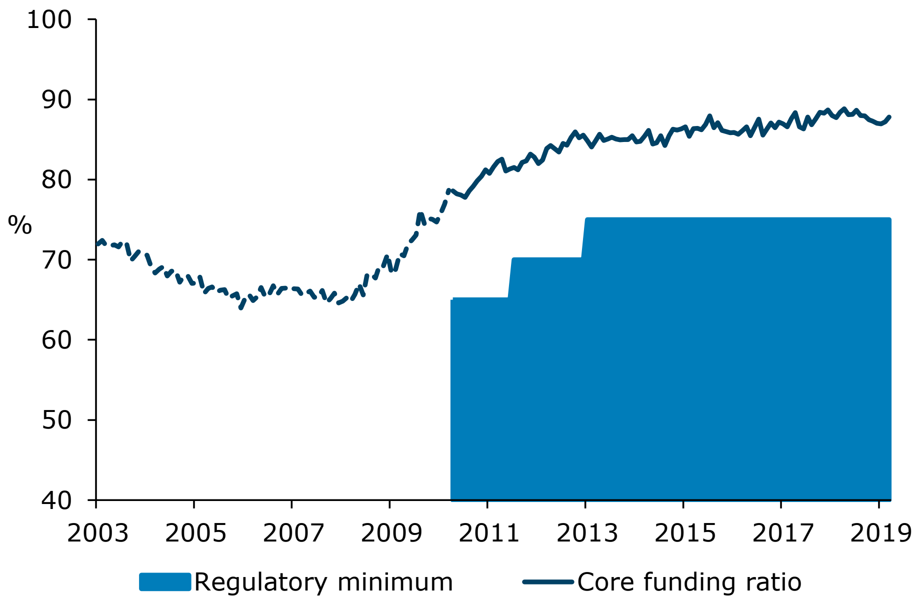
All banks fund short and lend long to some degree – it's inevitable (20-year term deposit, anyone?). But the basic notion underlying the CFR is that there mustn't be too large a mismatch between the amount of stable funding that can be assumed to stay in place for at least one year ('core' funding such as term deposits and long-term wholesale debt), and the core lending business of the bank that needs to be funded on a continuing basis (eg mortgages).

Prior to the GFC, New Zealand banks were heavily dependent on short-term foreign wholesale debt. Effectively, about 50% of banks' funding was in short-term money markets overseas. But when the GFC hit, these markets dried up and banks were left without access to funding. This highlighted that funding rollover risk was greater than had been previously realised. Requiring banks to maintain a minimum CFR therefore reduces the vulnerability of the banking sector in a period of general money market disruption.

[2] Wong (2012), 'Bank funding – the change in composition and pricing', RBNZ Bulletin, 75(2), and Cook and Steenkamp (2018), 'Funding cost pass-through to mortgage rates', RBNZ Analytical Note, AN2018/02.

As well as a lengthening of funding, banks' reliance on offshore funding (of whatever term) has decreased since the GFC. Banks currently source about 22% of their funding from abroad, down from 31% in 2009. The average maturity of this debt has also changed substantially, with more funding at longer maturities.

Figure 4. Core funding ratio



Source: RBNZ

…increasing the reliance on deposit funding.

New Zealand banks are now more resilient to international funding conditions. But the flip side of that is that they are now more exposed to domestic funding conditions, and in particular, deposits. There is now a direct link from deposit growth to credit growth that simply was not binding before. The core funding ratio requirement has increased the demand for deposits substantially, with deposits now making up about 60% of banks' funding, from about 40% previously.

The new bank funding mix is safer, but costlier

Insurance isn't free.

The CFR requirement has made banks more resilient to foreign financial market shocks, but this has not come without a cost. Domestic deposits and long-term wholesale funding is more expensive than short-term wholesale funding. RBNZ analysis notes that this has resulted in a wider and more volatile spread between mortgage rates and the OCR.[3]

The OCR is no longer a good proxy for bank funding costs

Prior to the GFC, term deposit rates (and bank funding costs more generally) closely tracked the OCR. This has changed substantially: 6-month term deposit rates are now tracking about 1.75%pts above the OCR, compared to a marginally negative spread prior to the GFC (figure 5), reflecting competition between banks for this funding. This increased cost has been passed on to lending rates, with a similar increase in the spread of the 6-month mortgage rate to the OCR after the GFC (figure 6).

Competition for deposits has limited OCR pass-through

The new importance of, and competition for, deposits means that the spread to the OCR is permanently wider. Even now, with an OCR at 1.00% and the 10-year government bond rate at 1.06%, households can get term deposits yielding 2.5-3%!

[3] Wong (2012), 'Bank funding – the change in composition and pricing', RBNZ Bulletin, 75(2), and Cook and Steenkamp (2018), 'Funding cost pass-through to mortgage rates', RBNZ Analytical Note, AN2018/02.

Figure 5. OCR and deposit rates

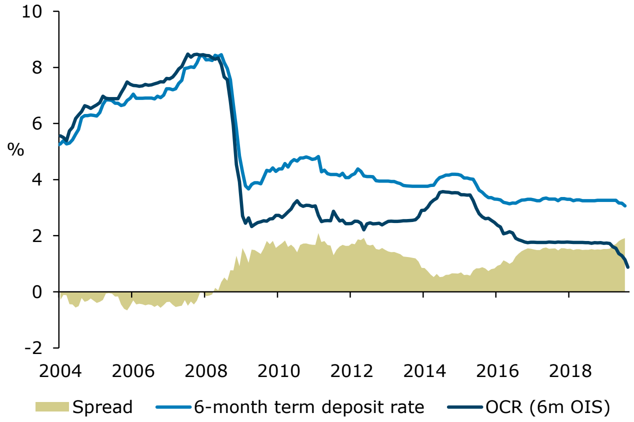
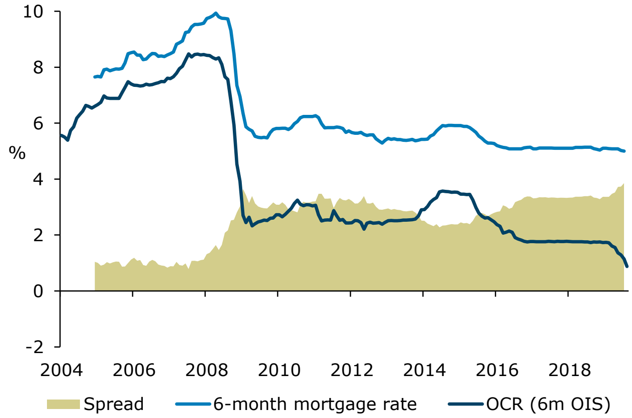


Figure 6. OCR and mortgage rates



Source: RBNZ, ANZ Research

Spreads are now wider…

But something else is clearly going on here. Lending and deposit rate margins over the risk-free rate have not been constant and have varied inversely with the OCR since the GFC (figures 7 and 8). Effectively, the pass-through from policy rates to lending and deposit rates has diminished as interest rates have moved lower. In other words, as the OCR has fallen (or increased), less of it has been passed on to retail interest rates as banks compete to retain deposit funding.

…and pass-through has diminished at low interest rates.

This suggests that interest rates in New Zealand may already be nearing an ELB in terms of their impact on retail interest rates. Close to the ELB, a lower policy rate would be reflected mainly in wider lending spreads (over riskless rates), rather than lower mortgage rates. Conversely, a slight rise in the policy rate would produce narrower lending spreads. Lending and deposit rates would not move much either way.[4] This is exactly what we've seen in the post-GFC period.

In fact, this was acknowledged in the RBNZ's August Monetary Policy Statement. This year, bank funding costs have not fallen as much as the OCR because the cost of deposit funding has held up. We expect this to continue as the OCR moves lower, hampering the transmission of a lower OCR to retail lending rates.

Figure 7. Deposit rate spread to OCR and the inverted OCR

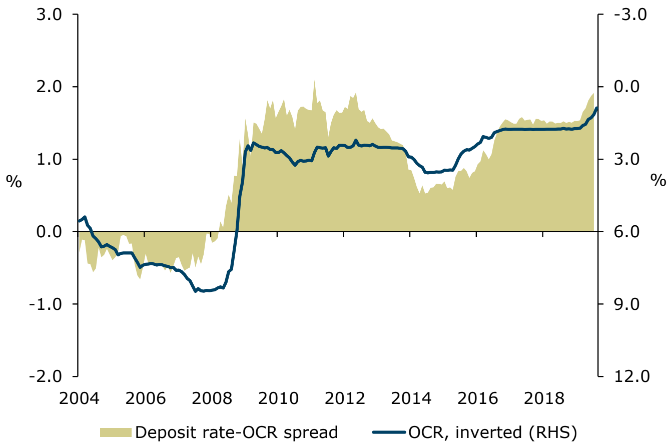
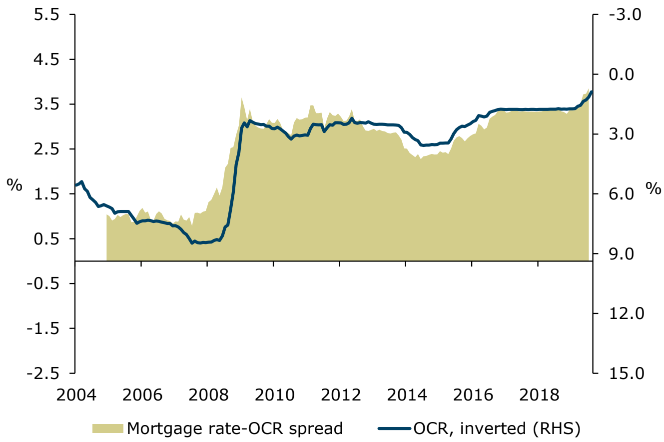


Figure 8. Mortgage rate spread to OCR and the inverted OCR



Source: RBNZ, ANZ Research

[4] Saunders (2019), 'Pass-through of Bank Rate to household interest rates', Speech, Bank of England.

Deposit growth is now needed for credit to flow

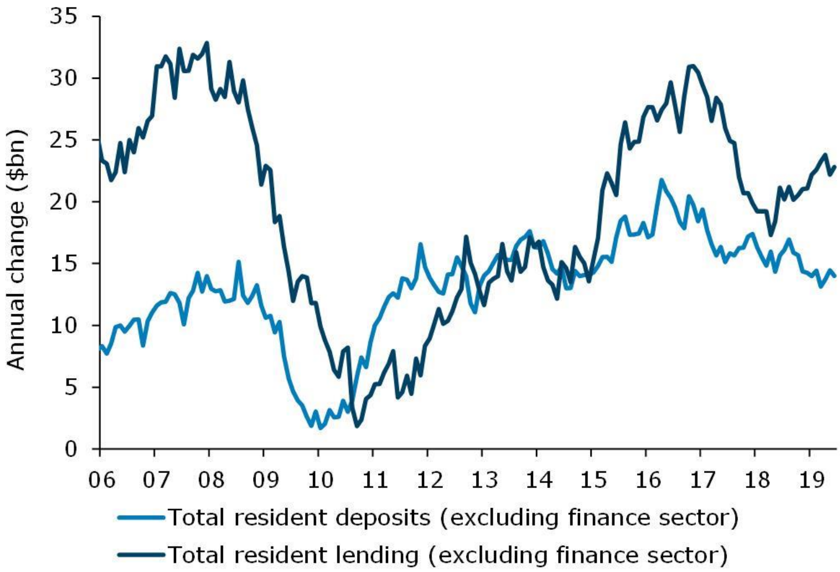
The CFR created a causal link between deposit and credit growth.

New Zealand banks are now more reliant than ever on deposit funding. But deposit growth has slowed over the past year, meaning that banks will increasingly have to turn to overseas funding markets to keep up with credit growth. However, the core funding ratio means that banks are restricted to funding at long maturities. The appetite for bank debt offshore does wane at high volumes, and rating agencies continue to cite offshore funding as a key risk to New Zealand banks.

Slower deposit growth means less credit or less pass-through.

To close the funding gap shown in figure 9, all else equal, banks will have to limit credit growth (creating a headwind for the economy) or raise deposit rates to try and attract more deposit funding (weakening the transmission from a lower OCR to bank deposit/lending rates). However, RBNZ analysis suggests that banks have little ability to raise deposits at a system level by simply increasing their deposit rates – it just reallocates it between banks.[5] This suggests downside risks for credit growth as aggregate deposit growth slows. "Go and spend" is the instruction from the central bank, but lower bank deposits will limit credit creation.

Figure 9. Bank funding gap



Source: RBNZ

Household savings behaviour is an important consideration

Bank deposits are relatively low risk…

It's important to consider household savings behaviour when assessing how a lower OCR is likely to be transmitted through to bank lending and deposit rates. As noted, banks have not fully passed on recent OCR cuts because they are competing to attract deposits.

…but low rates may drive a search for yield…

Bank deposits are generally considered to be at the safer end of the spectrum when it comes to the type of assets households might consider holding. As interest rates move lower, there's a greater incentive to 'reach for yield' and branch out into riskier investments such as shares, potentially making it harder for banks to attract deposits as rates fall.

However, if the economic outlook or global markets take a turn for the worse, households may opt for safety over returns, meaning deposit and lending rates might be able to go lower than otherwise – albeit demand for credit may not be too flash in such a scenario. But for now, household sentiment and risk appetite remains pretty strong.

…and a fall in deposit funding.

Deposit insurance also has the potential to impact the bank funding landscape, as it may see deposits leave 'safe' banks, attracted by the highest-yielding deposit takers that are

[5] Armstrong and Mulligan (2017), 'Diving in the deep end of domestic deposits', RBNZ Analytical Note, AN2017/05.

Monetary policy has been effective…

…but central bankers are well aware of diminishing returns at very low or negative rates.

The negative effects of low rates can be mitigated.

The RBNZ will have to closely monitor transmission…

…and assess whether further OCR cuts, or other options, would help.

also covered by the scheme. Depending on the scope of the scheme, it may place further pressure on banks trying to attract deposit funding for credit growth.

Bank funding constraints will limit the effectiveness of a lower OCR

The RBNZ recently released a paper which suggests that monetary policy has been just as effective at stimulating inflation and economic activity in the post-GFC period as before. But the effectiveness of interest rates in the post-GFC period, when the OCR was between 1.5-3.5%, does not necessarily imply that further cuts in the OCR below 1% – and possibly below 0% – will be as effective. We are in uncharted territory.

Overseas central bankers are acutely aware of the weakening in monetary policy effectiveness at very low interest rates:

"The MPC recognises the risk that, when interest rates are very low, Bank Rate cuts might not be fully passed on to the interest rates actually faced by households and firms. There have been examples overseas of interest rates on loans increasing when official policy rates have been reduced from very low levels."

– Bank of England Governor Carney, Inflation Report, August 2016

And across the Tasman this month, RBA Governor Lowe acknowledged in front of a parliamentary committee that monetary policy was becoming less potent. Lowe noted that banks found it harder to fully pass through rate cuts to borrowers because banks could not drop deposit rates below zero, so their interest margins were being squeezed. In addition, household debt levels were already very high (discouraging further borrowing and spending).

Policies and facilities overseas have been specifically designed to mitigate the risk that low rates reduce credit availability and to ensure that lower policy rates transmit to lower lending rates. For example, central banks that implement negative interest rates often tier bank reserves so that only a portion of bank reserves are subject to a negative interest rate. Also, term lending facilities have been introduced to boost credit availability and promote lending at low interest rates (eg the Term Funding Scheme by the BoE and the Targeted Longer-Term Refinancing Operations – TLTRO – by the ECB).

Numerous studies suggest that banks that rely heavily on deposit funding are those most negatively affected by negative interest rate policies and have lower pass-through of the policy rate to lending rates.[6] The structure of the New Zealand financial system is heavily bank-based, and the banking system is highly dependent on deposits, making the issue highly pertinent here.

Putting it all together, it appears that there is already diminishing pass-through of the OCR to bank funding costs (and lending/deposit rates) as banks compete to keep and attract deposit funding. This is likely to intensify as the OCR moves lower from here. The Monetary Policy Committee will have to closely watch whether policy is transmitting effectively through the economy, and assess whether further OCR cuts are likely to be a help or a hindrance. It may have to consider options to keep the transmission channel clear as rates move lower, such as establishing term lending facilities and tiering bank reserves if rates go negative. Alternatively, the RBNZ could opt for quantitative easing instead of negative rates (like the Fed and BoE did). Quantitative easing, or an 'operation twist' (ie purchasing longer-term bonds while selling shorter-term bonds), could push down longer-term mortgage rates, without the need for a lower OCR.

While the banking sector is very important for the implementation of monetary policy in the New Zealand economy, it is important to note once more that there are of course other channels through which monetary policy is likely to still be effective at very low or negative interest rates. The NZD, wholesale interest rate markets, and inflation

[6] Heider, Saidi, Schepens (2018), 'Life Below Zero: Bank Lending Under Negative Policy Rates', Review of Financial Studies and Eggertsson, Juelsrud, Wold (2017), 'Are negative nominal interest rates expansionary?', NBER Working Paper.

expectations will become relatively more important channels. For now, we are only forecasting one more OCR cut. But with the risks looking decidedly skewed from here, it would be timely to think about these issues and potential policy options.

Looking at the week ahead, the ANZ Business Outlook on Thursday and ANZ-Roy Morgan Consumer Confidence on Friday will provide a glimpse into the minds of businesses and consumers in August, amid heightened global recession fears. Building consents are also due on Friday; consents have held at a high level recently, but we see downside risk looming.

Local data

GlobalDairyTrade auction. Results were stronger than expected, with the GDT Price Index falling just 0.2% (against expectations of a 1% fall). Milk fats and skim milk prices declined, but particularly positive for our dairy producers was the lift in whole milk powder prices (+2.1%) to an average price of USD3100/t.

Retail Sales – Q2. At 0.2% q/q, retail sales volumes were a touch stronger than our expectation, but given it's small weighting in production GDP the surprise isn't large enough to make an impact on our Q2 GDP pick of 0.4% q/q – plenty more data to come on that front.

Overseas Merchandise Trade – July. Exports eased slightly in July but it was the large lift in imports that dragged the trade balance down to a deficit of $685 million. Deficits are normal during the winter months as agricultural export volumes are limited at this time of the season.

Data calendar

Date	Country	Data/event	Mkt.	Last	NZ time
24-Aug	GE	Import Price Index MoM - Jul	-0.10%	-1.40%	08/31
	GE	Import Price Index YoY - Jul	-1.90%	-2.00%	09:00
26-Aug	NZ	Trade Balance NZD - Jul	-254m	365m	10:45
	NZ	Exports NZD - Jul	5.05b	5.01b	10:45
	NZ	Imports NZD - Jul	5.20b	4.65b	10:45
	NZ	Trade Balance 12 Mth YTD NZD - Jul	-5012m	-4937m	10:45
	GE	IFO Business Climate - Aug	95.5	95.7	20:00
	GE	IFO Expectations - Aug	91.8	92.2	20:00
	GE	IFO Current Assessment - Aug	99	99.4	20:00
27-Aug	US	Chicago Fed Nat Activity Index - Jul	--	-0.02	00:30
	US	Durable Goods Orders - Jul P	1.30%	1.90%	00:30
	US	Durables Ex Transportation - Jul P	0.10%	1.00%	00:30
	US	Cap Goods Orders Nondef Ex Air - Jul P	0.10%	1.50%	00:30
	US	Cap Goods Ship Nondef Ex Air - Jul P	--	0.30%	00:30
	US	Dallas Fed Manf. Activity - Aug	-1	-6.3	02:30
	AU	ANZ Roy Morgan Weekly Consumer Conf. - 25-Aug	--	112.8	11:30
	JN	PPI Services YoY - Jul	0.60%	0.70%	11:50
	CH	Industrial Profits YoY - Jul	--	-3.10%	13:30
	GE	GDP SA QoQ - 2Q F	-0.10%	-0.10%	18:00
	GE	GDP NSA YoY - 2Q F	0.00%	0.00%	18:00
	GE	GDP WDA YoY - 2Q F	0.40%	0.40%	18:00
	GE	Private Consumption QoQ - 2Q	--	1.20%	18:00
	GE	Government Spending QoQ - 2Q	--	-0.30%	18:00
	GE	Capital Investment QoQ - 2Q	--	1.10%	18:00
	UK	UK Finance Loans for Housing - Jul	--	42653	20:30
	GE	Retail Sales MoM - Jul	-1.50%	3.50%	09/04
	GE	Retail Sales NSA YoY - Jul	--	-1.60%	09/04
28-Aug	US	House Price Purchase Index QoQ - 2Q	0.20%	1.10%	01:00
	US	S&P CoreLogic CS 20-City MoM SA - Jun	0.20%	0.14%	01:00
	US	S&P CoreLogic CS 20-City YoY NSA - Jun	--	2.39%	01:00
	US	S&P CoreLogic CS 20-City NSA Index - Jun	--	216.94	01:00
	US	S&P CoreLogic CS US HPI YoY NSA - Jun	--	3.43%	01:00
	US	S&P CoreLogic CS US HPI NSA Index - Jun	--	209.66	01:00
	US	Richmond Fed Manufact. Index - Aug	2	-12	02:00
	US	Conf. Board Consumer Confidence - Aug	130	135.7	02:00
	US	Conf. Board Present Situation - Aug	--	170.9	02:00
	US	Conf. Board Expectations - Aug	--	112.2	02:00
	AU	Construction Work Done - 2Q	-1.00%	-1.90%	13:30
	GE	GfK Consumer Confidence - Sep	9.6	9.7	18:00
	EC	M3 Money Supply YoY - Jul	--	4.50%	20:00
	US	MBA Mortgage Applications - 23-Aug	--	-0.90%	23:00
	UK	Nationwide House PX MoM - Aug	--	0.30%	09/04
	UK	Nationwide House Px NSA YoY - Aug	--	0.30%	09/04
29-Aug	NZ	ANZ Activity Outlook - Aug	--	5	13:00
	NZ	ANZ Business Confidence - Aug	--	-44.3	13:00
	AU	Private Capital Expenditure - 2Q	0.40%	-1.70%	13:30
	GE	CPI Saxony MoM - Aug	--	0.40%	19:00
	GE	CPI Saxony YoY - Aug	--	1.60%	19:00

Continued on following page

Data calendar

Date	Country	Data/event	Mkt.	Last	NZ time
29-Aug	GE	Unemployment Change (000's) - Aug	5.0k	1.0k	19:55
	GE	Unemployment Claims Rate SA - Aug	5.00%	5.00%	19:55
	EC	Economic Confidence - Aug	102.5	102.7	21:00
	EC	Business Climate Indicator - Aug	--	-0.12	21:00
	EC	Industrial Confidence - Aug	-7.3	-7.4	21:00
	EC	Services Confidence - Aug	--	10.6	21:00
	EC	Consumer Confidence - Aug F	--	-7.1	21:00
30-Aug	GE	CPI MoM - Aug P	-0.10%	0.50%	00:00
	GE	CPI YoY - Aug P	1.50%	1.70%	00:00
	GE	CPI EU Harmonized MoM - Aug P	0.10%	0.40%	00:00
	GE	CPI EU Harmonized YoY - Aug P	1.20%	1.10%	00:00
	US	GDP Annualized QoQ - 2Q S	2.00%	2.10%	00:30
	US	Personal Consumption - 2Q S	4.30%	4.30%	00:30
	US	GDP Price Index - 2Q S	2.40%	2.40%	00:30
	US	Core PCE QoQ - 2Q S	--	1.80%	00:30
	US	Advance Goods Trade Balance - Jul	-$74.0b	-$74.2b	00:30
	US	Retail Inventories MoM - Jul	--	-0.30%	00:30
	US	Wholesale Inventories MoM - Jul P	--	0.00%	00:30
	US	Initial Jobless Claims - 24-Aug	--	209k	00:30
	US	Continuing Claims - 17-Aug	--	1674k	00:30
	US	Bloomberg Consumer Comfort - 25-Aug	--	61.5	01:45
	US	Pending Home Sales MoM - Jul	0.00%	2.80%	02:00
	US	Pending Home Sales NSA YoY - Jul	--	-0.60%	02:00
	NZ	ANZ Consumer Confidence MoM - Aug	--	-5.10%	10:00
	NZ	ANZ Consumer Confidence Index - Aug	--	116.4	10:00
	NZ	Building Permits MoM - Jul	--	-3.90%	10:45
	UK	GfK Consumer Confidence - Aug	-10	-11	11:01
	UK	Lloyds Business Barometer - Aug	--	13	11:01
	JN	Jobless Rate - Jul	2.30%	2.30%	11:30
	JN	Retail Sales YoY - Jul	-0.60%	0.50%	11:50
	JN	Retail Sales MoM - Jul	-0.90%	0.00%	11:50
	JN	Industrial Production YoY - Jul P	-0.40%	-3.80%	11:50
	JN	Industrial Production MoM - Jul P	0.30%	-3.30%	11:50
	AU	Building Approvals MoM - Jul	0.00%	-1.20%	13:30
	AU	Building Approvals YoY - Jul	-22.20%	-25.60%	13:30
	AU	Private Sector Credit MoM - Jul	0.20%	0.10%	13:30
	AU	Private Sector Credit YoY - Jul	3.20%	3.30%	13:30
	JN	Vehicle Production YoY - Jul	--	9.30%	16:00
	JN	Housing Starts YoY - Jul	-5.40%	0.30%	17:00
	JN	Annualized Housing Starts - Jul	0.900m	0.922m	17:00
	JN	Construction Orders YoY - Jul	--	-4.20%	17:00
	UK	Consumer Credit YoY - Jul	--	5.50%	20:30
	UK	Net Consumer Credit - Jul	1.0b	1.0b	20:30
	UK	Net Lending Sec. on Dwellings - Jul	--	3.7b	20:30
	UK	Mortgage Approvals - Jul	66.0k	66.4k	20:30
	UK	Money Supply M4 MoM - Jul	--	0.10%	20:30
	UK	M4 Money Supply YoY - Jul	--	2.30%	20:30
	UK	M4 Ex IOFCs 3M Annualised - Jul	--	2.50%	20:30
	GE	Unemployment Change (000's) - Aug	5.0k	1.0k	19:55

Continued on following page

Data calendar

30-Aug	EC	Unemployment Rate - Jul	7.50%	7.50%	21:00
	EC	CPI Core YoY - Aug A	1.00%	0.90%	21:00
	EC	CPI Estimate YoY - Aug	1.00%	1.10%	21:00
31-Aug	US	Personal Income - Jul	0.30%	0.40%	00:30
	US	Personal Spending - Jul	0.50%	0.30%	00:30
	US	Real Personal Spending - Jul	0.30%	0.20%	00:30
	US	PCE Deflator MoM - Jul	0.20%	0.10%	00:30
	US	PCE Deflator YoY - Jul	1.40%	1.40%	00:30
	US	PCE Core Deflator MoM - Jul	0.20%	0.20%	00:30
	US	PCE Core Deflator YoY - Jul	1.60%	1.60%	00:30
	US	MNI Chicago PMI - Aug	48	44.4	01:45
	US	U. of Mich. Sentiment - Aug F	92.5	92.1	02:00
	US	U. of Mich. Current Conditions - Aug F	--	107.4	02:00
	US	U. of Mich. Expectations - Aug F	--	82.3	02:00
	US	U. of Mich. 1 Yr Inflation - Aug F	--	2.70%	02:00
	US	U. of Mich. 5-10 Yr Inflation - Aug F	--	2.60%	02:00
	CH	Composite PMI - Aug	--	53.1	13:00
	CH	Manufacturing PMI - Aug	49.6	49.7	13:00
	CH	Non-manufacturing PMI - Aug	53.9	53.7	13:00

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 growth momentum has decelerated and global risks are heightened. As headwinds persist, we expect a lower OCR will be required this year to support growth, inflation and employment. The resilience of domestic data, the trend in inflation and global developments will all bear watching closely.

Date	Data/event	Economic signal	Comment
Thu 29 Aug (1:00pm)	ANZ Business Outlook – Aug	--	--
Fri 30 Aug (10:00am)	ANZ Roy Morgan Consumer Confidence – Aug	--	--
Fri 30 Aug (10:45am)	Building Consents – July	Wary	Consents have held at a high level recently, but we see downside risk looming.
Mon 2 Sep (10:45am)	Terms of Trade – Q2	Sideways	Both export and import prices are poised to lift around 2% largely owing to a lower NZD.
Wed 4 Sep (early am)	GlobalDairyTrade auction	Steady	Seasonal increase in offer volumes will test buyers but tightening global milk supply should underpin demand.
Wed 4 Sep (1:00pm)	ANZ Commodity Price Index – Aug	--	--
Thu 5 Sep (10:45am)	Volume of Work Put in Place – Q2	Small rise	Increases in consent issuance points to a small rise in the quarter.
Mon 9 Sep (10:45am)	Economic Survey of Manufacturing – Q2	Watching	An easing trend has been at play here too. We're looking for a floor.
Tue 10 Sep (10:00am)	ANZ Truckometer - August	--	--
Thu 12 Sep (10:45am)	Food Price Index – August	Small lift	A small lift in food prices from fruit and vegetables is expected.
Thu 12 Sep (10:45am)	Rental Price Index – August	Small rise	Continued increases in rental prices should support a quarterly rise in CPI rents.
Thu 12 Sep (1:00pm)	ANZ Monthly Inflation Gauge - August	--	--
Fri 13 Sep (10:30am)	BNZ-BusinessNZ Manufacturing PMI – August	Watching	An easing trend has been at play here. We're looking for a floor.
Mon 16 Sep (10:30am)	Performance Services Index – August	Watching	Looking to see if July's rebound was more noise than signal.
Wed 18 Sep (early am)	GlobalDairyTrade auction	Stable	Seasonal increase in offer volumes will test buyers but tightening global milk supply should underpin demand.
Thu 19 Sep (10:45am)	Current Account – Q2	Widen	The annual current account is expected to widen slightly as a share of GDP.
Thu 19 Sep (10:45am)	Gross Domestic Product – Q2	Trough	We think Q1 growth was held up by a few temporary factors, and have pencilled in a soft 0.4% q/q lift for Q2.
Wed 25 Sep (10:45am)	Overseas Merchandise Trade – August	Steady	Export volumes still subdued due to low winter production restricting dairy and meat volumes will low prices moderate log export volumes and returns.
Wed 25 Sep (2:00pm)	RBNZ OCR Review – September	Watching	A dovish statement should set the scene for a November OCR cut to 0.75%.
Fri 27 Sep (10:00am)	ANZ Roy Morgan Consumer Confidence – Sep	--	--
On balance		**Data watch**	**Domestic and global data has softened and we expect a lower OCR this year with inflation pressures fading.**

Key forecasts and rates

	Mar-19	Jun-19	Sep-19	Dec-19	Mar-20	Jun-20	Sep-20	Dec-20	Mar-21
GDP (% qoq)	0.6	**0.4**	**0.6**	**0.6**	**0.6**	**0.7**	**0.6**	**0.7**	**0.7**
GDP (% yoy)	2.5	**2.0**	**2.2**	**2.2**	**2.2**	**2.5**	**2.5**	**2.6**	**2.7**
CPI (% qoq)	0.1	0.6	**0.4**	**0.1**	**0.7**	**0.3**	**0.6**	**0.2**	**0.6**
CPI (% yoy)	1.5	1.7	**1.2**	**1.2**	**1.8**	**1.5**	**1.6**	**1.7**	**1.7**
LCI Wages (% qoq)	0.3	0.8	**0.6**	**0.5**	**0.4**	**0.8**	**0.6**	**0.6**	**0.4**
LCI Wages (% yoy)	2.0	2.2	**2.3**	**2.3**	**2.3**	**2.3**	**2.2**	**2.3**	**2.3**
Employment (% qoq)	-0.2	0.8	**0.3**	**0.3**	**0.3**	**0.3**	**0.4**	**0.4**	**0.4**
Employment (% yoy)	1.5	1.7	**1.0**	**1.4**	**1.8**	**1.3**	**1.4**	**1.4**	**1.5**
Unemployment Rate (% sa)	4.2	3.9	**4.1**	**4.2**	**4.2**	**4.3**	**4.3**	**4.3**	**4.2**
Current Account (% GDP)	-3.6	**-3.6**	**-3.7**	**-3.8**	**-3.9**	**-4.0**	**-4.0**	**-4.0**	**-4.0**
Terms of Trade (% qoq)	1.0	**-0.1**	**0.4**	**-0.1**	**0.5**	**0.1**	**0.1**	**0.1**	**0.1**
Terms of Trade (% yoy)	-2.0	**-2.6**	**-2.0**	**1.1**	**0.6**	**0.9**	**0.6**	**0.8**	**0.4**

	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19
Retail ECT (% mom)	0.0	-0.5	-2.2	2.1	0.6	-0.1	0.5	-0.5	0.0	-0.1
Retail ECT (% yoy)	6.2	4.6	0.6	3.5	3.4	0.7	4.5	3.2	1.1	1.6
Car Registrations (% mom)	5.0	-11.0	-0.6	4.3	1.3	-2.7	1.6	-1.6	-2.8	3.7
Car Registrations (% yoy)	-5.4	-17.9	-15.8	-12.1	-3.9	-2.9	-0.5	-12.6	-11.0	-5.4
Building Consents (% mom)	2.0	-1.6	5.2	13.1	1.8	-7.2	-7.7	13.5	-3.9	--
Building Consents (% yoy)	8.7	-2.8	12.7	32.2	28.2	3.1	-3.2	7.1	9.4	--
REINZ House Price Index (% yoy)	3.8	3.1	3.1	2.8	3.0	2.4	1.4	1.7	1.7	1.5
Household Lending Growth (% mom)	0.4	0.6	0.4	0.4	0.5	0.5	0.5	0.5	0.5	--
Household Lending Growth (% yoy)	5.8	6.0	5.9	5.9	5.9	5.9	5.9	6.0	5.9	--
ANZ Roy Morgan Consumer Conf.	115.4	118.6	121.9	121.7	120.8	121.8	123.2	119.3	122.6	116.4
ANZ Business Confidence	-37.1	-37.1	-24.1	..	-30.9	-38.0	-37.5	-32.0	-38.1	-44.3
ANZ Own Activity Outlook	7.4	7.6	13.6	..	10.5	6.3	7.1	8.5	8.0	5.0
Trade Balance ($m)	-1305	-1004	9	-935	-94	825	375	175	365	-685
Trade Bal ($m ann)	-5774	-5556	-6161	-6433	-6715	-5739	-5564	-5588	-4937	-5463
ANZ World Comm. Price Index (% mom)	-2.4	-0.5	-0.2	2.0	2.8	4.1	2.6	0.1	-3.9	-1.4
ANZ World Comm. Price Index (% yoy)	-5.6	-5.1	-3.4	-2.2	-2.2	0.6	2.2	0.7	-2.4	-0.5
Net Migration (sa)	3980	4550	5780	4520	4300	3690	3290	4130	3100	--
Net Migration (ann)	48863	49525	50631	50869	51521	51156	50523	50256	49427	--
ANZ Heavy Traffic Index (% mom)	4.4	-2.3	-4.2	4.9	0.3	-2.0	4.1	0.7	-4.3	4.1
ANZ Light Traffic Index (% mom)	0.4	0.1	-1.8	2.0	-0.8	0.7	0.3	0.8	-2.1	1.5
ANZ Monthly Inflation Gauge (% mom)	0.3	0.2	-0.1	1.0	0.0	0.0	0.1	0.1	0.3	0.5

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	Jun-19	Jul-19	Today	Sep-19	Dec-19	Mar-20	Jun-20	Sep-20	Dec-20
NZD/USD	0.672	0.656	0.64	0.63	0.61	0.61	0.63	0.65	0.65
NZD/AUD	0.957	0.958	0.95	0.94	0.94	0.92	0.93	0.94	0.93
NZD/EUR	0.591	0.592	0.57	0.58	0.56	0.56	0.57	0.57	0.56
NZD/JPY	72.45	71.35	67.11	68.0	65.9	64.1	66.2	68.3	68.3
NZD/GBP	0.529	0.539	0.52	0.52	0.50	0.51	0.52	0.51	0.49
NZ$ TWI	71.6	71.0	71.4	68.8	67.2	66.8	68.2	69.2	68.3
Interest rates	Jun-19	Jul-19	Today	Sep-19	Dec-19	Mar-20	Jun-20	Sep-20	Dec-20
NZ OCR	1.50	1.50	1.00	1.00	0.75	0.75	0.75	0.75	0.75
NZ 90 day bill	1.64	1.50	1.19	1.10	0.93	0.93	0.93	0.93	0.93
NZ 10-yr bond	1.57	1.44	1.06	1.50	1.45	1.35	1.35	1.35	1.35
US Fed funds	2.50	2.25	2.25	2.25	2.00	2.00	2.00	2.00	2.00
US 3-mth	2.32	2.25	2.14	2.40	2.15	2.15	2.15	2.15	2.15
AU Cash Rate	1.25	1.00	1.00	1.00	0.75	0.75	0.75	0.75	0.75
AU 3-mth	1.20	1.01	0.99	0.95	0.95	0.95	0.95	0.95	0.95

	16-Jul	12-Aug	13-Aug	14-Aug	15-Aug	16-Aug
Official Cash Rate	1.50	1.00	1.00	1.00	1.00	1.00
90 day bank bill	1.48	1.20	1.18	1.17	1.18	1.19
NZGB 05/21	1.11	0.78	0.79	0.77	0.78	0.82
NZGB 04/23	1.15	0.76	0.77	0.75	0.76	0.80
NZGB 04/27	1.39	0.92	0.94	0.94	0.97	1.01
NZGB 04/33	1.76	1.21	1.24	1.24	1.26	1.31
2 year swap	1.31	0.95	0.93	0.95	0.95	0.97
5 year swap	1.39	0.97	0.96	0.98	0.98	1.00
RBNZ TWI	73.90	71.50	71.55	71.55	71.42	71.35
NZD/USD	0.6704	0.6411	0.6416	0.6404	0.6367	0.6405
NZD/AUD	0.9570	0.9477	0.9467	0.9445	0.9421	0.9474
NZD/JPY	72.55	68.36	68.16	68.28	67.76	67.48
NZD/GBP	0.5389	0.5286	0.5272	0.5281	0.5196	0.5210
NZD/EUR	0.6012	0.5786	0.5780	0.5777	0.5746	0.5746
AUD/USD	0.7005	0.6764	0.6778	0.6781	0.6757	0.6756
EUR/USD	1.1152	1.1078	1.1100	1.1085	1.1080	1.1144
USD/JPY	108.23	106.64	106.23	106.62	106.44	105.39
GBP/USD	1.2440	1.2126	1.2170	1.2130	1.2251	1.2266
Oil (US$/bbl)	56.77	56.21	56.34	55.68	55.35	54.17
Gold (US$/oz)	1417.83	1495.92	1507.20	1502.65	1498.06	1526.96
NZX 50	10867	10702	10804	10709	10725	10622
Baltic Dry Freight Index	2165	2067	2059	2061	2118	2168
NZX WMP Futures (US$/t)	3100	3000	3005	3020	3035	3035

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