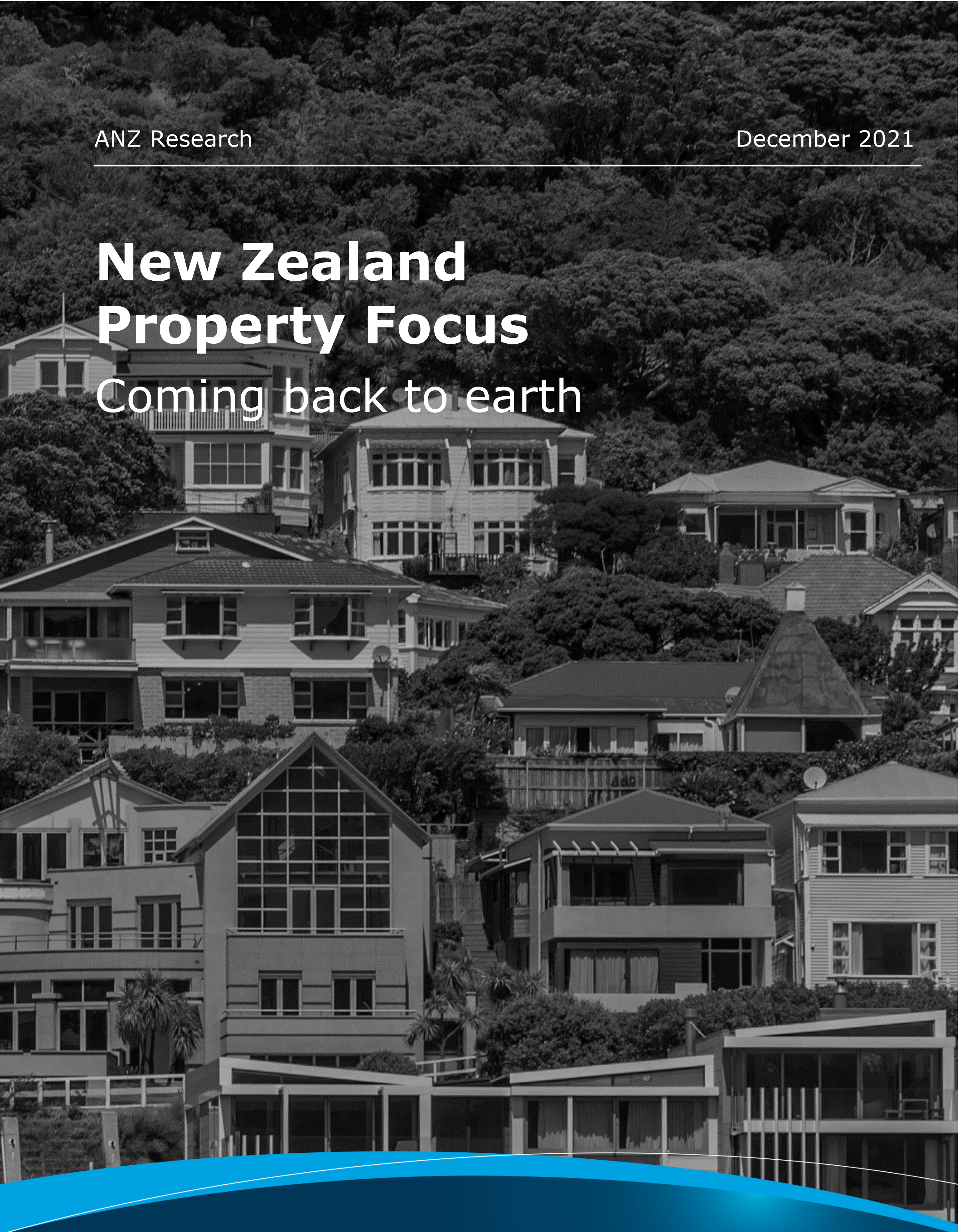


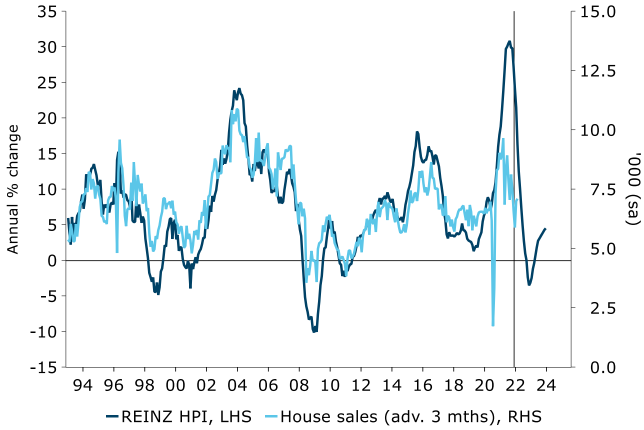
New Zealand Property Focus

Coming back to earth

At a glance

House prices are slowing

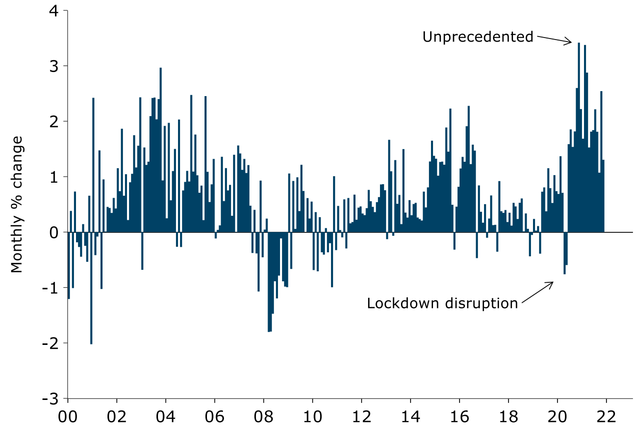
As headwinds start to weigh



Source: REINZ, Macrobond, ANZ Research

Monthly price gains continue

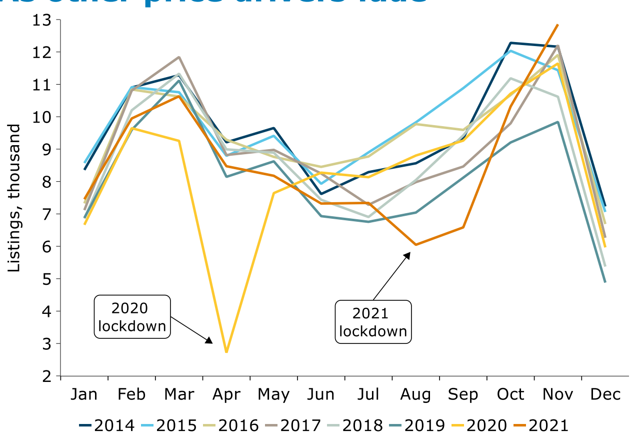
But are getting smaller



Source: REINZ, Macrobond, ANZ Research

New listings have surged

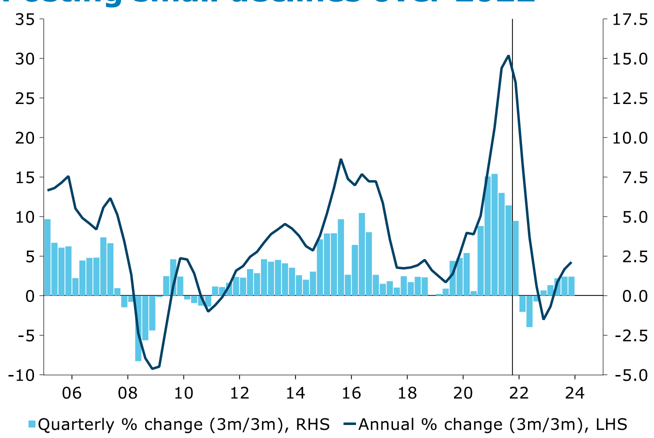
As other price drivers fade



Source: RealEstate.co.nz, Macrobond, ANZ Research

House prices to moderate

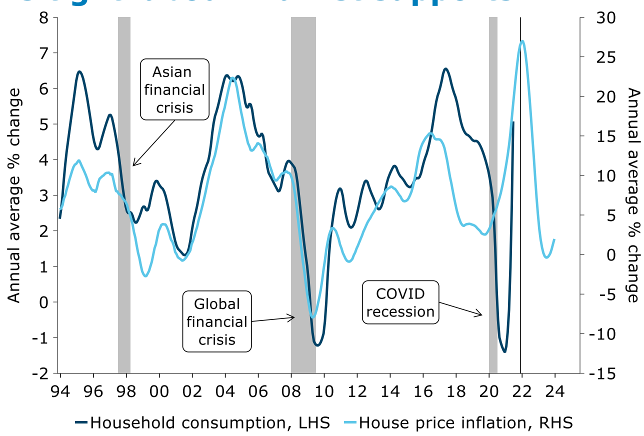
Posting small declines over 2022



Source: REINZ, Macrobond, ANZ Research

Domestic demand to hold up

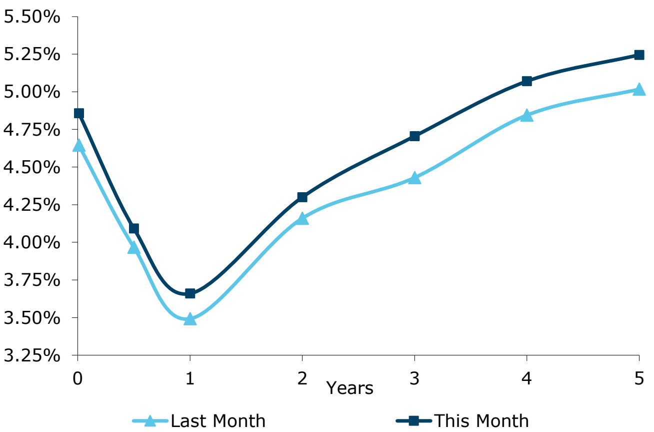
As tight labour market supports



Source: Stats NZ, REINZ, Macrobond, ANZ Research

Mortgage rates up again

But the largest increases are behind us



Source: RBNZ, REINZ, Stats NZ, Macrobond, Bloomberg, ICAP, RealEstate.co.nz, ANZ Research

This is not personal advice nor financial advice about any product or service. The opinions and research contained in this document are provided for information only, are intended to be general in nature and do not take into account your financial situation or goals. Please refer to the Important Notice.

Contact

Sharon Zollner, Finn Robinson, or David Croy for more details.

See page 9

INSIDE

ISSN 2624-0629

Publication date: 14 December 2021

Summary

Our monthly *Property Focus* publication provides an independent appraisal of recent developments in the residential property market.

Housing market overview

In November, house prices posted the second-lowest monthly increase since the end of lockdown in 2020. And it's looking like the shine is well and truly coming off the housing market, with weaker sales, tighter LVR restrictions and new consumer lending protections legislation seeing mortgage lending rapidly drying up, even as new listings surged to multi-year highs. As a result, we've revised down our house price outlook a touch, and are forecasting house prices will fall around 4% from their current extremely-elevated levels by mid-2022. Usually, falling house prices are correlated with recessions in New Zealand. But with the labour market running so strong, we think domestic demand will get through a period of mildly falling house prices relatively unscathed. See our Market Overview.

Mortgage borrowing strategy

Fixed mortgage rates have continued to rise, albeit at a more moderate pace than in prior months, with most rates up around 0.2%pts. The average floating rate is also up by a similar amount, broadly matching the 0.25% increase in the OCR delivered by the Reserve Bank. Fixed mortgage rates have now risen by between 1.5%pts and 2%pts since hitting all-time lows in May or June. While that will have come as a shock to many borrowers, we think upcoming rises are likely to be more moderate. That's because 2 to 5-year wholesale interest rates have already moved sharply higher in anticipation of a higher OCR, and the onus is now on the RBNZ to deliver. As for the choice of tenor for those looking to fix, on balance we still prefer the 1-year. Mortgage rates will likely be higher in a year's time, but they may not rise quickly enough to be worthwhile paying the hefty step-up to fix for 2 years or more. See our Mortgage Borrowing Strategy.

Housing market overview

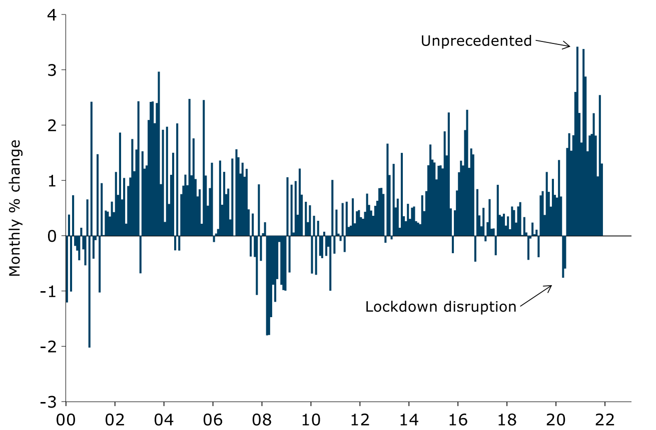
Summary

In November, house prices posted the second-lowest monthly increase since the end of lockdown in 2020. And it's looking like the shine is well and truly coming off the housing market, with weaker sales, tighter LVR restrictions and new consumer lending protections legislation seeing mortgage lending rapidly drying up, even as new listings surged to multi-year highs. As a result, we've revised down our house price outlook a touch, and are forecasting house prices will fall around 4% from their current extremely-elevated levels by mid-2022. Usually, falling house prices are correlated with recessions in New Zealand. But with the labour market running so strong, we think domestic demand will get through a period of mildly falling house prices relatively unscathed.

A slow grind down

Monthly house price inflation slowed in November, rising just 1.3% m/m (sa ANZ estimate) – the second-slowest monthly gain since the 2020 lockdown ended (figure 1). It's been a slow burn, but we've very likely seen the peak in house price rises.

Figure 1. Monthly house price inflation (sa)

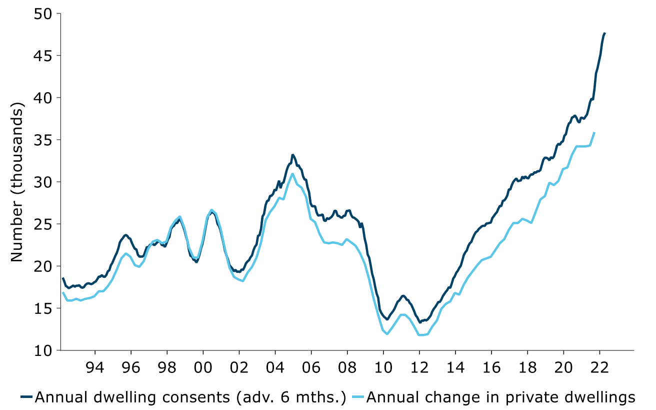


Source: REINZ, Macrobond, ANZ Research

The many headwinds we've seen accumulate over 2021 are finally starting to rein in rampant house price inflation. In particular, in recent weeks the housing narrative has shifted to a more pessimistic stance. Tighter loan-to-value ratio (LVR) restrictions have seen lending dry up for low-deposit borrowers, while tweaks to the Credit Contracts and Consumer Finance Act (CCCFA) are making it harder for many borrowers to get a mortgage. Anecdotal reports confirm this difficulty. There are fewer people at open homes, and auction clearance rates have fallen.

These factors only add to the list of headwinds that have been pushing against strong house price growth in recent months. In particular, current housing supply growth is far outstripping new demand. Population growth is anaemic with the border closed, but at the same time, annual dwelling consent issuance is holding up at record levels. We've already seen significant growth in private dwellings, and even accounting for capacity constraints in the building sector and lockdown volatility, these consents data suggest we should see strong building activity continue for at least the next six months (figure 2).

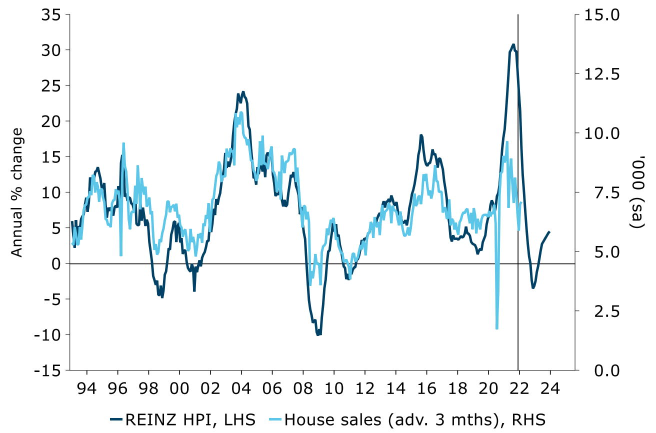
Figure 2. Private dwellings and building consents



Source: Stats NZ, Macrobond, ANZ Research

Annual house price inflation is still well above what would usually be implied by the level of house sales currently taking place (figure 3). But given the array of policy and market forces that are pushing against further house price rises, we expect to see the gap rapidly close as we move through 2022.

Figure 3. House sales and house price inflation

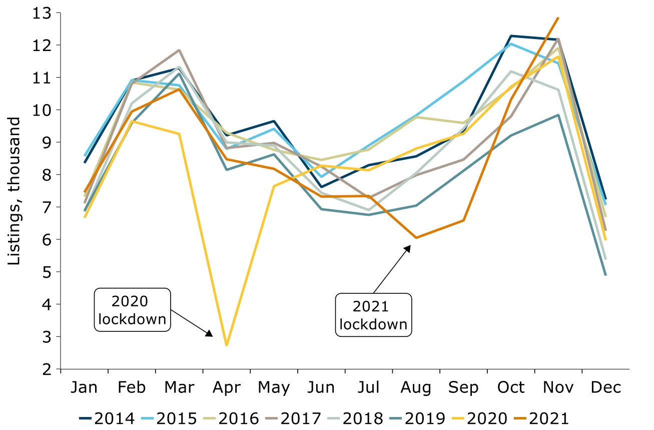


Source: REINZ, Macrobond, ANZ Research

Two key drivers that have kept house prices going recently have been Fear of Missing Out (FOMO) and low listings – both of which have pushed house prices even further beyond fundamental values.

But both these factors appear to be turning. New real estate listings for November reached a multi-year high (figure 4) – and while the stock of listings is still historically low, further growth in new listings would change that, especially as more housing supply comes online. The aforementioned CCCFA and LVR changes also seem to have tightened credit availability to the extent that even FOMO won't be enough to keep the heat from leaving the housing market. Add in sharply higher mortgage rates over the past few months for good measure, and the ingredients for imminent further slowing in house price inflation are there.

Figure 4. New real estate listings



Source: RealEstate.co.nz, Macrobond, ANZ Research

House prices likely to fall in 2022

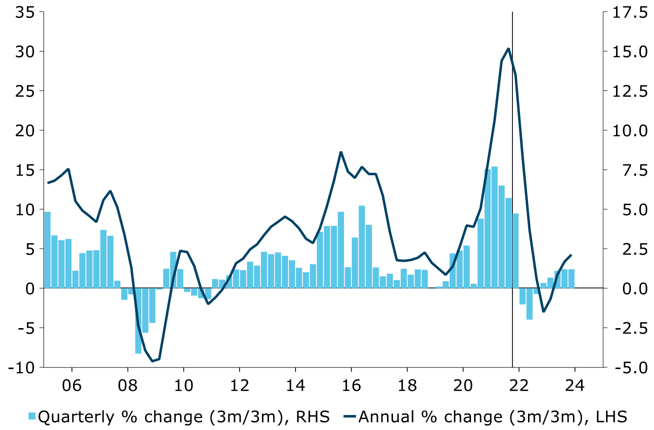
It's become increasingly clear that the odds are stacked against further strong house price rises. Consequently, we've revised our house price outlook down a touch, and our baseline expectation is that we see a moderate decline in house prices over 2022, of around 4% compared with November 2021 levels.

As discussed above, there are many factors pointing more aggressively downwards for house prices, including higher mortgage rates, tighter lending conditions, tax policy changes, affordability constraints and robust supply growth. But household incomes, while being eroded by high CPI inflation, are secure due to extremely strong labour demand, amid the tightest labour market on record. Unless the wheels fall off the economy due to some unforeseen shock, we're unlikely to see a sudden and deep decline in house prices. So long as people keep their jobs, the pay cheques will keep rolling in, and mortgage repayments will keep happening.

Formally, our forecast is for annual house price inflation to fall to a low of −3% y/y (3m/3m) in 2022 Q4, down from our previous expectation that prices would slow to a crawl of 1.0% y/y (3m/3m) in the same period. On a quarterly basis we expect that prices will resume growing from the second half of 2022, albeit at a much more sedate pace than we've seen over the past 18 months (figure 5).

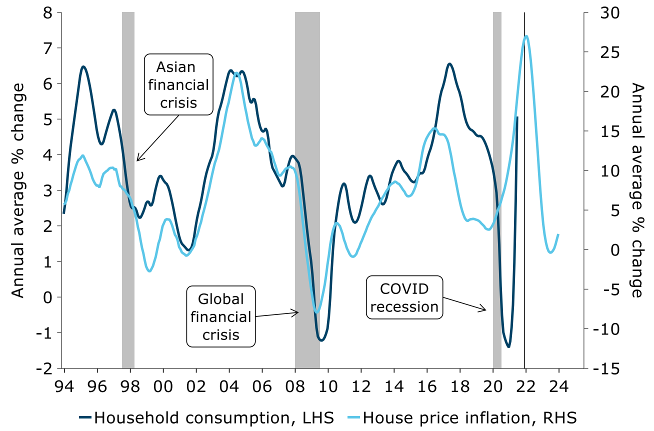
So how would a period of falling house prices impact the New Zealand economy? Household consumption makes up the bulk of our national expenditure – and it has followed house prices pretty closely over the past few decades (figure 6). Each time we've seen a significant drop in house prices, it's been associated with either a sizeable slowing or outright fall in household consumption. But, each of those episodes has also coincided with an exogenous global shock – the Asian Financial Crisis in 1997, and Global Financial Crisis in 2008. What we haven't seen before (at a national level at least) is a period of gently falling house prices without a simultaneous economic crisis or technical recession.

Figure 5. House price inflation forecast



Source: REINZ, Macrobond, ANZ Research

Figure 6. Household consumption and house prices



Source: Stats NZ, REINZ, Macrobond, ANZ Research

But the COVID recession has been a strange one. In the same year that we saw household consumption fall 10.5% in a single quarter in Q2 2020, house price inflation surged. And we're not convinced that a slowing housing market in 2022 is predestined to cause a collapse in household consumption (at least in the absence of some other large income shock). Our lower house price outlook can clearly be attributed to regulatory tightening, declining credit availability and rising interest rates, rather than a severe external shock that could significantly impact household demand.

Sure, some households may feel less wealthy if house prices start to fall (and borrowing costs rise). But given the strength in the labour market, household consumption may well weather a drop in house prices better than in previous cycles. Consumers remain pessimistic in our confidence survey, but at the same time, they've been spending up a storm nonetheless, with total card spending up over 9% m/m in both November and October – rapidly bouncing back from lockdown. In fact, some moderation in household spending is needed, since consumers have been spending beyond their means in recent quarters.

A final point to note is that the 4% drop in house prices that we are predicting will only bring the level of house prices back to September 2021 levels – which were already way higher than before the pandemic. Re-winding the clock a few months for house prices may not be ideal for people who have purchased a property very recently. But those people are few in number relative to the vast bulk of existing property owners whose property values would still be miles above where they were just a few years ago.

To wrap up, the slowdown has taken its time arriving, in terms of pricing defying gravity far longer than weakening house sales growth would normally imply. But it's now looking like the housing market is likely to soften a little more than we previously expected – and we're now forecasting that house price inflation will drop to a low of -3.0% y/y (3m/3m) over mid-2022. But we're not changing our forecasts for GDP or the OCR. Overall demand remains strong and the labour market is tight, and that should prevent a cooler housing market from severely denting economic momentum.

The causality behind the historical correlation between the broader economy and the housing market runs both ways, and certainly not exclusively. Given very high household debt levels we can't rule out seeing consumption fall significantly, or that house prices could fall by more than we are forecasting. But our central view is that so long as the tight labour market continues to sustain economic momentum, a fall in house prices won't bring an end to this economic expansion as long as nothing comes out of left field.

To be fair, left field is a pretty crowded place at the moment, as the US Federal Reserve finally faces up to inflation, China finally faces up to problems in its real estate sector, and the world nervously eyes up the implications of Omicron. With house prices this far out of whack compared to incomes, we need a good solid run of decent income growth and balance sheet consolidation to reduce the risks of a nasty hangover from what's been a truly spectacular boom. Cross fingers.

Housing market indicators for November 2021 (based on REINZ data seasonally adjusted by ANZ Research)

	Median house price			House price index		# of monthly sales	Monthly % change	Average days to sell
	Level	Annual % change	3-mth % change	Annual % change	3-mth % change			
Northland	$747,607	26.4	2.5	31.0	9.3	166	+3%	39
Auckland	$1,265,638	26.0	2.9	25.6	5.1	2,603	+1%	32
Waikato	$831,338	27.4	6.1	33.2	6.6	654	+3%	30
Bay of Plenty	$885,214	20.2	4.0	29.1	6.2	398	-8%	36
Gisborne	$672,587	28.6	5.5	28.8	5.2	48	-15%	37
Hawke's Bay	$804,671	25.6	9.8	28.8	5.2	223	0%	29
Manawatu-Whanganui	$624,895	25.1	4.3	24.9	4.0	346	+4%	33
Taranaki	$609,075	26.0	2.3	27.9	4.5	170	+2%	30
Wellington	$938,612	22.0	4.4	21.8	1.6	721	+5%	33
Tasman, Nelson & Marlborough	$763,268	14.9	3.6			212	+3%	30
Canterbury	$677,097	31.2	9.3	38.2	10.2	1,019	-1%	30
Otago	$709,152	16.4	4.3	20.9	5.1	360	+6%	33
West Coast	$359,337	42.3	10.1	25.0	5.7	36	-4%	36
Southland	$422,990	9.9	3.5	23.1	5.5	176	+29%	34
New Zealand	**$900,431**	**23.7**	**2.8**	**27.1**	**5.2**	**7,095**	**+1%**	**32**

Mortgage borrowing strategy

This is not personal advice nor financial advice about any product or service. The opinions and research contained in this document are provided for information only, are intended to be general in nature and do not take into account your financial situation or goals. Please refer to the Important Notice.

Summary

Fixed mortgage rates have continued to rise, albeit at a more moderate pace than in prior months, with most rates up around 0.2%pts. The average floating rate is also up by a similar amount, broadly matching the 0.25% increase in the OCR delivered by the Reserve Bank. Fixed mortgage rates have now risen by between 1.5%pts and 2%pts since hitting all-time lows in May or June. While that will have come as a shock to many borrowers, we think upcoming rises are likely to be more moderate. That's because 2 to 5-year wholesale interest rates have already moved sharply higher in anticipation of a higher OCR, and the onus is now on the RBNZ to deliver. As for the choice of tenor for those looking to fix, on balance we still prefer the 1-year. Mortgage rates will likely be higher in a year's time, but they may not rise quickly enough to be worthwhile paying the hefty step-up to fix for 2 years or more.

Our view

Mortgage rates continue to rise, with increases seen for all terms including floating since last month. None of this will be welcome news to borrowers, but if there is any good news to be had, it is that the worst is likely to be behind us. We say that because when we look at the level and term structure of the wholesale "swap" yield curve out to 2 to 5 years, markets are clearly *already* anticipating a much higher OCR in the future.

Moves to date have all been about the market shifting from a view that the OCR might go higher to a firm view that the RBNZ will hike six times in 2022. But now that this is priced in, the onus is on the RBNZ to deliver on those expectations, which now actually exceed our own forecasts. To illustrate, we note that markets are expecting (or pricing in) an OCR of around 2¼% by the end of next year. Yet we only expect it to get to 2%. In theory, that suggests wholesale rates have scope to correct a little lower.

That said, we wouldn't bank on a downward correction in wholesale rates, let alone mortgage rates. Markets have a tendency to price in more hikes than what actually gets delivered during the tightening cycle, so if we were to see a pull-back, it might be shallow. It would also likely only be temporary, because as the OCR goes higher, a 2-year-ahead view of where it will average in the future will also mechanically rise. Bring it all together and the picture likely looks like this: the worst of the rises are probably behind us, and upcoming increases will likely be more limited, if we see them at all. We say that because a lot needs to go right for the OCR to reach 2%. If, for example, we saw a global asset price slump, or New Zealand house prices started falling significantly, or COVID suddenly becomes a big issue again (the new Omicron variant has markets in Europe worried about fresh restrictions), OCR hikes might get derailed.

As has been the case for a couple of months now, with higher mortgage rates already here, there isn't really anyway to hide if your fixed term is ending. We still think the broad direction of travel will be upward, and that makes the higher floating and 6-month rates less appealing.

But what about longer terms? Is it worth paying up for a longer period of certainty? If certainty is what is strongly desired, 2 years (or longer) may be appealing. But unless we see further sharp rises in mortgage rates – which we don't expect – that certainty could be costly. So if it's just cost that matters, our preference is for the 1 year, which remains the cheapest rate.

Breakeven analysis supports this. Consider, for example, the choice between 3.66% for 1 year or 4.30% for 2 years. Over a 2-year horizon, back-to-back 1-year fixes will end up being cheaper so long as the 1-year rate is below 4.94% next year. That's a large (1.28%pt) increase, but that is what you'd have to expect in order to pay up for 2 years now, if cost were your only consideration. It's more than we expect, and remember, we've already seen some large increases, and wholesale interest rate markets are already factoring in upcoming Reserve Bank OCR rises.

Figure 1. Carded special mortgage rates^

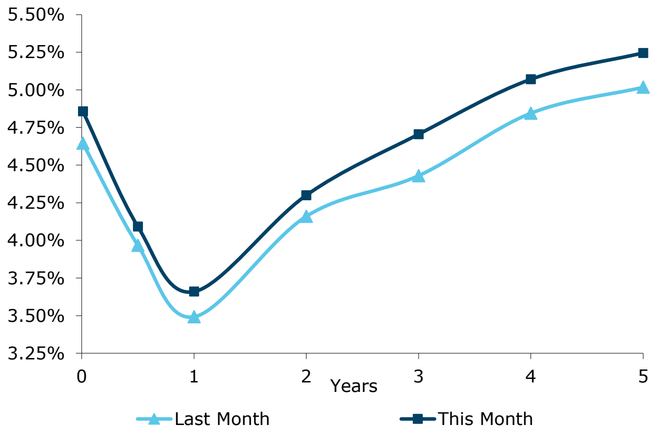


Table 1. Special Mortgage Rates

		Breakevens for 20%+ equity borrowers			
Term	Current	in 6mths	in 1yr	in 18mths	in 2 yrs
Floating	4.86%				
6 months	4.09%	3.23%	5.00%	4.89%	5.31%
1 year	3.66%	4.11%	4.94%	5.10%	5.52%
2 years	4.30%	4.61%	5.23%	5.47%	5.84%
3 years	4.71%	5.02%	5.54%	5.68%	5.88%
4 years	5.07%	5.29%	5.64%		
5 years	5.25%	#Average of "big four" banks			

^ *Average of carded rates from ANZ, ASB, BNZ and Westpac.*

Source: interest.co.nz, ANZ Research

Key forecasts

Weekly mortgage repayments table (based on 25-year term)

Mortgage Size ($000)	Mortgage Rate (%)													
	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75
200	207	213	219	225	231	237	243	250	256	263	270	276	283	290
250	259	266	273	281	289	296	304	312	320	329	337	345	354	363
300	310	319	328	337	346	356	365	375	385	394	404	415	425	435
350	362	372	383	393	404	415	426	437	449	460	472	484	496	508
400	414	426	437	450	462	474	487	500	513	526	539	553	566	580
450	466	479	492	506	520	534	548	562	577	592	607	622	637	653
500	517	532	547	562	577	593	609	625	641	657	674	691	708	725
550	569	585	601	618	635	652	669	687	705	723	741	760	779	798
600	621	638	656	674	693	711	730	750	769	789	809	829	850	870
650	673	692	711	730	750	771	791	812	833	854	876	898	920	943
700	724	745	766	787	808	830	852	874	897	920	944	967	991	1,015
750	776	798	820	843	866	889	913	937	961	986	1,011	1,036	1,062	1,088
800	828	851	875	899	924	948	974	999	1,025	1,052	1,078	1,105	1,133	1,160
850	879	904	930	955	981	1,008	1,035	1,062	1,089	1,117	1,146	1,174	1,204	1,233
900	931	958	984	1,011	1,039	1,067	1,095	1,124	1,154	1,183	1,213	1,244	1,274	1,306
950	983	1,011	1,039	1,068	1,097	1,126	1,156	1,187	1,218	1,249	1,281	1,313	1,345	1,378
1000	1,035	1,064	1,094	1,124	1,154	1,186	1,217	1,249	1,282	1,315	1,348	1,382	1,416	1,451

Mortgage rate projections (historic rates are special rates; projections based on ANZ's wholesale rate forecasts)

	Actual			Projections						
Interest rates	Mar-21	Jun-21	Sep-21	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23
Floating Mortgage Rate	4.5	4.5	4.5	4.9	5.2	5.7	6.2	6.2	6.2	6.2
1-Yr Fixed Mortgage Rate	2.3	2.2	2.7	3.7	3.8	3.9	4.0	4.0	4.0	4.0
2-Yr Fixed Mortgage Rate	2.6	2.6	3.1	4.3	4.1	4.0	4.0	4.0	4.0	4.0
5-Yr Fixed Mortgage Rate	3.0	3.6	4.0	5.3	5.0	4.8	4.8	4.9	4.9	4.9

Source: RBNZ, ANZ Research

Economic forecasts

	Actual			Forecasts						
Economic indicators	Dec-20	Mar-21	Jun-21	Sep-21	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23
GDP (Annual % Chg)	0.1	2.9	17.4	-1.6	2.4	3.1	0.8	6.1	3.7	2.7
CPI Inflation (Annual % Chg)	1.4	1.5	3.3	4.9(a)	5.5	5.8	5.1	3.9	3.2	2.5
Unemployment Rate (%)	4.8	4.6	4.0	3.4(a)	3.5	3.4	3.2	3.1	3.0	3.0
House Prices (Quarter % Chg)	7.5	7.7	6.6	5.7(a)	4.7	-1.0	-2.0	-0.4	0.3	0.7
House Prices (Annual % Chg)	15.6	21.3	28.8	30.4(a)	27.0	16.7	7.4	1.2	-3.0	-1.4

Interest rates	Mar-21	Jun-21	Sep-21	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23
Official Cash Rate	0.25	0.25	0.25	0.75	1.00	1.50	2.00	2.00	2.00	2.00
90-Day Bank Bill Rate	0.35	0.35	0.65	1.02	1.52	2.02	2.10	2.10	2.10	2.10
10-Year Bond	1.81	1.77	2.09	2.50	2.60	2.70	2.70	2.80	2.80	2.80

Source: ANZ Research, Statistics NZ, RBNZ, REINZ

Contact us

Meet the team

We welcome your questions and feedback. Click here for more information about our team.

Sharon Zollner
Chief Economist

Follow Sharon on Twitter
@sharon_zollner

Telephone: +64 27 664 3554
Email: sharon.zollner@anz.com

General enquiries:
research@anz.com

Follow ANZ Research
@ANZ_Research (global)

David Croy
Senior Strategist

Market developments, interest rates, FX, unconventional monetary policy, liaison with market participants.

Telephone: +64 4 576 1022
Email: david.croy@anz.com

Susan Kilsby
Agricultural Economist

Primary industry developments and outlook, structural change and regulation, liaison with industry.

Telephone: +64 21 633 469
Email: susan.kilsby@anz.com

Miles Workman
Senior Economist

Macroeconomic forecast co-ordinator, fiscal policy, economic risk assessment and credit developments.

Telephone: +64 21 661 792
Email: miles.workman@anz.com

Finn Robinson
Economist

Macroeconomic forecasting, economic developments, labour market dynamics, inflation and monetary policy.

Telephone: +64 21 629 553
Email: finn.robinson@anz.com

Kyle Uerata
Economic Statistician

Economic statistics, ANZ proprietary data (including ANZ Business Outlook), data capability and infrastructure.

Telephone: +64 21 633 894
Email: kyle.uerata@anz.com

Natalie Denne
PA / Desktop Publisher

Business management, general enquiries, mailing lists, publications, chief economist's diary.

Telephone: +64 21 253 6808
Email: natalie.denne@anz.com

Important notice

Last updated: 15 October 2021

This document is intended for ANZ's Institutional, Markets and Private Banking clients. It should not be forwarded, copied or distributed. The opinions and research contained in this document are (a) not personal advice nor financial advice about any product or service; (b) provided for information only; and (c) intended to be general in nature and does not take into account your financial situation or goals.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Cambodia. The information contained in this document is confidential and is provided solely for your use upon your request. This does not constitute or form part of an offer or solicitation of any offer to engage services, nor should it or any part of it form the basis of, or be relied in any connection with, any contract or commitment whatsoever. ANZ does not have a licence to undertake banking operations or securities business or similar business, in Cambodia. By requesting financial services from ANZ, you agree, represent and warrant that you are engaging our services wholly outside of Cambodia and subject to the laws of the contract governing the terms of our engagement.

Chile. You understand and agree that ANZ Banking Group Limited is not regulated by Chilean Authorities and that the provision of ANZ Research is not subject to any Chilean supervision and is not guaranteed by any regulatory or governmental agency in Chile.

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.

Important notice

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 material is for information purposes only and is not financial advice about any product or service. We recommend seeking financial advice about your financial situation and goals before acquiring or disposing of (or not acquiring or disposing of) a financial product.
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. In respect of any matters arising from, or in connection with, the distribution of this publication in Singapore, please speak to your usual ANZ contact in 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.

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