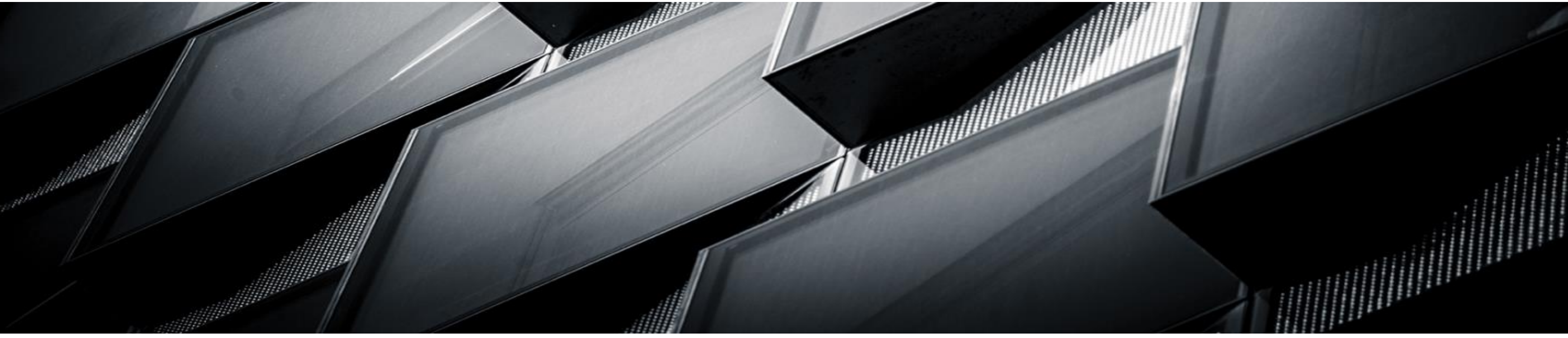
ANZ Research

September 2019

New Zealand Property Focus

Back to basics



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

INSIDE

CONTRIBUTORS

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

Michael Callaghan
Economist
Telephone: +64 4 382 1975
E-mail:
Michael.Callaghan@anz.com

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

ISSN 2624-0629

Publication date: 19 September 2019

Summary

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

Feature Article: Back to basics

With the Government having announced a KiwiBuild 'reset', we go back to basics; thinking about demand and supply in the housing market. The New Zealand housing market is prone to boom and bust cycles, and subject to large swings in demand, often coming from swings in migration. But constrained housing supply means that increases in housing demand tends to lead to higher house prices, while housing construction reacts more slowly. A focus on easing supply constraints is what is really needed, so we review what is being done on that front. The KiwiBuild reset this month offered some goodies for first home buyers, but the newly announced 'reset' policies are likely to just add to housing demand. That said, elements of the KiwiBuild programme may still be able to add some value by addressing supply constraints. Other policies are also in train in the background – the Government is building a record number of state homes and the National Policy Statement on Urban Development has the opportunity to transform local land-use planning and infrastructure. But this is all coming against a backdrop of downside risks to the construction sector outlook.

Property gauges

The housing market has tentatively stabilised. Nationwide, house prices were up 2.1% y/y in August, up from 1.7% y/y in July. Auckland house price inflation is still negative in annual terms, but a little less than previously, contracting 2.6% y/y. Auckland house prices continued to underperform the broader market, rising less than the ex-Auckland index, which ticked up to 6.8% y/y. But housing market activity still remains soft. Creating a bit more of a mixed picture, house sales more than reversed last month's strength, falling 7.5% m/m. This saw annual sales growth at -0.1% y/y. The notable boost to house prices in August may reflect support from lower mortgage rates over the past year, but the reversal in sales activity supports the view that the market is unlikely to take off substantially from here. While we expect the market to remain subdued overall, there is a risk that recent drops in mortgage rates reignite the housing market.

Economic overview

The New Zealand economy has lost a great deal of momentum, with annual growth falling to 2.1% in the second quarter, and leading indicators are suggesting this trend will continue in the second half of the year. Things just keep going in the wrong direction for the Reserve Bank, with inflation expectations and pricing intentions now starting to slide. Accordingly, we believe the RBNZ will conclude it cannot afford to be patient. We are now forecasting cuts in the Official Cash Rate not only in November, but also February and May, taking the OCR to just 0.25%. That said, the growth fundamentals for the New Zealand economy remain in place – we expect annual GDP growth to have fallen to 1.9% by the start of next year before gradually picking up as easier monetary conditions kick in. Meanwhile, growth in New Zealand's trading partners has deteriorated further, and near-term indicators suggest that the slowdown has further to run. Global central banks have stepped up their monetary policy easing efforts, but time will tell whether this will be enough to avert a further sharp slowdown.

Feature Article: Back to basics

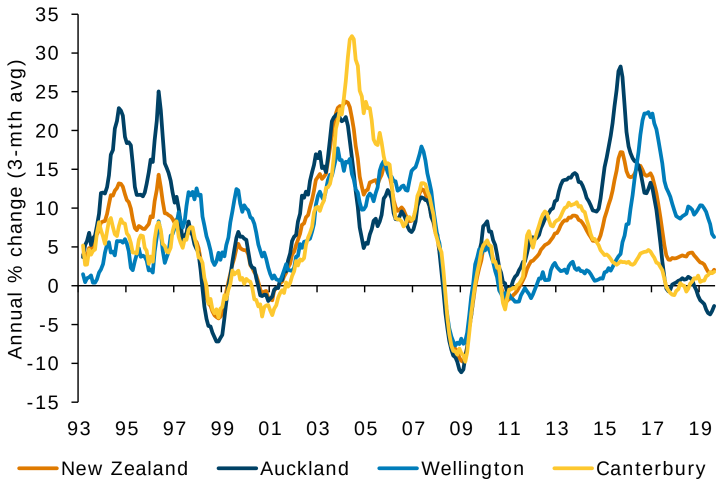
Summary

With the Government having announced a KiwiBuild 'reset', we go back to basics; thinking about demand and supply in the housing market. The New Zealand housing market is prone to boom and bust cycles, and subject to large swings in demand, often coming from swings in migration. But constrained housing supply means that increases in housing demand tends to lead to higher house prices, while housing construction reacts more slowly. A focus on easing supply constraints is what is really needed, so we review what is being done on that front. The KiwiBuild reset this month offered some goodies for first home buyers, but the newly announced 'reset' policies are likely to just add to housing demand. That said, elements of the KiwiBuild programme may still be able to add some value by addressing supply constraints. Other policies are also in train in the background – the Government is building a record number of state homes and the National Policy Statement on Urban Development has the opportunity to transform local land-use planning and infrastructure. But this is all coming against a backdrop of downside risks to the construction sector outlook.

Back to basics

This month, we go back at the basics – demand and supply – to explain why the New Zealand housing market sees so many boom and bust house price cycles (figure 1).

Figure 1. Regional house price inflation



Source: Stats NZ, ANZ Research

It's evident in the chart above that the booms have tended to be significantly larger than the busts. Affordability measures have worsened over the past decade (figures 2 and 3), consistent with rapid house price inflation and modest wage growth – although low interest rates have kept serviceability reasonable. Lately, more robust income growth and a moderating Auckland housing market have seen affordability improve there. But the rest of the country has higher house prices to income than ever before – and has popped out of the 3-5 times income range generally considered "affordable". Housing affordability has become a national issue.

Figure 2. Regional house prices to income

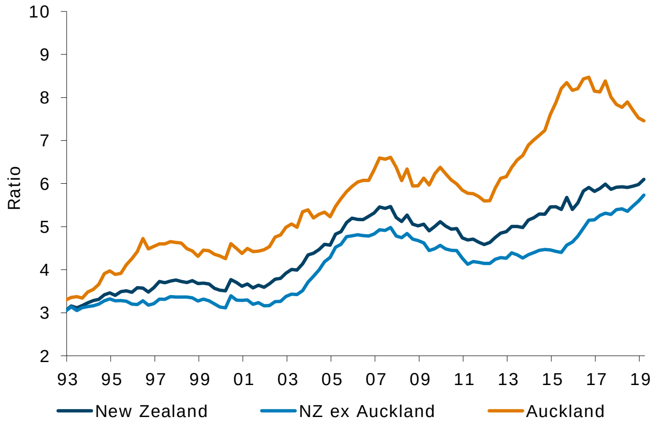
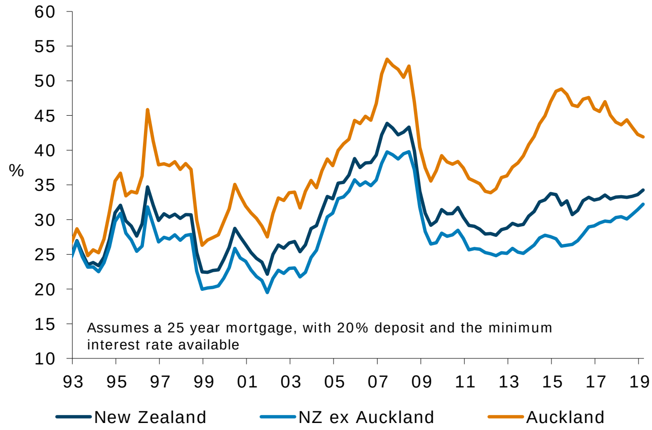


Figure 3. Regional mortgage payments to income



Source: Stats NZ, REINZ, ANZ Research

Feature Article: Back to basics

So what should the policy response be?

With the KiwiBuild 'reset' announced this month, the Government has officially abandoned its target to build 100,000 affordable homes, but announced a bunch of other policies to entice more first-home buyers into the housing market.

But let's go back to ECON 101. In the end, in the housing market – like any market – price developments come back to supply and demand (figures 4 and 5).

The responsiveness of housing supply (ie the extent to which new housing construction responds to changes in demand) depends on policies such as land use and planning regulations, as well as factors such as the availability of credit for developers. If housing supply is less responsive to changes in price (ie the steeper orange line rather than the light blue line), then increases in housing demand (eg due to stronger migration or lower mortgage rates) will tend to lead to a bigger part of the impact showing up in higher house prices, and less of it in stronger housing construction, once the dust settles and the market finds its new equilibrium.

Figure 4. Supply and demand in equilibrium

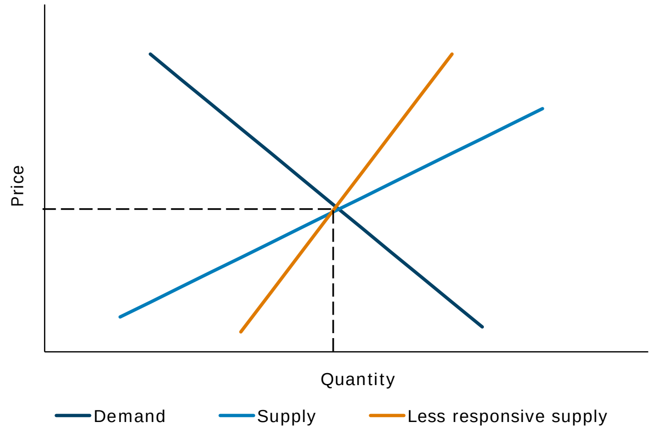
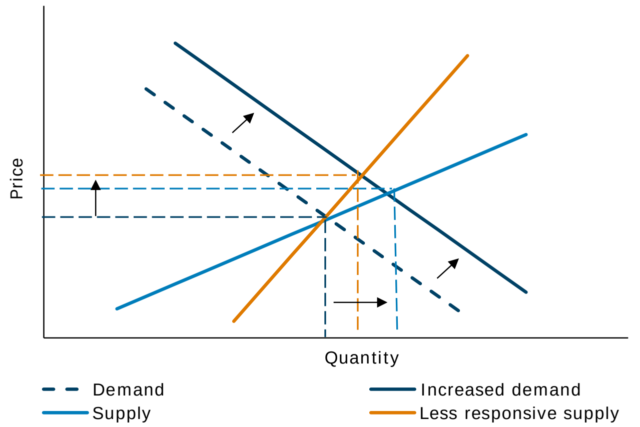


Figure 5. Response to increase in demand



Source: ANZ Research

The empirical evidence for New Zealand suggests that the responsiveness of housing supply to changes in demand is around average compared to other economies, but is only around half as effective as in a number of OECD countries (Productivity Commission, 2012). With a long-run supply elasticity that is less than 1, an increase in the demand for houses in New Zealand is estimated to lead to a proportionately larger increase in house prices than in new house construction.

On the demand side, there are a few factors they may increase housing demand in New Zealand. Two of the most important ones over history have been population growth (particularly from migration) and mortgage rates (figures 6 and 7). We are forecasting the Official Cash Rate to fall further, which, all else equal, will put downward pressure on mortgage rates, and we see net migration remaining relatively strong for some time yet.

Figure 6. Standard mortgage rates

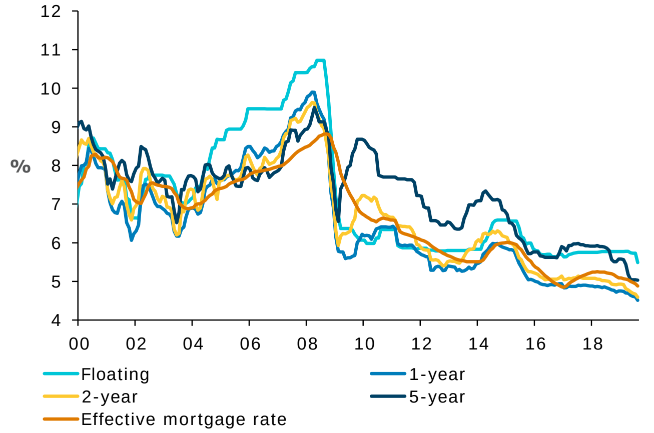
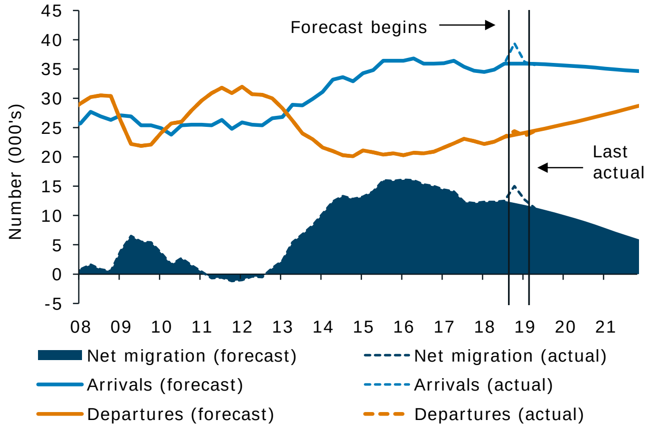


Figure 7. Migration



Source: Stats NZ, RBNZ, ANZ Research

There are several things that have been done or could be done to alleviate pressure from the demand side – limiting migration, banning foreign ownership, adjusting the taxation system to reduce housing's advantages, or regulatory constraints (RBNZ investor loan-to-value restrictions come to mind). But in addition to demand-side measures, a focus on making supply more responsive is an important part of the solution.

Rapid house price inflation can be exacerbated by expectations of future house price inflation, as buyers and speculators anticipate that supply will be unable to keep pace with underlying demand. Speculators, in particular, would be much less active in the market were housing supply expected to be highly responsive to respond to fluctuates in demand, because responsive supply limits price surges.

When housing supply is less responsive, we get an undesirable mix of fewer homes built and stronger house price inflation (figure 5 above). But while such an outcome might be undesirable in a macroeconomic sense, there are of course winners and losers with any price change; existing homeowners have very little to gain from high rises being permitted to be built next door. It's a very political question and always will be, with the exact same person being entirely capable of being a rampant liberal regarding their own property rights and a raging socialist regarding their neighbour's.

On the supply side, it's worth noting that we are in the midst of a construction boom, although growth in the industry has slowed in recent years (figures 8 and 9). But it's still not keeping up: increases in housing demand have tended to lead to higher house prices.

Figure 8. Annual consents by region

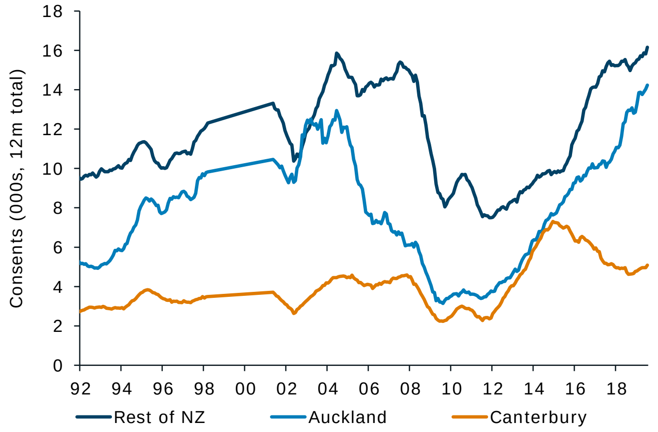
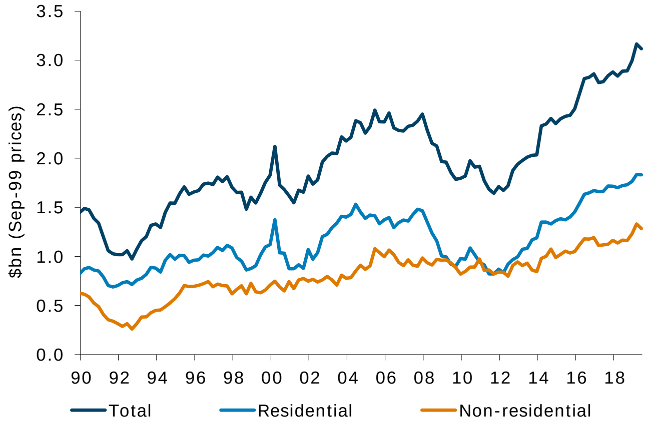


Figure 9. Construction activity



Source: Stats NZ, ANZ Research

One factor weighing on housing construction in recent years has been the slowdown in Christchurch, as the rebuild from the 2011 earthquake winds down. In other regions, residential construction growth has still been solid, with a greater proportion of multi-unit dwellings (townhouses and apartments) in recent years. But the sector has been running at full capacity and has experienced significant cost inflation as a result. How much longer this will remain the case isn't clear – some data suggests that profitability concerns are starting to take over from capacity constraints as the sector's main problem. But what is clear, is that there is fairly limited ability for the sector to push levels of construction higher from here.

That said, there's an opportunity for new technologies, like prefabrication, to push out the supply curve in New Zealand – meaning a greater quantity of housing is able to be produced at a lower cost. But it's fair to say overnight change is not on the horizon.

With the KiwiBuild reset this month, the Government has officially abandoned its target to build 100,000 affordable homes. Home building under the scheme had always been expected to ramp up slowly (1000 homes within the first year), but the number of houses actually built disappointed even those modest estimates.

We had already expected the scheme would have a limited impact in terms of net new houses being built – if the construction industry remained capacity constrained, a significant proportion of any new building would tend to crowd out what the private sector would otherwise have built. The Treasury and RBNZ's own forecasts heavily discounted the likely net contribution of the KiwiBuild scheme due to an assumed crowding out of private sector building. So in that regard, it would be wildly incorrect to conclude that ~100,000 fewer homes are now going to be built.

Turning to the other initiatives announced within the reset, there were a host of policies that will boost demand, particularly from first home buyers, but there appears lack of urgency around supply – at least within the new initiatives announced:

- **Home ownership scheme.** A progressive home ownership scheme will be developed and introduced next year. This will reduce the deposit needed to get a mortgage, and repayments. $400 million from the KiwiBuild appropriation has been set aside for the progressive home ownership scheme, which could include rent-to-buy and shared equity plans for between 2500 and 4000 families.
- **Changes to the First Home Grant and First Home Loan.** This will reduce the current disadvantage for multiple borrowers and ensure that households who have been saving consistently through KiwiSaver for at least three years, and who can service the required mortgage, can put together the minimum deposit for a KiwiBuild home.
- **Reducing holding periods for KiwiBuild homes.** Buyers of studio and one-bedroom homes will only need to commit to owning them for one year, instead of the original three years.
- **Supporting home ownership.** The deposit required for a Government-backed mortgage will be reduced to 5%, and family and friends can use their $10,000 First Home Grant and their KiwiSavers to buy their first home together.
- **Opening up the eligibility criteria for buying a KiwiBuild home.** The asset test for KiwiBuild buyers who have previously owned a home ('second chancers') will be removed.
- **Increasing price caps for Wellington and for larger family homes.** KiwiBuild price caps for the Wellington region have been increased. In addition, up to 10% of KiwiBuild homes in each development will be allowed to breach the price cap if they have four or more bedrooms.

Several of these policies such as subsidies for progressive home ownership and reduced deposit requirements are likely to benefit first home buyers, and on an individual basis, increase the likelihood of them getting into their first home. But in aggregate the policies will largely just add to demand in the housing market – and in a supply-constrained market, add to land and house price pressures. The Government currently spends more than $3 billion per year on housing assistance and the Treasury suggests that, without supply reforms, building programmes will be expensive, inflationary, and slow to deliver.

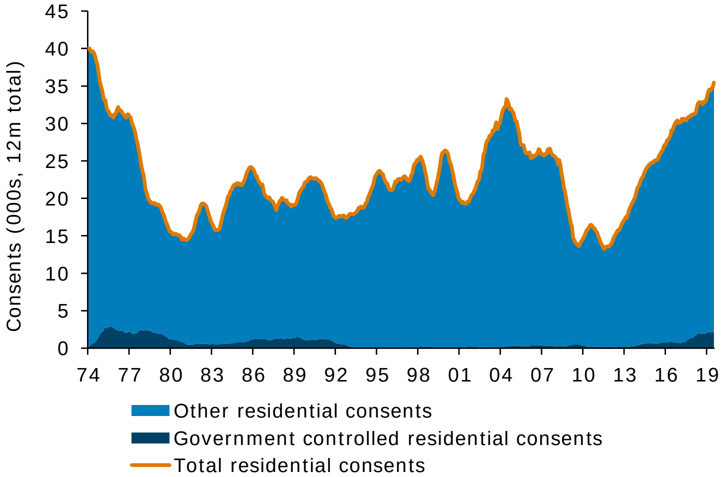
There are other policy changes that the Government has put through in recent years:

- **Foreign ownership banning.** This policy has likely limited demand, but may also limit the quantity of houses being supplied.
- **Stopping state house sales.** This policy doesn't change the net supply of houses in the market.
- **Reforming tenancy rules.** While improving the housing stock and tenant rights, this has added additional costs for landlords and doesn't add to housing supply.
- **Building state and public houses.** The building of state houses has ramped up substantially in the past three years (figure 10). However, it pales in comparison to the activity in the private sector, and anecdotally may have crowded out other construction activity to some degree.
- **Starting off reform of the Resource Management Act (RMA).** This is crucial, but the reform process is only starting.

The Treasury's advice to the Minister of Housing shows that Treasury officials are well aware of the importance of focusing on supply. The Treasury note that housing is expensive because councils heavily restrict land for housing in their district plans and do not plan for sufficient growth in bulk infrastructure. These regulations are adding a differential between the cost of producing a house when the system is responsive, and the price of existing houses in Auckland. The regulatory burden has been assessed at around $530,000 in Auckland, and around $300,000 in Wellington and Queenstown.[1]

[1] Lees, K. (2017) 'Quantifying the impact of land use regulation: Evidence from New Zealand'. Sense Partners. Report for Superu, Ministerial Social Sector Research Fund. June 2017.

Figure 10. Private sector and public housing construction



Source: Stats NZ, ANZ Research

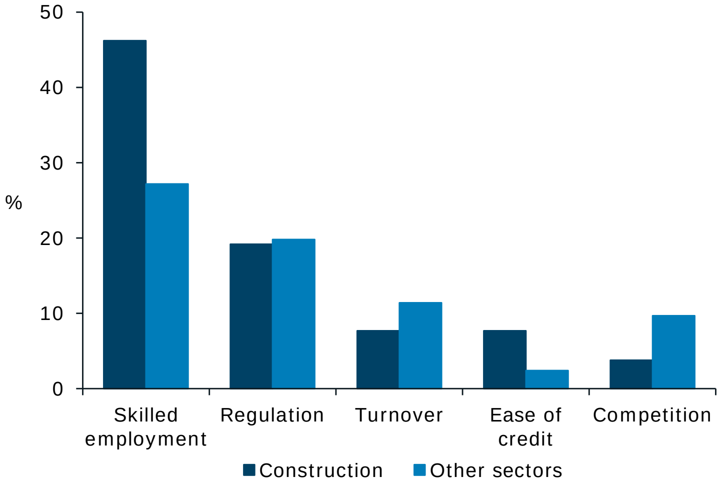
The rules that determine what can be built where are designed to create liveable cities, but do hamper the flexibility of housing supply to respond to demand pressures from population growth. In most New Zealand cities, the supply of greenfield (ie undeveloped) land is deliberately limited, and in-demand brownfield (ie previously developed) land has strong height, density, and other limits. As we discussed in our August Property Focus, increased housing density is definitely going to have to be a part of the solution to addressing housing affordability in New Zealand, and appreciating land prices have been a key driver of house price inflation in New Zealand over recent years.

In fact, the Government's own National Policy Statement on Urban Development (NPS), currently under consultation, does have a heavy focus on allowing building 'up and out'. The NPS will, for example, force councils to abandon restrictions on building height and housing density in city centres, and takes aim at minimum car-park requirements.

While the KiwiBuild reset has a number of new initiatives, the focus needs to be kept on housing supply. The RMA reform and work on addressing the incentives of councils in the construction process need to be front and centre. For example, the Productivity Commission has said that new funding tools would be required to help councils deal with rapid urban growth and incentivise infrastructure investment.

But regardless of how government policy shapes up, we see the outlook for house-building as very murky currently. On the one hand, we've had strong population growth and are still experiencing housing shortages. On the other, construction-sector respondents in our ANZ Business Outlook survey are reporting that they expect lower activity and profitability going forward, and will be cutting staff as a result. Talking to firms involved in residential development, it appears that capital constraints, bureaucratic costs, cash-flow difficulties, and difficulty achieving required pre-sales are putting the brakes on multi-unit development at least.

Figure 11. Top 5 problems facing businesses –June 2019



Source: ANZ Research

Feature Article: Back to basics

There have certainty been constraints in the construction sector over the past few years. Based on our ANZ Business Outlook survey, key issues have been:

- **Finding skilled workers**. This is a greater issue for construction firms than for other sectors.
- **Regulation**, similar to other sectors in the economy. The slow consenting process and lack of incentives for councils to open up land and provide appropriate infrastructure appears an issue here.
- **Ease of credit** (figure 12), particularly for property developers.

That said, going forward there is a risk that capacity constraints fade as demand and activity wanes. This may already be occurring, as construction firms have noted an intention to reduce headcount (figure 13).

Figure 12. Construction sector ease of credit

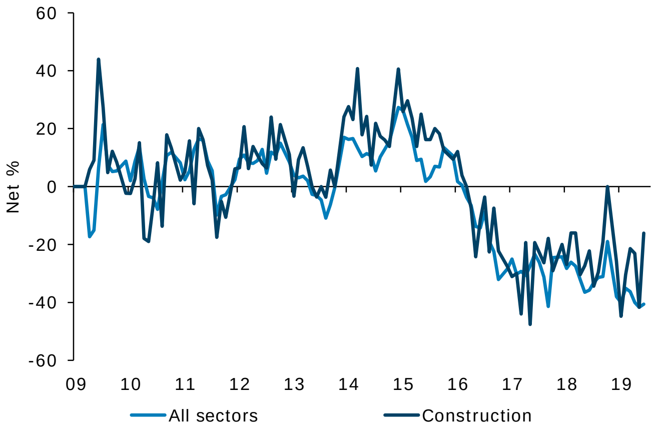
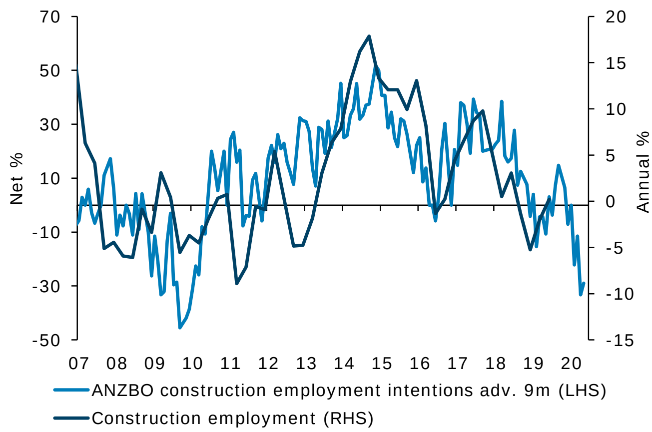


Figure 13. Construction intentions and employment



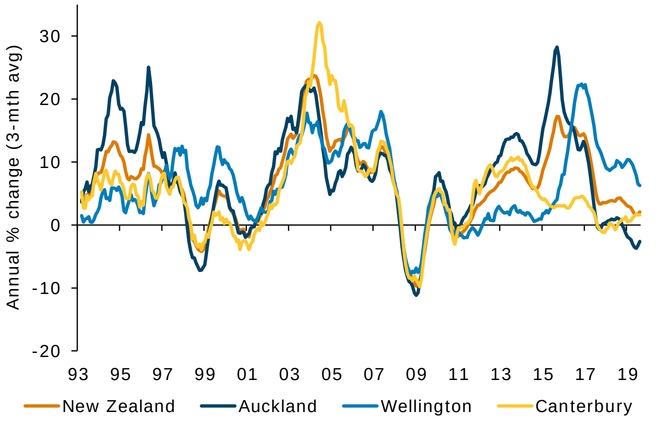
Source: Stats NZ, ANZ Research

Building consents are holding up but there are question marks around the usual working assumption that these are a reliable guide to the actual activity outlook. We're largely assuming that construction activity will remain at a high level, but there are risks on both sides of this forecast.

In its new form the KiwiBuild programme may still help to put a floor under the construction sector if the outlook does deteriorate, although it's unlikely to be large enough to fully offset a marked downturn. Further, the Government's books would have to bear the substantial risk of operating in that environment.

In short, there are no quick fixes. If there were, it's fair to say they'd be in place already.

Figure 1. Regional house price inflation

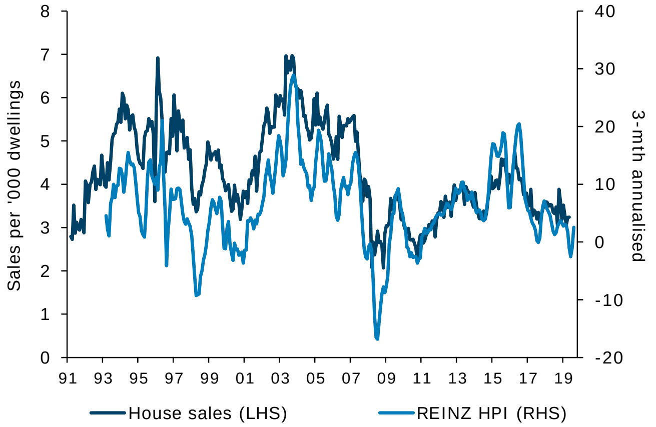


Source: ANZ Research, REINZ

Annual house price inflation is showing tentative signs of stabilising, up 2.1% y/y (3mma) in August, from 1.7% y/y in July. We had expected the softening in prices in early 2019 would find a floor and that tailwinds such as continued (but moderating) population growth and low interest rates would offset some of the headwinds weighing on the market. This appears to be the case for now and we expect house price inflation to tick up slightly to around 3-4% over the next year.

Regional divergence remains a key theme. Auckland house price inflation is still negative, but a little less than previous, contracting 2.6% y/y. Growth in Wellington prices slowed again, to 6.7% y/y, while prices in Canterbury were steady at 1.6% y/y.

Figure 2. REINZ house prices and sales

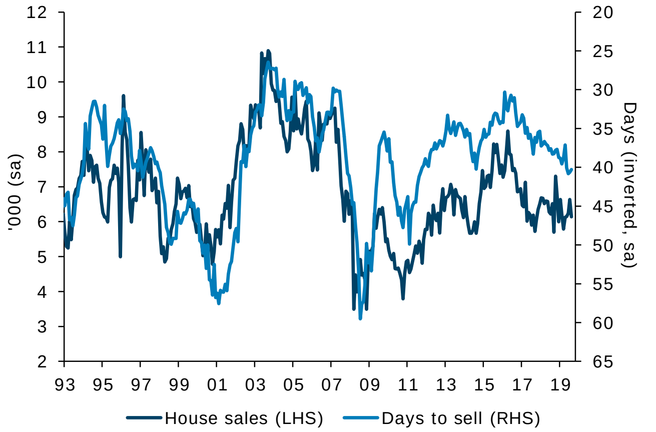


Source: ANZ Research, REINZ

Sales volumes and prices tend to be closely correlated, although at times tight dwelling supply can complicate the relationship.

Seasonally adjusted house sales fell 7.5% m/m in August, unwinding last months' 6.3% gain. Annual growth is up ever so slightly, 0.1% y/y, after seven months in the red. The activity data has remained soft and January's 12% lift – boosted by the RBNZ's relaxation of LVR restrictions – has now fully reversed. House sales remain at a low level, consistent will low house price inflation. Auckland house sales have ticked up on an annual basis for the first time since December (2.4%). But outside of Auckland, sales are falling 1.7% y/y.

Figure 3. Sales and median days to sell

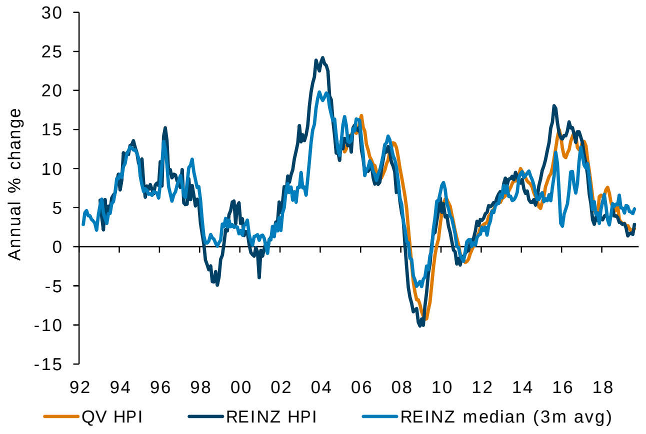


Source: ANZ Research, REINZ

How long it takes to sell a house is also an indicator of the strength of the market, encompassing both demand and supply-side considerations. Larger cities tend to see houses sell more quickly, but deviations in a region from its average provide an indicator of the heat in a market at any given time.

It has been taking longer to sell houses since early 2016, indicating continued loosening in the previously tight housing market. Days to sell nationwide are now at 40 days, a slight tick down in August, but the trend of taking longer to sell is firmly in place. Regional divergences are evident. The Auckland market in particular shows signs of slack where the days to sell measure is hovering around the mid-forties, up from the high twenties at the peak of the housing market.

Figure 4. REINZ and QV house prices

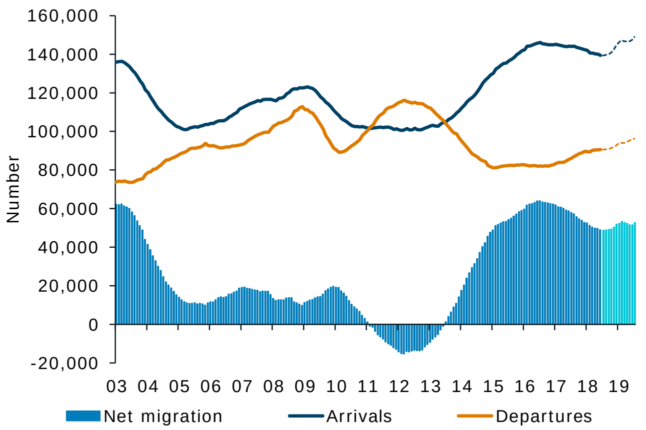


Source: ANZ Research, REINZ, QVNZ

There are three monthly measures of house prices in New Zealand: the median and house price index measures produced by REINZ, and the monthly QVNZ house price index. The latter tends to lag the other measures as it records sales later in the transaction process. Moreover, movements do not line up exactly, given differing methodologies (the REINZ house price index and QVNZ measures attempt to adjust for the quality of houses sold).

The REINZ HPI – our preferred measure – is sitting at 2.1% y/y (3mma) in August. The QVNZ measure has ticked up for the second consecutive month at 2.3% y/y. The REINZ median remained within recent ranges, with annual growth of 4.8%. Since the median does not control for composition, the higher growth rate may reflect a rising proportion of high-value sales.

Figure 5. Annual migration*



Source: Statistics NZ

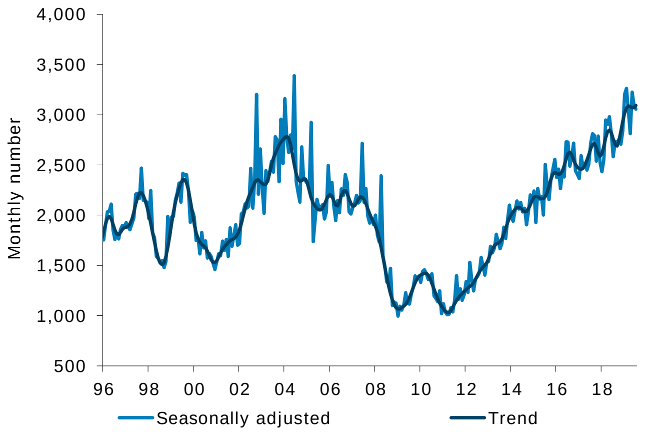
*Dotted lines show the last nine months of data, which we look through because they are subject to substantial revisions. The data prior to June 2014 is back-casted using Stats NZ's discontinued experimental data.

Migration flows to and from New Zealand are one of the major drivers of housing market cycles. The early-1970s, mid-1990s, mid-2000s and most recent house price booms have coincided with large net migration inflows.

Annual net migration reportedly lifted slightly to 52,700 in August, but Statistics NZ's data is subject to substantial revision. To avoid unnecessary noise in our economic outlook we're now forecasting net migration with a nine-month lag.

The older, more reliable data suggest the cycle was still easing towards the end of 2018. And we think this gradual easing trend has continued into 2019 and will continue beyond.

Figure 6. Residential building consents

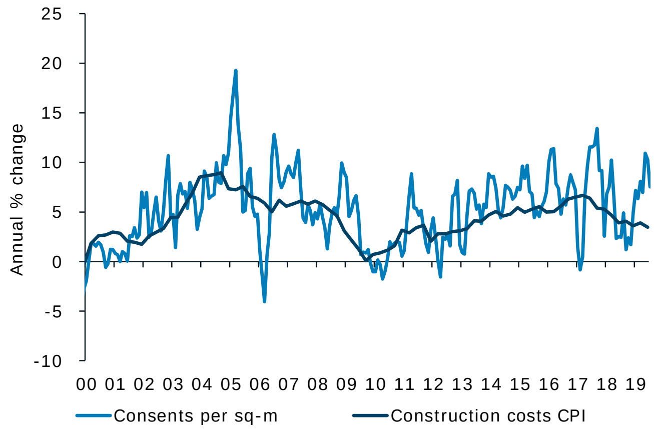


Source: ANZ Research, Statistics NZ

Residential building consents stabilised in August, after a strong upward trajectory. The data are volatile, particularly for multi-unit dwellings. Given construction firms' activity expectations have turned sour of late, we'll be watching this one closely. Annual consent issuance is still very strong, having breached 35,000 for the first time in August. Growth in Auckland consents continues to provide impetus, with annual consents up over the 14k mark, and still rising.

Overall, housing demand should be supportive of further construction activity. However, capacity constraints are rife and profit challenges are ongoing, which we expect will make it difficult for issuance to push higher.

Figure 7. Construction cost inflation

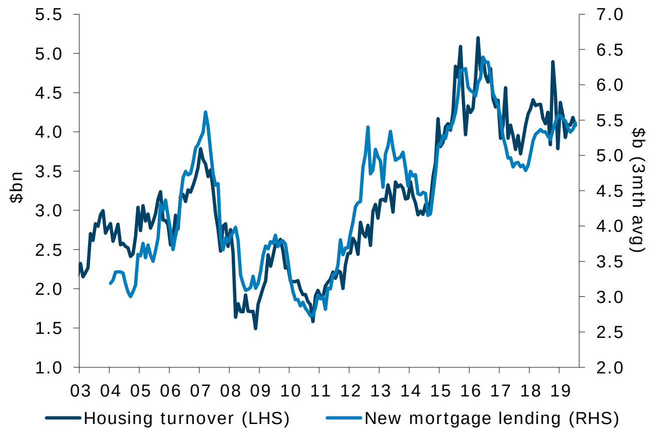


Source: ANZ Research, Statistics NZ

Construction cost inflation has softened since 2017 and we don't expect it to reach the dizzying heights (6.7% y/y) achieved over 2016-2017. Growth in the cost of consented work per square metre – a proxy – eased to 7.5 y/y (3mma) in August, following a period of strength over 2019. This compares with CPI construction cost inflation of 3.5% y/y in the June quarter.

Capacity pressures in the industry remain acute, which should continue to support price rises. But with construction growth slower than in recent years, and caution among firms, we don't expect construction cost inflation to surge higher from here.

Figure 8. New mortgage lending and housing turnover

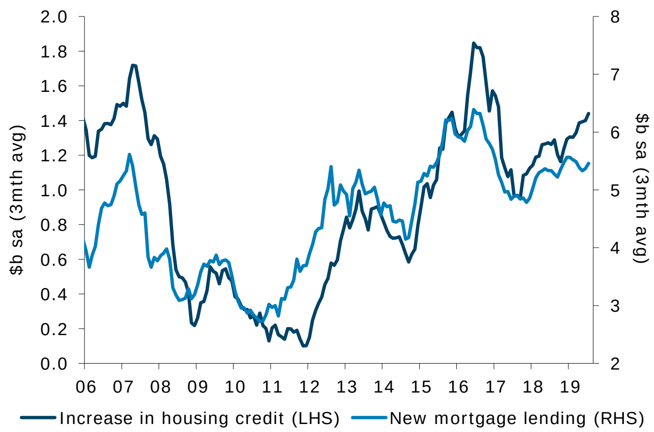


Source: ANZ Research, RBNZ

New residential mortgage lending figures are published by the RBNZ. These are gross (rather than net) flows and can provide leading information on household credit growth and housing market activity.

New mortgage lending moves closely with new house sales. New lending rose 7.9% m/m (sa) in July, and up slightly on an annual basis to 1.7% y/y (3mma). House sales and new lending were boosted by the easing in LVR restrictions in January, but both have subsequently pulled back. From here, the outlook will depend on where the trend in sales settles. Housing turnover and new mortgage lending have been oscillating around a high level, but headwinds may see this peter out eventually.

Figure 9. New mortgage lending and housing credit

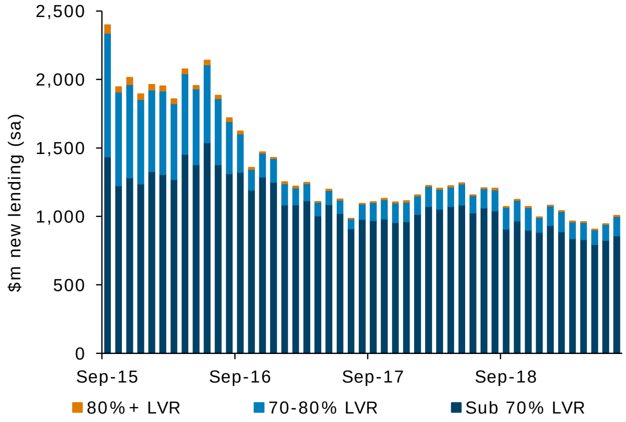


Source: ANZ Research, REINZ, RBNZ

Household credit has been growing at a relatively steady pace for the past year or so. In seasonally adjusted terms, household lending lifted 0.5% m/m to be up 5.9% y/y in July.

Housing credit growth has been stable in recent months, despite housing market volatility. Banks are behaving prudently, the housing market has cooled, investors are wary and loan-to-value ratio restrictions are expected to still have a dampening influence on credit availability. Proposed tightening in banks' capital requirements would also create headwinds, if implemented, and the outlook for the labour market is looking more wobbly. On the whole, we expect credit growth will continue to grow modestly from here.

Figure 10. Investor lending by LVR

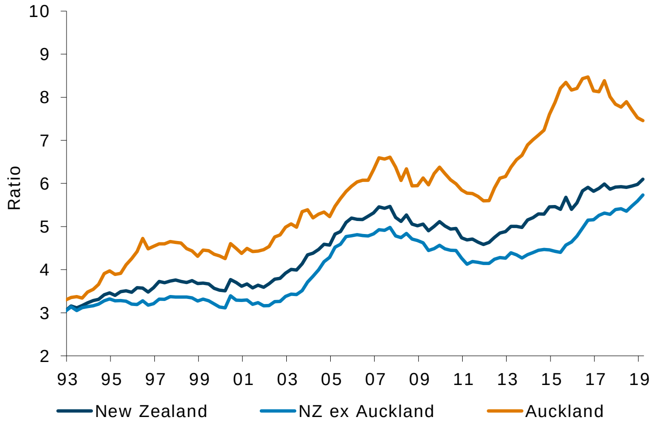


Source: ANZ Research, RBNZ

On a seasonally adjusted basis, new lending to investors grew 2.9% in July, continuing a hefty 5.7% m/m jump in June. Investor lending is down 16% y/y. New lending to investors has been relatively soft over 2019 to date. Underlying this, investors remain wary, which is weighing on the housing market. About 16% of new loans were to investors in July, down from an average of 22% over 2018 and well below 2016 peaks of almost 35%. It will be interesting to see the impact of the new record low in the OCR.

The share of investor lending on riskier terms remains low. The share of investor lending at loan-to-value ratios of less than 70% is sitting above 85%. In late-2014 it was about half.

Figure 11. Regional house prices to income

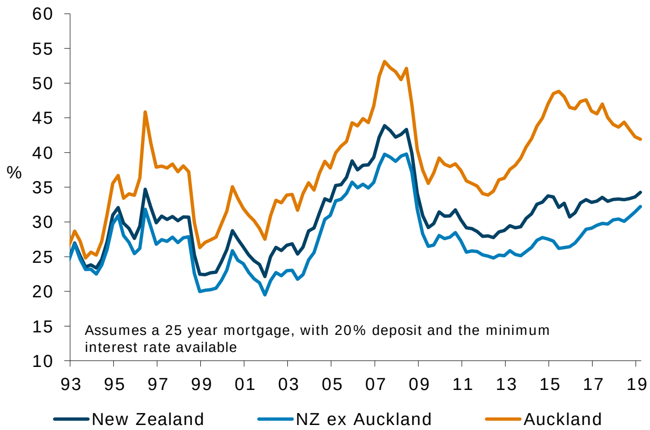


Source: ANZ Research, REINZ, Statistics NZ

One commonly cited measure of housing affordability is the ratio of average house prices to incomes. It is a standard measure used internationally to compare housing affordability across countries. It isn't perfect; it does not take into account things like average housing size and quality, interest rates, and financial liberalisation. Therefore, it is really only a partial gauge as some of these factors mean that it is logical for this ratio to have risen over time.

Nationally, the ratio has been stable at 6 times income since early 2017. Auckland has seen its ratio ease from over 8 times in 2017 to an estimated 7.5 times in Q1 2019, reflecting recent weakness in house prices. Ex-Auckland, the ratio has continued to rise; at 5.6 times incomes this is at record highs.

Figure 12. Regional mortgage payments to income



Source: ANZ Research, REINZ, RBNZ, Statistics NZ

Another, arguably more comprehensive, measure of housing affordability is to look at it through the lens of debt serviceability, as this also takes into account interest rates, which are an important driver of housing market cycles.

We estimate that for a purchaser of a median-priced home (20% deposit), the average mortgage payment to income nationally is 34%. However, there are stark regional differences. In Auckland it is 42% and the rest of New Zealand it is 31%. This is not far from historic highs in Auckland, despite mortgage rates being very low. Debt levels are high nationwide. And while home ownership is being made more affordable by low mortgage rates, households could be vulnerable in the event of a lift in interest rates.

Property gauges

The housing market has tentatively stabilised. Nationwide, house prices were up 2.1% y/y in August, up from 1.7% y/y in July. Auckland house price inflation is still negative in annual terms, but a little less than previously, contracting 2.6% y/y. Auckland house prices continued to underperformed the broader market, rising less than the ex-Auckland index, which ticked up to 6.8% y/y. But housing market activity still remains soft. Creating a bit more of a mixed picture, house sales more than reversed last month's strength, falling 7.5% m/m. This saw annual sales growth at -0.1% y/y. The notable boost to house prices in August may reflect support from lower mortgage rates over the past year, but the reversal in sales activity supports the view that the market is unlikely to take off substantially from here. While we expect the market to remain subdued overall, there is a risk that recent drops in mortgage rates reignite the housing market.

We use ten gauges to assess the state of the property market and look for signs that changes are in the wind.

Affordability. For new entrants into the housing market, we measure affordability using the ratio of house prices to income (adjusted for interest rates) and mortgage payments as a proportion of income.

Serviceability / indebtedness. For existing homeowners, serviceability relates interest payments to income, while indebtedness is measured as the level of debt relative to income.

Interest rates. Interest rates affect both the affordability of new houses and the serviceability of debt.

Migration. A key source of demand for housing.

Supply-demand balance. We use dwelling consents issuance to proxy growth in supply. Demand is derived via the natural growth rate in the population, net migration, and the average household size.

Consents and house sales. These are key gauges of activity in the property market.

Liquidity. We look at growth in private sector credit relative to GDP to assess the availability of credit in supporting the property market.

Globalisation. We look at relative property price movements between New Zealand, the US, the UK, and Australia, in recognition of the important role that global factors play in New Zealand's property cycle.

Housing supply. We look at the supply of housing listed on the market, recorded as the number of months needed to clear the housing stock. A high figure indicates that buyers have the upper hand.

House prices to rents. We look at median prices to rents as an indicator of relative affordability.

Policy changes. Government and macro-prudential policy can affect the property market landscape.

Indicator	Level	Direction for prices	Comment
Affordability	Unaffordable	↔/↓	Affordability constraints are very relevant. It started with Auckland; several other regions have joined the party.
Serviceability/ indebtedness	High debt, low rates OK – high rates not	↔/↓	Serviceability looks okay provided interest rates stay low and income growth is solid. Debt levels are high.
Interest rates / RBNZ	More cuts coming	↔/↑	We see the OCR falling further in November, but the impact on retail rates is unclear. Short-term mortgage rates have fallen.
Migration	Peaked	↔/↑	Migration remains elevated. Data for June softened from previous estimates. The data remains prone to very large revisions.
Supply-demand balance	Demand > Supply	↔/↑	MBIE estimates New Zealand is short 71k houses, but the build-up of pent-up demand is becoming less pronounced.
Consents and house sales	Shortage	↔/↑	We expect consents issuance will struggle to push higher, with the construction sector reaching its limits.
Liquidity	Set to tighten	↔/↓	Credit availability is very relevant. Banks have plenty of cash currently, but know they have to raise a lot more capital.
Globalisation	Weak	↔/↓	The foreign-buyer ban has stymied demand from non-residents, and the housing market is weak in Australia.
Housing supply	Too few	↔/↑	The Government is going to take a more active role, but there are still questions about crowding out other work and labour shortages.
House prices to rents	Too high	↔/↓	Rents are moving up, with pressures on the existing stock apparent. Buying remains relatively expensive.
Policy changes	Dampening	↔/↓	Government policy changes are making investors wary. Easing in loan-to-value restrictions and the ruling out of a capital gains tax has provided a slight offset.
On balance	**In recent ranges**	↔/↓	**We expect the market to remain contained, though volatility may continue in the short term.**

Property gauges

Figure 1: Housing affordability

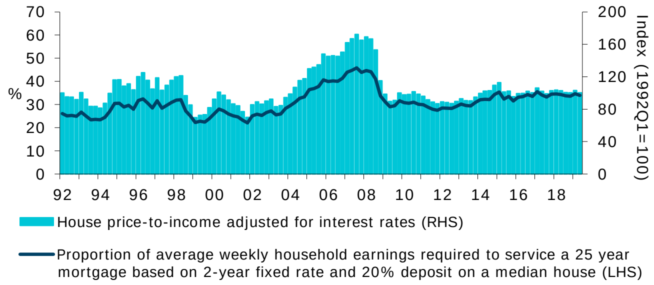


Figure 2: Household debt to disposable income

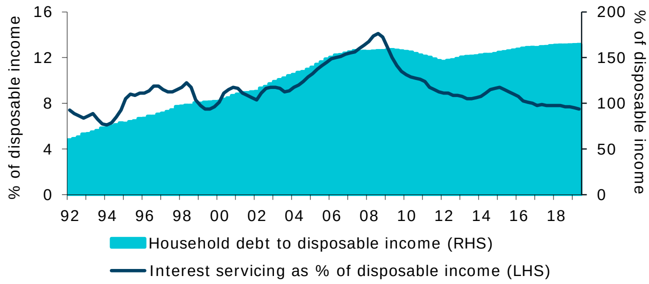


Figure 3: New customer average residential mortgage rate (<80% LVR)

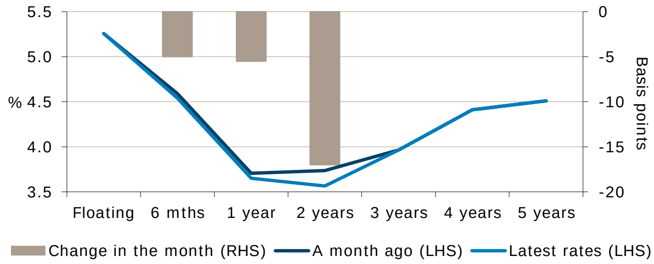


Figure 4: Annual migration*

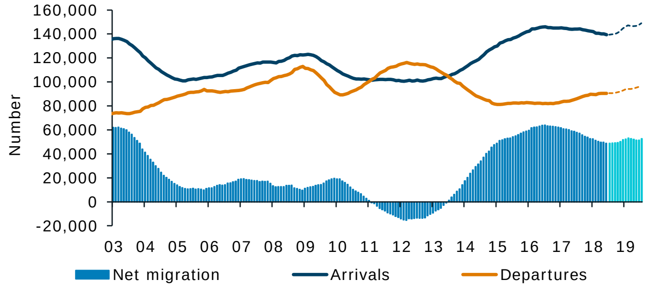


Figure 5: Housing supply-demand balance

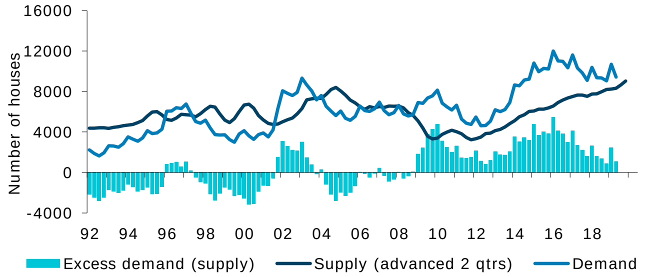


Figure 6: Building consents and house sales

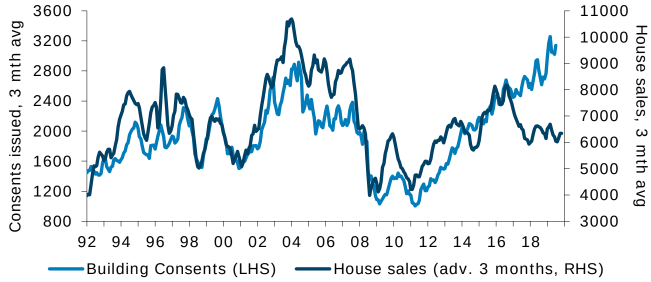


Figure 7: Liquidity and house prices

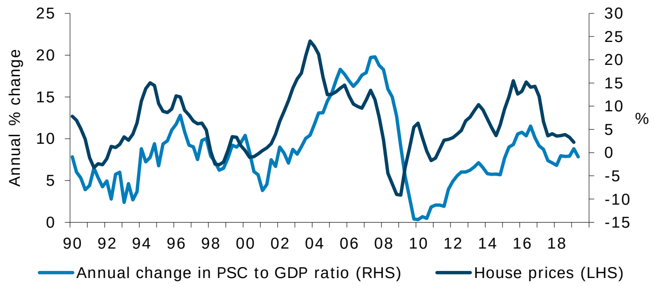


Figure 8: House price inflation comparison

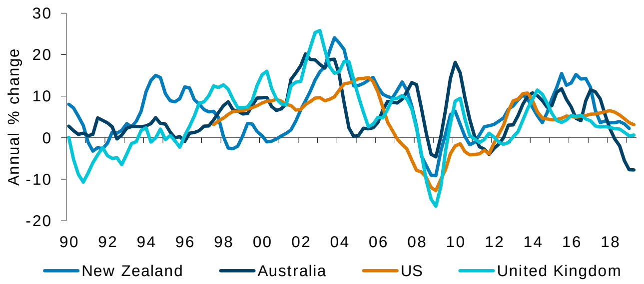


Figure 9: Housing supply

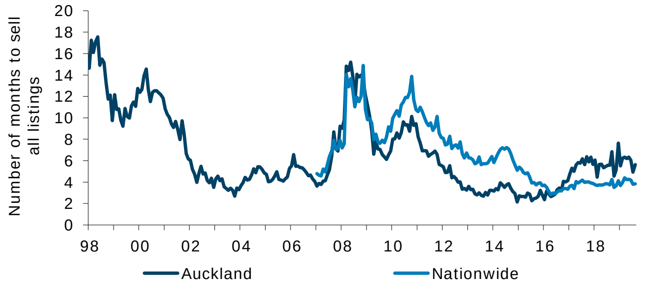
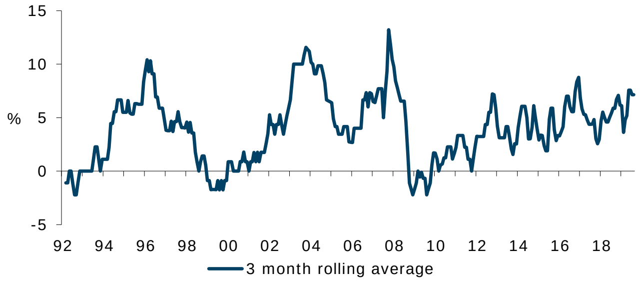


Figure 10: Median rental, annual growth



Source: ANZ Research, Statistics NZ, REINZ, RBNZ, QVNZ, Nationwide, Bloomberg, Barfoot & Thompson, MBIE

* Dotted lines show the last nine months of data, which we look through because they are subject to substantial revisions. The data prior to June 2014 is back-casted using Stats NZ's discontinued experimental data.

Economic overview

Summary

The New Zealand economy has lost a great deal of momentum, with annual growth falling to 2.1% in the second quarter, and leading indicators are suggesting this trend will continue in the second half of the year. Things just keep going in the wrong direction for the Reserve Bank, with inflation expectations and pricing intentions now starting to slide. Accordingly, we believe the RBNZ will conclude it cannot afford to be patient. We are now forecasting cuts in the Official Cash Rate not only in November, but also February and May, taking the OCR to just 0.25%. That said, the growth fundamentals for the New Zealand economy remain in place – we expect annual GDP growth to have fallen to 1.9% by the start of next year before gradually picking up as easier monetary conditions kick in. Meanwhile, growth in New Zealand's trading partners has deteriorated further, and near-term indicators suggest that the slowdown has further to run. Global central banks have stepped up their monetary policy easing efforts, but time will tell whether this will be enough to avert a further sharp slowdown.

Our view

The New Zealand economy has lost a great deal of momentum, and leading indicators are suggesting this trend will continue in the second half of the year. The slowdown has been relatively gentle, but it has been persistent, with annual GDP growth having slowed from above 4% in mid-2016 to just 2.1% in June this year.

In the second quarter of this year, construction activity fell and manufacturing declined, but a rebound in growth among services industries led quarterly growth. That said, looking through the quarterly volatility, the easing trend in annual services growth remains firmly in place.

We expect annual GDP growth to have fallen to 1.9% by the start of next year before gradually picking up as easier monetary conditions kick in. That's far from a recession.

The growth fundamentals for the New Zealand economy remain in place. Interest rates have dropped significantly, and the exchange rate is also trending lower. The labour market is tight, and ongoing moderate growth in real incomes should support household spending. Global supply-side considerations such as the China swine flu epidemic and muted global dairy production growth have shielded the nation's main food commodity export prices to a large degree from the impacts of the slowdown in the Chinese economy.

That said, near-term indicators suggest that the Reserve Bank's August MPS forecasts of a near-term robust bounce-back in growth are unlikely to be realised. The RBNZ needs the economy looking like it's going to run hot, above trend, to be confident of achieving their CPI inflation target over the medium term. And things just keep going in the wrong direction, with inflation expectations and pricing intentions now starting to slide. Accordingly, we believe the RBNZ will conclude it cannot afford to be patient. We are now forecasting cuts in the OCR not only in November, but also February and May, taking the OCR to just 0.25%.

We believe, though it's hard to be sure, that 0.25% is probably about the limit of the OCR's usefulness. The New Zealand financial system is unusually dependent on banks, and New Zealand banks are unusually dependent on household deposits. This puts a floor under deposit rates, which then limits how low lending rates can go. The pass-through to retail lending rates is already no longer 1:1, and will continue to decline with each cut from here. Still, mortgage rates have hit record lows, and we are waiting with bated breath to see the impact on the housing market. A strong rebound in housing is the main risk to our view that the OCR will continue to be aggressively cut.

Meanwhile, growth in New Zealand's trading partners has deteriorated further. Trading partner GDP growth peaked at 4% in late-2017 but has dipped to 2.8% in the second quarter of this year. And near-term indicators suggest that the slowdown has further to run.

Against that backdrop, central banks have continued the move towards more accommodative monetary policy over the past month. This month the Federal Reserve cut the policy rate by 25bp to 1.75-2.00% and the door was left open for another rate cut this year, although officials were divided. The European Central Bank (ECB) unleashed what little firepower it has left; cutting the deposit rate 10bp to -50bp and reintroducing quantitative easing of EUR20bn per month. To improve the transmission of policy through the banking system, the ECB will also tier the deposit rate (to exclude some deposits held at the central bank from negative rates) and will boost its term lending facilities. The Reserve Bank of Australia is also expected to cut further – we're picking a cash rate of 0.25% by mid-next year.

Time will tell whether central banks efforts will be enough to avert a further sharp slowdown.

Key forecasts

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

Mortgage Size ($'000)	Mortgage Rate (%) 3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75
200	231	237	243	250	256	263	270	276	283	290	297	304	311	319
250	289	296	304	312	320	329	337	345	354	363	371	380	389	398
300	346	356	365	375	385	394	404	415	425	435	446	456	467	478
350	404	415	426	437	449	460	472	484	496	508	520	532	545	558
400	462	474	487	500	513	526	539	553	566	580	594	608	623	637
450	520	534	548	562	577	592	607	622	637	653	669	684	701	717
500	577	593	609	625	641	657	674	691	708	725	743	761	778	797
550	635	652	669	687	705	723	741	760	779	798	817	837	856	876
600	693	711	730	750	769	789	809	829	850	870	891	913	934	956
650	750	771	791	812	833	854	876	898	920	943	966	989	1,012	1,036
700	808	830	852	874	897	920	944	967	991	1,015	1,040	1,065	1,090	1,115
750	866	889	913	937	961	986	1,011	1,036	1,062	1,088	1,114	1,141	1,168	1,195
800	924	948	974	999	1,025	1,052	1,078	1,105	1,133	1,160	1,188	1,217	1,246	1,274
850	981	1,008	1,035	1,062	1,089	1,117	1,146	1,174	1,204	1,233	1,263	1,293	1,323	1,354
900	1,039	1,067	1,095	1,124	1,154	1,183	1,213	1,244	1,274	1,306	1,337	1,369	1,401	1,434
950	1,097	1,126	1,156	1,187	1,218	1,249	1,281	1,313	1,345	1,378	1,411	1,445	1,479	1,513
1000	1,154	1,186	1,217	1,249	1,282	1,315	1,348	1,382	1,416	1,451	1,486	1,521	1,557	1,593

Housing market indicators for August 2019 (based on REINZ data)

	Median house prices		No of sales (sa)	Mthly % chg	Avg days to sell (sa)
	Ann % chg	3mth % chg			
Northland	11.0	3.3	194	-2%	75
Auckland	-3.5	0.0	1,760	-11%	44
Waikato	2.2	-0.7	676	+1%	46
Bay of Plenty	6.7	1.2	484	+3%	45
Gisborne	25.1	-4.1	56	-3%	32
Hawke's Bay	12.1	3.7	187	-28%	34
Manawatu-Whanganui	25.0	8.0	337	-8%	30
Taranaki	14.8	6.1	165	-10%	37
Wellington	7.7	5.6	617	-16%	34
Tasman, Nelson and Marlborough	0.6	-0.5	222	-3%	38
Canterbury	3.4	1.4	905	-6%	39
Otago	13.8	3.4	352	-8%	33
West Coast	-6.6	-4.9	38	-6%	105
Southland	28.5	3.4	132	-18%	29
New Zealand	**5.5**	**2.3**	**6,140**	**-7%**	**40**

Key forecasts

	Actual			Forecasts						
Economic indicators	Dec-18	Mar-19	Jun-19	Sep-19	Dec-19	Mar-20	Jun-20	Sep-20	Dec-20	Mar-21
GDP (Ann % Chg)	2.5	2.5	2.1	2.2	2.0	1.9	1.9	2.1	2.1	2.2
CPI Inflation (Annual % Chg)	1.9	1.5	1.7	1.5	1.5	1.9	1.7	1.5	1.6	1.6
Unemployment Rate (%)	4.3	4.2	3.9	4.1	4.3	4.4	4.4	4.5	4.5	4.5
House Prices (Annual % Chg)	3.3	2.7	1.6	2.3	2.4	2.6	4.0	3.5	3.3	2.9
Interest rates (RBNZ)	Dec-18	Mar-19	Jun-19	Sep-19	Dec-19	Mar-20	Jun-20	Sep-20	Dec-20	Mar-21
Official Cash Rate	1.75	1.75	1.50	1.00	0.75	0.50	0.25	0.25	0.25	0.25
90-Day Bank Bill Rate	2.0	1.9	1.6	1.2	0.9	0.7	0.5	0.5	0.5	0.5
Floating Mortgage Rate	5.8	5.8	5.7	5.5	5.2	5.0	4.7	4.7	4.7	4.7
1-Yr Fixed Mortgage Rate	4.8	4.7	4.6	4.5	4.3	4.2	4.1	4.1	4.1	4.1
2-Yr Fixed Mortgage Rate	4.9	4.8	4.7	4.7	4.6	4.4	4.4	4.4	4.4	4.4
5-Yr Fixed Mortgage Rate	5.6	5.4	5.0	5.4	5.3	5.1	5.1	5.1	5.1	5.1

Source: ANZ Research, Statistics NZ, RBNZ, REINZ

Important notice

This document is intended for ANZ's institutional, professional or wholesale clients, and not for individuals or retail persons. 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 click here or request from your ANZ point of contact. If trading strategies or recommendations are included in this document, they are solely for the information of 'wholesale clients' (as defined in section 761G of the Corporations Act 2001 Cth).

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

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

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

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

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

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

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

Important notice

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

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

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

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

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

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

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

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

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

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

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

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

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