

NEW ZEALAND ECONOMICS ANZ PROPERTY FOCUS

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LIES, DAMNED LIES AND MIGRATION

SUMMARY

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

CHIEF ECONOMIST CORNER

Migration is booming, with a net inflow of over 69,000k migrants (125,000 gross arrivals) over the past year, according to Statistics NZ data. That's putting pressure on housing and infrastructure. But when you look at the fuller picture, including the number of permanent resident approvals (the aim of which has not really altered from 45-50k per annum), the story does appear less alarming. A German au pair, for instance, doesn't have the same impact on the property market as a permanent resident. New Zealand's economic and political credentials currently look pretty good. Because of that, we don't believe net migrant inflows are going to cool aggressively any time soon, in the absence of policy intervention. Skill shortages will worsen as the population ages, so New Zealand needs to import labour. However, it is questionable whether current policy settings have got the 'mix' right and are achieving the desired outcomes. Sub-par GDP per capita growth is telling, as is the mismatch between reported skill shortages and the skill sets of arrivals. It is also odd that more foreign students are heading into Private Training Institutes as opposed to Universities. In short, there are aspects that suggest the migration framework, and the application of the rules, could be in need of adjustment.

THE PROPERTY MARKET IN PICTURES

Nationwide house price growth continues to accelerate, although turnover has softened, in part due to a lack of new supply. While strong, there are also some signs that new lending growth has begun to cool, with the latest RBNZ LVR restrictions likely to see that continue

PROPERTY GAUGES

Splintered messages remain with regard to housing. There is excess demand, not excess supply, which is positive for prices; interest rates are low, keeping debt-servicing costs manageable for now; and migration inflows are strong. Yet homage needs to be paid to valuations that are extended and to rising levels of leverage. Affordability for first home buyers is dire. So we have a market pushing against valuation metrics, but still underpinned on a number of levels.

ECONOMIC OVERVIEW

The New Zealand economy is expanding at a rapid clip. Migration, housing and construction are at the epicentre. We forecast GDP growth in excess of 3% over the year ahead. At that pace, demand is outstripping supply. Firms are finding it more difficult to find labour and this theme will intensify over the year ahead. That said, risks to the outlook look skewed to the downside courtesy of the global scene. The two main local risk factors, namely low dairy prices and housing over-exuberance (too much borrow-and-spend style growth) look manageable provided sensible heads prevail. Another year of booming house prices would be worrisome.

MORTGAGE BORROWING STRATEGY

Mortgage rates have fallen slightly over the past month. Although the RBNZ cut the OCR by 25bps, all four major banks passed on a lesser amount. In contrast, some term deposit rates lifted, reflecting more competitive tension for deposits. This is the reality created by strong credit growth amidst a shortage of retail funding and rising wholesale funding costs. Looking ahead, although we expect the OCR to come down by another 50bps by February, mortgage rates are likely to fall by less. We continue to favour 1-2 year rates. Longer-term rates are also still very competitive (at around 5%) and may suit more risk-averse borrowers.

LIES, DAMNED LIES AND MIGRATION

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WILL THE REAL MIGRATION STORY PLEASE STAND UP

There is an old adage when it comes to interpreting facts and figures, namely 'lies, damned lies and statistics'. In other words, there are often a number of different ways to interpret data, which results in a number of different conclusions – often skewed to peoples' previous biases. That seems to apply to New Zealand's migration story, with a myriad of interpretations being thrown around at present.

We **don't** intend to add much to the debate about the merits (or not) of migration here. But we thought we'd take a look at the numbers themselves, with our intention being that by digging further into the details we hope to see if we can better assess what is really going on and help more accurately shape the economic debate.

The story at the headline level seems obvious enough.

- **Immigration (the inflow) has boomed.** Over the past year, 125,000 new migrants have turned up in New Zealand looking to pull up a chair for at least the next 12 months (12 months being the classification Statistics NZ use to define if someone is a permanent/long-term migrant or just a short-term visitor). **That's** up some 50% in four years, with around a quarter of that inflow being returning New Zealanders.
- Emigration (the outflow) has fallen sharply, and is down 36% since the peak in early 2012. Most of those heading offshore are New Zealand citizens, but that number has almost halved from 2012. Departures are mostly to Australia, the United Kingdom and the United States.
- Notably, the annual net outflow of people to Australia evident between 1991 and 2015 has now turned into a net inflow of 1,800 people. That still includes a net loss of 3,600 New Zealand citizens.
- Annual net migration has been rising sharply and is sitting at all-time highs. At the start of 2013, the annual net inflow was all of 12 people. It is now over 69,000.

But such figures only part of the story. To understand what is going on you need to take a look under the bonnet. It makes a difference.

THE FRAMEWORK

The migration framework is easy enough to understand. It's empowered by domestic immigration policy and administration, manifesting in New Zealanders and people from other countries coming and going. Broadly speaking, New Zealanders and Australian citizens (under most circumstances) can largely come and go as they please between the two countries. For the others, there are:

- **Arrivals** abstracting from short-term visitors, immigration policy enables people from other countries to come into New Zealand via two main channels:
 - Temporarily: The aim is to allow people in to build international linkages, spend money, and address skills shortages, while managing the inevitable risks of migration (eg biosecurity). Temporary migration includes visitors (backpackers who stay longer than a year, for example), international students and workers (essential skills, study to work, family, seasonal and more).
 - Permanently (through residency): The New Zealand Residence Programme looks to add around 45k 50k approvals per year. This 'target' has been in place for a while, so it's not like the floodgates have suddenly opened, as the headline migration numbers might suggest. Permanent residents are given the same privileges and responsibilities available to New Zealand citizens, including access to education,



employment and welfare. Permanent residency issuance typically (but not always) happens after non-citizens arrived via one of the temporary avenues above, so there is a lag effect. Prospective residents earn points across a number of categories including work experience, qualifications, prior work in New Zealand, an employment offer, working in regions other than the big cities, investment ability, etc, and these points count towards their permanent resident application. Permanent residency is granted under a number of categories including skilled migrant, work to residence, entrepreneur, investor, family and humanitarian.

Departures – thanks for coming.

THE DATA

There are two main sources of migration data, which can complicate the discussion somewhat. Each source measures different, but relevant, aspects of the migration story. The first is Statistics NZ's monthly International Travel and Migration figures, which measure the short and long-term movement of people to and from New Zealand. The second is Immigration NZ data on the number (and composition) of visas processed and approved.

Statistics NZ International Travel and Migration data comes from electronic passport and flight records, as well as arrival and departure cards filled out upon entry to and departure from New Zealand. The data is a useful and timely source of information. But there are a couple of points to note:

- Travellers may change their intention to stay short or long-term term, or the purpose of their travel etc, after they have arrived or left the country. In other words, the figures are indicative rather than absolute.
- The published concept of "permanent and long-term" migration (ie those intending to stay 12 months or more) should not to be confused with permanent residency. The definition of permanent and long-term migration is a simple one and is all about the stated intention to stay (or leave) for 12 months or more. It therefore captures a number of aspects of people's movement (visitors, students etc) that have nothing to do with residency.

Immigration NZ data measures the number of visa applications and approvals obtained for entering NZ under one of the temporary or permanent immigration policies. For some countries, visas must be obtained prior to entry. Others may be given upon entry (e.g. Australians) or may be granted while the applicant is in New Zealand. In the latter instance, the visa may be granted without a border crossing being recorded by Statistics NZ. That means the Statistics NZ and Immigration NZ data, while related, are independent of one another, so caution is needed when comparing the two. In terms of the Immigration NZ figures, we note:

- A total of 209,461 temporary work visas were issued in 2016 (2015/2016 financial year). Of this, 33% (69,000) were for working holiday schemes, with the largest group in this category being 15,000 Germans on the working holiday scheme. UK working holiday visas were next at 13,000. Temporary visas, such as working holiday visas, give young people the opportunity to work in New Zealand for up to 12 months (some flexibility offered to different countries, such as 23 months for UK travellers).
- 18% of temporary work visas came in on skilled work visas, with most of these in the essential skills category.
- 17% (35,000) were on a relationship basis.
- 43,085 permanent residence visas were approved in 2015. The majority (35%) were under the family stream (partners, parents, dependent children). Principal and secondary skilled migrants were 25% apiece.
- 86% of the skilled migrant permanent visas were given while the applicant was in New Zealand.

THE WELCOME MAT

The migration numbers from Statistics New Zealand are often what grab the headlines. These figures show net migration inflows surging to record levels, which then sets off the concern from some about the impact this could have on housing and infrastructure demand and the possible implications for labour supply and wage growth. But one school of thought is that little can actually be done about the surge, and/or that **we shouldn't be** concerned, as the benefits of migration outweigh the costs. There are some observations that support that assessment:

• The Statistics NZ data tells only part of the story. When you actually look at the fuller picture, including what Immigration NZ figures show, such as the numbers of permanent residencies granted (which has not



really changed over time), the story does appear less alarming. A German au pair, for instance, **doesn't** have the same impact on the property market as a permanent resident (though the former still needs to be 'housed').

- A lot of the gain seen in net migration has been 'uncontrollable'. It is almost impossible to control the flow of New Zealanders in and out of the country, and we put Australians in that category as well. Over the past year, we estimate that 'uncontrollable' migration has turned positive for the first time at least as far back as 1990. Its historical average is negative 19,000.
- Firms are telling us that skill shortages in many sectors are a key issue. In order to counter that, we need to import human capital; someone has to build all those houses in Auckland! Our Small Business Monitor points to skill shortages as a pressing issue (Figure 1 below). Firms are telling us they don't lack demand. What they lack is the skill base to meet that demand. This issue will become even more pronounced as the population ages. For the agriculture sector alone, an additional 50k workers are needed in order for it to meet its growth strategy over the next decade. When you include natural attrition, this requirement jumps to more than 200k (see February 2015 ANZ Agri Focus Summer Sizzle for more on the issue). Figures 2 below shows the staff needs for just the primary sector going through the entire supply chain, highlighting the increasing sophistication amongst job skill requirements in the future. A lot of this will need to be sourced from offshore.

FIGURE 1. BIGGEST PROBLEMS FACING BUSINESSES

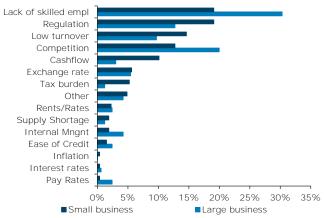
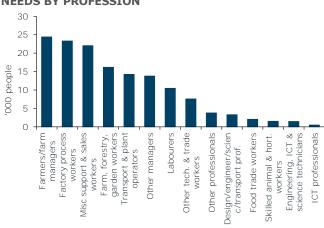


FIGURE 2. PIMARY SECTOR ESTIMATED REPLACEMENT NEEDS BY PROFESSION



Source: ANZ Source: ANZ, MPI

- Migration inflows can add to the economy's diversity, bring much-needed capital and can drive better offshore connectivity. Some sectors, such as horticulture and viticulture, would grind to a halt without imported foreign labour. New Zealand, like many other nations, is facing demographic challenges and a "pension" gap; we need more (younger) workers to "fund" a burgeoning population of retirees.
- Other sectors benefit from foreign students studying in New Zealand by boosting education exports. By one scale, education is New Zealand's third-largest export earner (behind personal travel and whole milk powder). With regards to New Zealand's two largest education export markets, Chinese students have increased 64% over the past five years, while students from India have more than doubled.
- Migration has tended to be very cyclical and the conventional wisdom is that we'll eventually see
 mean reversion back towards 15k per year. Specifically, permanent and long-term departures will pick
 up from today's low levels (New Zealanders will start leaving again and we'll see some recycling of the current
 inflow into outflows) and inflows will also begin to taper off.

But what else does the data show? Is the above description really a true reflection of what is going on? We touch on a few thoughts below:

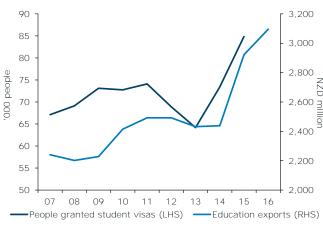
• **GDP per capita growth is lacklustre.** In the March quarter, annual per capita real GDP growth was just 0.7%. Timing and measurement issues might be at play, but clearly this is a less-than-desirable rate of growth for what is ultimately the most widely followed measure of living standards. **So we're not seeing "value creation"** right now from this population boom. To be fair, there are obvious lags between population growth and real GDP growth – a migrant does not instantaneously add to economic growth when they arrive; it takes



time for them to integrate. In other words, today's strong population growth should continue to spur increased levels of activity into the future. That said, growth in GDP per capita has not been flash for a while, so perhaps it is more complicated than that.

FIGURE 3. NZ ANNUAL REAL GDP PER CAPITA

FIGURE 4. STUDENT VISAS AND EDUCATION EXPORTS



Source: ANZ, Statistics NZ, MBIE

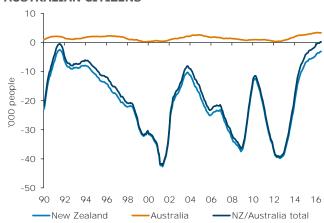
- Annual net migration started picking up in 2012. While 'uncontrollable' elements have played a clear role (as discussed above), we have also seen 'controllable' net migration surged 95% over the same period. One can't ignore that side of the equation.
- In response to the view that net migration will 'mean revert' shortly, we'd question whether outflows to Australia or the rest of the world will pick up any time soon. We also struggle to see arrivals easing meaningfully. In the game of tit-for-tat between New Zealand and Australian citizens moving between our respective countries, Australia typically wins. There is typically a big net loss of New Zealanders going to Australia long-term (the 10-year average is 23k) than the opposite (1k). This despite having had a better rugby team for a long time now. The worst of it was in 2012, when there was a net loss of 40k NZ/Australian citizens to Australia. These days, there is still a net loss being recorded, but at only 600, is pretty much even-stevens (NB: this figure differs to the +1,800 mentioned on page 2 as the -600 is 'uncontrollable', ie Australasian citizens, alone). The reality is that people, like capital, are attracted to good news stories and shy away from bad ones. The New Zealand economy has been outperforming our Trans-Tasman neighbour on a number of metrics of late, and looks set to continue doing so. Add to this Brexit and US election shenanigans, together with safety and lifestyle benefits, and you have a recipe for inflows remaining strong and outflows remaining soft for some time yet.

FIGURE 5. ANNUAL NET MIGRATION



Source: ANZ, Statistics NZ

FIGURE 6. ANNUAL PLT NET MIGRATION OF NZ AND AUSTRALIAN CITIZENS



Source: ANZ, Statistics NZ



• Around one quarter of the 40k-50k permanent resident visas approved each year are for principal applicants associated with the business/skilled migrant stream. Secondary skilled migrants are around another quarter of this. The share of principal to total skilled migrants (total includes families) has been rising over time and stands at around 50%. So it's not like we're now letting in more associated family members with primary applicants. Rather the reverse. But the largest inflow is still the family stream (partners, parents, dependent children etc), which stands at around 35%. Residency approvals on humanitarian grounds make up another 8%, with the business category (entrepreneurs, investors etc) rounding things out. To us, it is notable that the family stream exceeds the principal applicant (business/skilled migrant) stream by a material margin.

FIGURE 7. PERMANENT RESIDENCY BY STREAM

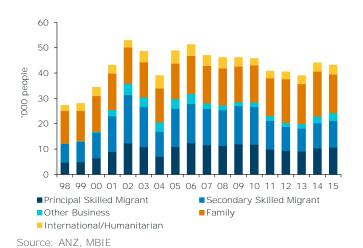
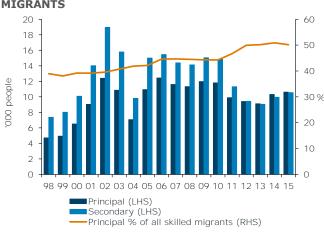


FIGURE 8. PERMANENT VS SECONDARY SKILLED MIGRANTS



Source: ANZ, MBIE

- The rhetoric is that migrants are needed to fill skill shortages. We certainly concur. But that is not necessarily backed up by what skills end up coming through the system. While we know that the tourism sector is doing well, and long may that continue, three of the top four occupations of principal skilled migrants approved for residency are chefs, retail managers and café/restaurant managers. Retail spending on food and beverage services is up 10% on a year ago, which is clearly strong growth, so perhaps it is little wonder we are seeing strong demand for these types of workers as a result. But the dominance in approvals for chefs is still eye-watering (699 in 2014/2015) and it is certainly a surprise that it is the *top* occupation.
- It is a broadly similar story when looking at temporary visa approvals. There seems to be a mismatch between the skills of those coming in and what is actually needed. Some sectors appear fully clothed (food services); some don't (construction). Most of the people with essential skills work visas are going into cafés, restaurants, dairy and retail. Some make more sense than others dairy has had definite staff shortages (although there are anecdotes of staff redundancies now), while retailing generally remains a tough industry.



FIGURE 9. TOP 10 MAIN OCCUPATIONS FOR PRINCIPAL SKILLED MIGRANT APPLICANTS (2015)

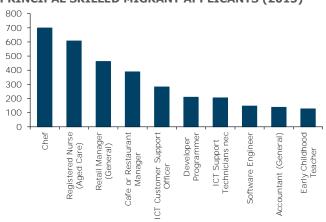
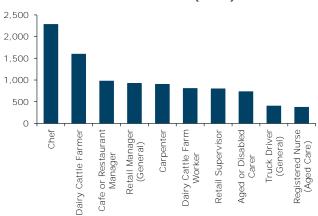


FIGURE 10. TOP 10 MAIN OCCUPATIONS OF ESSENTIAL SKILLS WORK VISAS (2015)

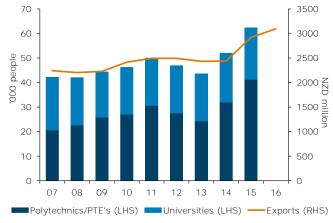


Source: ANZ, MBIE

Source: ANZ, MBIE

- Most of the occupations of those coming in on essential skills (temporary) and the principal skilled migrant category (permanent) are very similar. Either that's consistency at work or we are being hoodwinked on both levels.
- Education: the number of international student visas granted increased 17% from 2010 to 2015. Education exports were up 21% over the same period (28% to June 2016). **However, we are seeing a massive surge in students heading to polytechnics and private training institutes (52%) without the same growth in those going to universities (10%). Is that the right mix?**

FIGURE 11. PEOPLE GRANTED STUDENT VISAS AND EDUCATION EXPORTS



Source: ANZ, MBIE

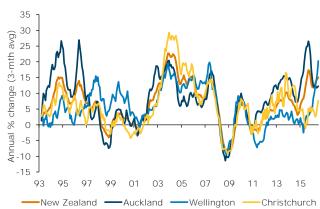
• **Around half of these international students are from China and India.** Most of the Chinese students are attending university while well over half of the Indian students are attending private training establishments. That **looks a little odd, and we can't think of good reasons why** this should be the case.

THE UPSHOT

New Zealand needs a solid inflow of migrants. Abstracting from the conceptual value that comes from importing ideas, skills and connecting more internationally, and adding to the export base (education), current demand for migrants is being accentuated by skill shortages today and in the future. However, it is questionable whether current policy settings have got the 'mix' right and have achieved the desired outcomes. Sub-par GDP per capita growth is telling. There are numerous questions within the story (composition of visa approvals, skills of applicants etc) that suggest the migration framework, and the application of the rules, could be in need of adjustment.



FIGURE 1. REGIONAL HOUSE PRICES



Source: ANZ, REINZ

Nationwide house prices grew strongly in July. Our preferred measure of prices (the REINZ stratified measure) showed nationwide prices rising 2.4% sa (6.5% q/q), with annual growth lifting to 16% y/y. July was the sixth consecutive month of circa 2% monthly house price growth.

Auckland house price growth has been strong of late, rising 2.5% sa in July following a 3.5% surge in June. Annual price growth is accelerating again, lifting to over 15% y/y in July (the chart shows a three-month average).

Non-Auckland regions have also been experiencing strong growth of late. On a three-month average basis, regional North Island and Wellington are experiencing the strongest annual house price growth, at 22% and 20% respectively. Non-Canterbury South Island prices are running at 13% y/y, while Canterbury is underperforming with *just* 8% y/y house price growth.

FIGURE 2. REINZ HOUSE PRICES AND SALES



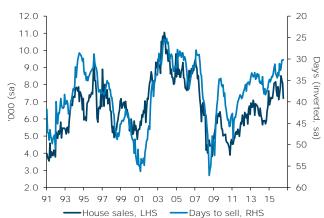
Source: ANZ, REINZ

Sales volumes and prices tend to be closely correlated, although tight dwelling supply has seen a correspondingly greater ramping-up of prices over the last five years or so.

Most recently, sales volumes have fallen, with seasonally adjusted sales dropping 11% m/m in July, which happens to be the third consecutive monthly fall. On a 3m/3m basis, volumes are now down 1.2% and 11% below levels 12 months prior. Auckland sales volumes are down 21% y/y, while non-Auckland regions are 4.5% weaker.

This weaker sales activity does hint at more modest price growth going forward. However, at this stage we see it as more indicative of a lack of available property listings than a signal of weaker demand.

FIGURE 3. SALES AND MEDIAN DAYS TO SELL



Source: ANZ, REINZ

The length of time it takes to sell a house is also an indicator of the strength of the real estate market. It encompasses both demand and supply-side considerations.

Nationally, the median time to sell a house held at just 30.2 days (sa) in July, which is the equal lowest since June 2007 and well below the historical average of 38 days. It supports the argument of weaker sales numbers being driving by a lack of supply rather than softer demand.

Over the past 12 months, the median time to sell a house has fallen most dramatically in Southland, Manawatu/Whanganui and Northland. In Auckland, it has been largest unchanged at 31 days for the past year. It is lowest in Wellington (22.9 days).



FIGURE 4. REINZ AND QV HOUSE PRICES

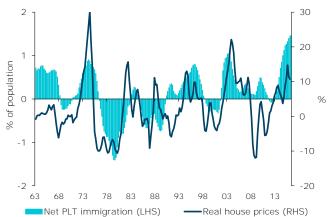


Source: ANZ, REINZ, QVNZ CoreLogic

There are three key measures of house prices in New Zealand: the median and stratified house price measures produced by REINZ, and the monthly QVNZ house price index published by Property IQ. 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, with the REINZ median typically more volatile as it is sensitive to the composition of sales taking place.

After a period of more modest price growth, all three measures are showing acceleration once again. The median sale price, which is holding above \$500K (after breaching this level for the first time ever in May), increased 11% y/y in July. The gap is closing, but this is still below both the stratified and the QVNZ measure of price growth (16% and 14% y/y respectively), which adjust for difference in the quality of houses sold.

FIGURE 5. NET PLT IMMIGRATION AND HOUSE PRICES



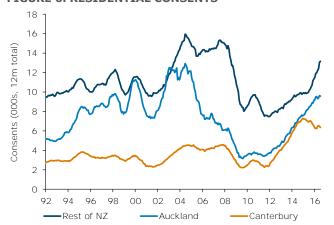
Source: ANZ, Statistics NZ, QVNZ

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

On a three-month annualised basis, net permanent and long-term migration sat at 67.4K in July, which is around 1½% of the resident population. More arrivals and fewer departures have both contributed to this large net inflow.

While net inflows have eased from the record high of close to 72K annualised late in 2015, we are not expecting them to ease back to the long-run average of around 15K any time soon. Due to its economic outperformance, perceived safety and political ructions elsewhere, New Zealand will remain an attractive destination for migrants.

FIGURE 6. RESIDENTIAL CONSENTS



Source: ANZ, Statistics NZ

Nationwide residential consent issuance has been strengthening. On a three-month annualised basis, total issuance remained above 30K in July, which is effectively the highest since mid-2004.

A large part of the increase has been due to the Auckland region (annual issuance of 9.6K), although there are some signs that this is starting to be capped by increasing capacity constraints in the construction sector. Canterbury issuance is off its highs, but only modestly so. Nevertheless, this is consistent with other evidence suggesting that the residential component of the earthquake is past its peak. Positive trends have been clearly evident in likes of Wellington and other regional North Island areas. In fact, issuance in these regions is now accelerating strongly.



FIGURE 7. CONSTRUCTION COST INFLATION



Source: ANZ, Statistics NZ

On a three-month average basis, the value of residential consents per square metre was up 'only' 6.0% y/y in July, which is below the strong rates of growth experienced earlier in the year. However, because it is a volatile measure, we are not reading much into it at this stage. In fact, it has ticked a little higher again of late. Looking through the volatility, an upward trend is apparent, which is consistent with the upward trend seen in the construction cost component of the CPI, which sat at 5.6% y/y in Q2 (7.6% y/y for Auckland).

Our internal anecdotes continue to highlight that capacity pressures in the construction sector are reasonably intense, and not limited to any one region. Forward books are generally full, and in some cases work is reportedly being turned away. Difficulty finding the appropriate staff (or any staff) was a common theme in the sector.

FIGURE 8. MORTGAGE APPROVALS & HOUSING CREDIT



by the RBNZ. These tend to provide leading information on the state of household credit and housing market activity.

Weekly housing loan approval figures are published

The mid-2015 surge in approvals preceded the strengthening in mortgage borrowing and housing market lift as investors rushed to get into the market prior to the looming Government and RBNZ changes.

Approvals values, while at a strong level, have eased modestly off their highs of late and signal that a peak in housing credit growth may be close at hand.

Source: ANZ, RBNZ

FIGURE 9. HOUSE TURNOVER AND MORTGAGE GROWTH



Source: ANZ, REINZ, RBNZ

Despite house sales values being at all-time highs, mortgage borrowing levels are only just approaching pre-GFC peaks (although the rate of growth is strong).

The high-LVR lending restrictions that have been in place since October 2013 have also played a role in slowing the pick-up in mortgage borrowing. They were tightened in November for Auckland investors (deposit requirement of 30%) but relaxed in other areas (up to 15% of new lending could be for borrowers with less than a 20% deposit).

A further tightening in national LVR limits recently announced by the RBNZ is likely to see mortgage growth slow. But figures are not yet available on their impact.



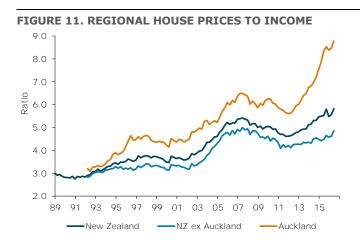
FIGURE 10. INVESTOR LENDING BY LVR 3.0 2.5 2.0 ■80%+ LVR ■70-80% LVR ■Sub 70% LVR

Source: ANZ, RBNZ

Despite the further tightening of lending restrictions to Auckland investors in November 2015, investor lending has been increasing as a share of total new residential mortgage lending, although there are some recent signs of cooling. In July, new lending to investors grew at a 17% y/y pace and made up 37% of total new lending, which is down a touch from the 38% share in June.

However, this lending is still being done with reasonable levels of equity. In July, effectively two thirds of investor lending was done at an LVR less than 70%. Less than 2% of lending to investors had an LVR greater than 80%.

However, in a clear sign that speculative activity is still evident, of the new lending to investors, 54% was on interest-only terms.



Source: ANZ, REINZ, Statistics NZ

One standard measure of housing affordability is the ratio of average house prices to income. It is a common measure used internationally to compare housing affordability across countries. That said, 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 sits just below a ratio of 6, which is slightly above the previous highs recorded prior to the GFC. However, there is a stark regional divide. We estimate the average house price to income in Auckland has now risen to close to 9 times, suggesting a severely unaffordable market. Elsewhere, the ratio is around 5 times, which is back where it peaked prior to the financial crisis.

FIGURE 12. REGIONAL MORTGAGE PAYMENTS TO INCOME 55 50



Source: ANZ, 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 takes into account the likes of interest rates, which are an important driver of housing market cycles.

We estimate that the average mortgage payment to income nationally is around 30% at the moment. It has even fallen a little of late due to recent mortgage rate falls.

However, once again there are stark regional differences, with the average mortgage payment to income in Auckland close to 50%. That is near the highs reached in 2007 despite mortgage rates being at historic lows currently. It highlights how sensitive some Auckland borrowers would be to even a small lift in interest rates.



PROPERTY GAUGES

Splintered messages remain with regard to housing. There is excess demand, not excess supply, which is positive for prices; interest rates are low, keeping debt-servicing costs manageable for now; and migration inflows are strong. Yet homage needs to be paid to valuations that are extended and to rising levels of leverage. Affordability for first home buyers is dire. So we have a market pushing against valuation metrics, but still underpinned on a number of levels.

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 existing mortgage payments.

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.

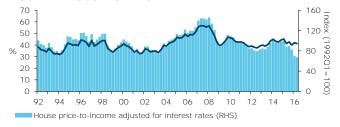
HOUSE PRICES TO RENTS. We look at median prices to rents as an indicator of relative affordability across the regions.

Indicator	Level	Direction for prices	Comment
Affordability	Excessive	$\leftrightarrow / \downarrow$	House prices and leverage rising faster than incomes.
Serviceability/ indebtedness	Hard work	$\leftrightarrow / \downarrow$	Serviceability looks fine as long as interest rates remain low, which they look set to.
Interest rates / RBNZ	Low and lower	\leftrightarrow	RBNZ is cutting but banks are now competing more for deposits which means borrowers don't get the full benefit.
Migration	No sign of slowing	↔/↑	NZ still better than other countries and fewer New Zealanders are leaving. Last one out of the UK turn out the light!
Supply-demand balance	Shortage worsening	↔/↑	Still excess demand out there.
Consents and house sales	More builders please	↔/↑	Consent issuance not keeping pace with demand.
Liquidity	Take that	↓	Investors under the gun given new LVR restrictions, which although officially launching in October, are being applied now.
Globalisation	NZ cheap	\leftrightarrow	NZ houses expensive to us but cheap to everyone overseas.
Housing supply	Too few being built	↔/↑	A lot more builders are needed to keep up with the demand and curb growing imbalances.
House prices to rents	Squeeze	$\leftrightarrow / \downarrow$	House prices outpacing rents.
On balance	Levelling out	\leftrightarrow	Still tension between valuations and supply shortages. Impact of LVR restrictions likely to hold sway in the nearterm and that means some levelling out of the exuberance seen in the first half of 2016.



PROPERTY GAUGES

FIGURE 1: HOUSING AFFORDABILITY



 Proportion of average weekly household earnings required to service a 25 year mortgage based on 2-year fixed rate and 20% deposit on a median house (LHS)

FIGURE 3: NEW CUSTOMER AVERAGE RESIDENTIAL MORTGAGE RATE (<80% LVR)

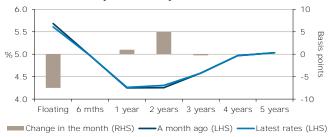


FIGURE 5: HOUSING SUPPLY-DEMAND BALANCE



FIGURE 7: LIQUIDITY AND HOUSE PRICES



FIGURE 9: HOUSING SUPPLY



FIGURE 2: SERVICEABILITY AND INDEBTEDNESS

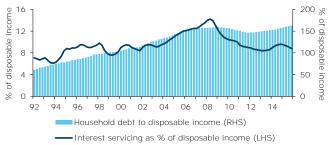


FIGURE 4: NET MIGRATION

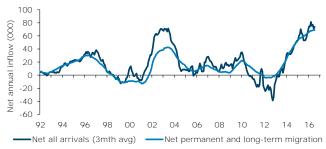


FIGURE 6: BUILDING CONSENTS AND HOUSE SALES

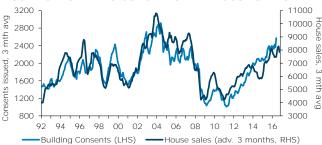


FIGURE 8: HOUSE PRICE INFLATION COMPARISON



FIGURE 10: MEDIAN HOUSE PRICES TO RENTS



Source: ANZ, Statistics NZ, REINZ, RBNZ, QVNZ, Nationwide, Bloomberg, Barfoot & Thompson, www.realestate.co.nz, Department of Building and Housing.



ECONOMIC OVERVIEW

SUMMARY

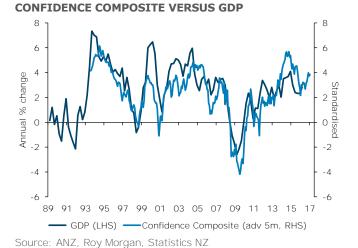
The New Zealand economy is expanding at a rapid clip. Migration, housing and construction are at the epicentre. We forecast GDP growth in excess of 3% over the year ahead. At that pace, demand is outstripping supply. Firms are finding it more difficult to find labour and this theme will intensify over the year ahead. That said, risks to the outlook look skewed to the downside courtesy of the global scene. The two main local risk factors, namely low dairy prices and housing over-exuberance (too much borrow-and-spend style growth) look manageable provided sensible heads prevail. Another year of booming house prices would be worrisome.

OUR VIEW

The economy is expanding briskly. Momentum accelerated early in the year. Migration inflows were strong. Construction boomed. Housing surged. Tourism flourished. That combination remains in vogue. Each month of consistent expansion is encouraging firms to invest further and take on more staff. Success is breeding more enthusiasm for success.

We forecast GDP growth to accelerate towards 3½% over the year ahead. Key signals from our suite of timely indicators remain positive. Lagging GDP data is old (we only have data up until the March quarter at present and we are now in August!). Our confidence composite gauge and financial conditions measures are pointing to strong momentum being maintained. Job ads have now risen for six consecutive months. The unemployment rate is trending lower and real household income growth is running at an above-average pace.

8 6 98.0 98.5 mdex (inverse) 99.5 e) 100.0 90.92 94 96 98 00 02 04 06 08 10 12 14 16 GDP (LHS) —FCI (adv 12 mths. RHS)



Source: ANZ, Statistics NZ, Bloomberg

Demand across the economy is outstripping available supply. Capacity bottlenecks are coming more to the fore. Firms are finding it more difficult to find skilled staff (NZIER Quarterly Survey of Business Opinion, ANZ Small Business Microscope, MYOB). **That's** a handbrake on momentum, although certainly a better problem to have than a lack of demand!

Two localised challenges / risks to the outlook look manageable:

- The dairy sector is still under considerable cash-flow strain but the outlook for prices looks less bleak. Cost structures are being pruned. Balance is being restored to the market; low international dairy prices are curtailing supply, thereby helping to stabilise prices. The industry is still going through an adjustment but it's not as bad as it was shaping up to be a few months ago.
- **Housing excesses.** Borrowing excesses (household debt is 163% of income) in combination with valuation excesses ups the ante on a correction. At present that's hard to envisage given support from migration and a curtailed supply-side response. The RBNZ is tempering market activity via tighter LVR restrictions, with early (anecdotal) signs of success. **But another year of strong credit growth would put us on notice.**

But the greatest risk is the global scene. There is no shortage of candidates. Globalisation and economic integration is being replaced by the antithesis. Emerging market Asia has high leverage. Europe faces structural challenges. Watch the flow-on from Brexit. Policymakers have few bullets to fire if things go amiss and lower interest rates are arguably fostering bigger problems down the track.



MORTGAGE BORROWING STRATEGY

SUMMARY

Mortgage rates have fallen slightly over the past month. Although the RBNZ cut the OCR by 25bps, all four major banks passed on a lesser amount. In contrast, some term deposit rates lifted, reflecting more competitive tension for deposits. This is the reality created by strong credit growth amidst a shortage of retail funding and rising wholesale funding costs. Looking ahead, although we expect the OCR to come down by another 50bps by February, mortgage rates are likely to fall by less. We continue to favour 1-2 year rates. Longer-term rates are also still very competitive (at around 5%) and may suit more risk-averse borrowers.

OUR VIEW

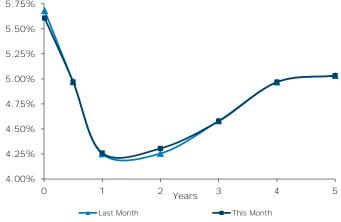
Mortgage rates are little changed this month despite the 25bp reduction in the OCR. While at face value this is disappointing for borrowers, it's a question of balance. The Reserve Bank was able to lower the OCR without worrying about inflaming the housing market more. Borrowers got some rate reduction; depositors were the winner with some rates rising (which is telling as normally deposit and borrowing rates move in tandem); and exporters look to benefit from a lower OCR keeping a lid on the NZD (although it hasn't come down, it has merely stabilised). This is the stark reality of what happens when a nation is borrowing more than it earns and saves. When competitive pressure turns towards deposits (if they can't fall too much further, then neither can lending rates), and wholesale funding costs rise, it is natural for banks to turn to the (more reliable and stable) retail funding base.

This lack of ability for mortgage rates to go much lower is set to be a key feature of the next few quarters. We expect the OCR and wholesale interest rates to grind lower, but competitive pressure for deposits means mortgage rates will move down by less.

With the mortgage curve tick-shaped and higher rates some time away, we continue to see value in 1-2 year tenors, especially for those looking to reduce costs. However, as we flagged last month, 5-year rates are at all-time lows near 5%. This tenor has the benefit of certainty and may suit more risk-averse borrowers.

Breakeven analysis generally also supports focussing on 1-2 year rates. Unless you can seriously envisage 6-12 month rates going below 4% early next year (we can't), you are likely to be better off going for a 1 or 2 year fixed rate.

CARDED SPECIAL MORTGAGE RATES^ 5.75%



Special Mor	Breakevens for 20%+ equity borrowers								
Term	Current	in 6mths	in 1yr	in 18mths	in 2 yrs				
Floating	5.61%								
6 months	4.97%	3.55%	4.33%	4.37%	4.99%				
1 year	4.26%	3.94%	4.35%	4.68%	5.12%				
2 years	4.31%	4.31%	4.74%	5.14%	5.63%				
3 years	4.58%	4.74%	5.20%	5.36%	5.52%				
4 years	4.97%	5.00%	5.23%						
5 years	5.03%	#Average of "big four" banks							

Standard Mo	Breakevens for standard mortgage rates*								
Term	Current	in 6mths	in 1yr	in 18mths	in 2 yrs				
Floating	5.61%								
6 months	5.06%	4.49%	4.97%	4.83%	5.16%				
1 year	4.77%	4.73%	4.90%	5.00%	5.23%				
2 years	4.84%	4.86%	5.06%	5.17%	5.35%				
3 years	4.97%	5.02%	5.20%	5.33%	5.50%				
4 years	5.09%	5.18%	5.35%						
5 years	5.23%	*may be subject to a low equity fee							

Similarly, unless you can envisage mortgage rates starting to rise in 18-24 months' time, breakevens suggest there is limited value in longer tenors. Broadly speaking, we think the most sensible strategy is to select the cheapest rate (the 1-2 year), but to keep up interest payments so as to get your principal down as soon as possible. While it is only happening slowly, the tables are turning from being in favour of borrowers to being in favour of depositors, or at least being less skewed to the former.



[^] Average of carded rates from ANZ, ASB, BNZ and Westpac. Sourced from interest.co.nz

KEY FORECASTS

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

	Mortgage Rate (%)														
		4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00	7.25
	200	243	250	256	263	270	276	283	290	297	304	311	319	326	333
	250	304	312	320	329	337	345	354	363	371	380	389	398	407	417
	300	365	375	385	394	404	415	425	435	446	456	467	478	489	500
	350	426	437	449	460	472	484	496	508	520	532	545	558	570	583
6	400	487	500	513	526	539	553	566	580	594	608	623	637	652	667
(\$,000)	450	548	562	577	592	607	622	637	653	669	684	701	717	733	750
	500	609	625	641	657	674	691	708	725	743	761	778	797	815	833
Size	550	669	687	705	723	741	760	779	798	817	837	856	876	896	917
ge S	600	730	750	769	789	809	829	850	870	891	913	934	956	978	1,000
Jag	650	791	812	833	854	876	898	920	943	966	989	1,012	1,036	1,059	1,083
Mortga	700	852	874	897	920	944	967	991	1,015	1,040	1,065	1,090	1,115	1,141	1,167
ž	750	913	937	961	986	1,011	1,036	1,062	1,088	1,114	1,141	1,168	1,195	1,222	1,250
	800	974	999	1,025	1,052	1,078	1,105	1,133	1,160	1,188	1,217	1,246	1,274	1,304	1,333
	850	1,035	1,062	1,089	1,117	1,146	1,174	1,204	1,233	1,263	1,293	1,323	1,354	1,385	1,417
	900	1,095	1,124	1,154	1,183	1,213	1,244	1,274	1,306	1,337	1,369	1,401	1,434	1,467	1,500
	950	1,156	1,187	1,218	1,249	1,281	1,313	1,345	1,378	1,411	1,445	1,479	1,513	1,548	1,583
	1000	1,217	1,249	1,282	1,315	1,348	1,382	1,416	1,451	1,486	1,521	1,557	1,593	1,630	1,667

Housing market indicators for July 2016 (based on REINZ data)

	House prices (ann % chg)	3mth % chg	No of sales (sa)	Mthly % chg	Avg days to sell (sa)
Northland	15.9	8.0	260	-13	36
Auckland	12.2	3.6	2,426	-11	31
Waikato/BOP/Gisborne	25.7	8.5	1,292	-10	29
Hawke's Bay	6.3	0.6	222	-22	31
Manawatu-Whanganui	15.4	6.5	356	-4	30
Taranaki	8.5	1.8	184	-9	33
Wellington	13.6	5.2	777	-11	23
Nelson-Marlborough	6.8	0.1	230	+3	25
Canterbury/Westland	2.6	0.3	913	-12	33
Central Otago Lakes	32.2	10.4	154	+ 4	34
Otago	5.2	5.5	307	-4	27
Southland	5.1	-1.2	189	-8	23
NEW ZEALAND	8.4	5.9	7,208	-11	30

Key forecasts

		Actual		Forecasts						
Economic indicators	Sep-15	Dec-15	Mar-16	Jun-16	Sep-16	Dec-16	Mar-17	Jun-17	Sep-17	Dec-17
GDP (Ann Avg % Chg)	2.9	2.5	2.5	2.7	3.0	3.3	3.4	3.5	3.4	3.3
CPI Inflation (Annual % Chg)	0.4	0.1	0.4	0.4(a)	0.4	0.9	1.3	1.2	1.6	1.7
Unemployment Rate (%)	6.0	5.4	5.7	5.5	5.4	5.4	5.3	5.2	5.2	5.1
Interest rates (carded)	Jun-16	Jul-16	Latest	Sep-16	Dec-16	Mar-17	Jun-17	Sep-17	Dec-17	Mar-18
Official Cash Rate	2.25	2.25	2.00	2.00	1.75	1.50	1.50	1.50	1.50	1.50
90-Day Bank Bill Rate	2.4	2.3	2.3	2.2	2.0	1.8	1.8	1.8	1.8	1.8
Floating Mortgage Rate	5.7	5.7	5.6	5.6	5.6	5.5	5.5	5.5	5.5	5.5
1-Yr Fixed Mortgage Rate	4.9	4.7	4.7	4.7	4.6	4.5	4.7	4.8	4.9	5.0
2-Yr Fixed Mortgage Rate	5.1	4.9	4.8	4.8	4.8	4.8	4.9	5.1	5.2	5.2
5-Yr Fixed Mortgage Rate	5.6	5.5	5.3	5.4	5.4	5.5	5.5	5.6	5.6	5.7



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