

Hair of the dog

Why a rising housing market will boost household spending

- New Zealand consumers have had a long hangover. After 2008, saving rates rose, household borrowing slowed sharply, and consumer spending per person fell.
- However the hangover seems to be lifting. Housingrelated borrowing has picked up, confidence has risen, and we estimate that saving rates have bottomed out as a result.
- As the housing market continues to heat up, we expect household saving rates to fall further, boosting consumer spending – much as in previous housing market upswings.
- That said, we don't expect saving rates to fall back to their pre-recession lows.

New Zealand's housing market is now clearly enjoying a revival: prices are surging in Auckland and Canterbury, and increasingly rising in other parts of the country of the country as well. There is a lot of debate about what this means for domestic spending, and hence for New Zealand's inflation and interest rate outlook.

In the past, a rising housing market has generally been accompanied by falling saving rates and rising consumer spending. But there are lots of ways in which 'this time is different' – job security is lower, there is greater global economic uncertainty, existing debt burdens are higher. Accordingly, there's a prominent view that spending will stay fairly closely tied to incomes over the next few years. Importantly, the RBNZ and Treasury are in this camp. This view says that the wider economic impact of rising house prices will be correspondingly muted.

We are sceptical. It's clear that households went through a prolonged period of adjustment to higher saving rates after the 2008/2009 recession. However our assessment is that this process has started to reverse. We expect it to reverse further as the housing market continues to heat up. This is the main reason why we expect stronger domestic spending, stronger inflation pressures and more interest rate hikes than the RBNZ is currently signalling.

In this article – the third in a series of bulletins looking at New Zealand households' borrowing and spending patterns – we explain our thinking in more detail. $^{\rm 1}$

The housing market, mortgage debt and household equity withdrawal

Why should we expect a link between the housing market and spending in the first place? At first blush the answer looks simple – rising house prices make homeowners feel wealthier, so they spend more.

The problem with this story is that it works much better for other assets, such as shares. After all, everyone needs a house to live in, and most houses are traded among New Zealand residents. So while there's no doubt that some people (e.g. older homeowners trading down) experience a net benefit when the price of their home increases, the net impact across the economy is much less clear-cut. Rising prices will make first home buyers or those wanting to trade up feel worse off and may even make them save more as they build up a bigger deposit.

However, houses are unusual in another way – they're the main asset that most people can easily borrow against, and when the value of that asset rises so does the amount they can borrow. That means that rising house sales and prices tend to go hand in hand with rising mortgage debt. In fact, every house sale will add to the economy's total mortgage debt if the buyer takes on more debt than the seller pays down.

Provided that this increase in debt isn't reinvested in housing, it's potentially available for spending on consumer goods and services. This is the process known as 'housing equity withdrawal'.

There are two ways in which equity withdrawal can happen. One is existing borrowers remortgaging, effectively 'using the house as an ATM'. But the available evidence suggests that this 'active' kind of equity withdrawal has typically been a small part of the total. 'Passive' equity withdrawal, which occurs through housing turnover, has historically been more important.²

To see how passive housing equity withdrawal works, let's suppose a first-home buyer puts up a 20% deposit to buy a property from a freehold owner for \$500,000. To make things simple let's also suppose we're dealing with a last-time seller – say a deceased estate. The estate's heirs now have up to \$500,000 to spend. Of that \$500,000, \$100,000 is just a transfer from the buyer. However, the other \$400,000 represents an increase in debt.

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¹ See 'Save us!' (20 August 2012) and 'Delever me' (11 September 2012), at http://www.westpac.co.nz/wib/economic-updates/economic-research-and-strategy/.

² We don't have New Zealand evidence, but an Australian survey suggests that most of the value of equity withdrawn in the mid-2000s was the passive result of property turnover (Schwartz et al. (2006), http://www.rba.gov.au/publications/rdp/2006/pdf/rdp2006-08.pdf). UK evidence points to similar conclusions, with last-time sellers playing a particularly large role (see, for example, Reinold (2011), http://www.bankofengland.co.uk/publications/quarterlybulletin/qb110205.pdf).

In practice the chain of house sales leading to a net withdrawal or injection of equity is more complex than in this example – some people along the chain will be trading up, down or sideways. But 'passive' equity withdrawal occurs whenever the amount borrowed by the buyer is greater than the amount the seller reinjects into housing (by paying off mortgage debt, buying another house, or building/renovating a property).

Is this time different?

But haven't NZ households been 'deleveraging'? We would argue that while that may have been true a couple of years ago, it's less and less true now.

Mortgage growth did slow precipitously – and persistently – after the Global Financial Crisis. That slowdown was even bigger than the housing market correction alone would have predicted (figure 1). We suspect a big reason has been existing homeowners paying off their mortgages faster while interest rates are low.

That 'deleveraging' process significantly affected the profile of household borrowing until early 2012. As figure 1 shows, mortgage growth continued to slow even after the housing market started to pick up.

More recently, though, the two have begun to re-sync. Mortgage growth remains lower than before the recession, but it's picked up since early 2012, and indeed now seems to be growing slightly faster than household incomes.

Of course, it may also be that people are saving more of the equity withdrawn from house sales than in the past. For example, household deposit growth has been persistently high in recent years.

Figure 1: House sales and growth in mortgage debt



What does it all mean for household saving?

When we crunch the numbers they suggest that saving rates have already peaked.

Specifically, we can estimate what recent borrowing trends imply for housing equity withdrawal. To allow for the fact that some withdrawn housing equity may be deposited or invested elsewhere, we can then go a step further and estimate what's happened to households' total net equity withdrawal

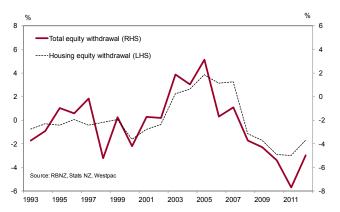
(households' total household borrowing, net of their total investment, not just in housing).³

The results – shown in figure 2 – confirm that there was a major shift away from net equity withdrawal to net injection over 2008-2010. However they also suggest that equity withdrawal has started to rise again.

Last year's housing market upturn resulted in a predictable increase in housing equity withdrawal. Total equity withdrawal also appears to have begun to recover. That's consistent with the latest official estimates of the New Zealand household saving rate, which fell slightly in the year to March 2012.

Details of how we've calculated equity withdrawal are in the appendix. To estimate housing equity withdrawal we've used the change in total mortgage borrowing and our estimates of exearthquake residential investment (quake-related construction is a special case, being mostly insurance-funded). Calculating total equity withdrawal is slightly more involved, drawing on a variety of data on household asset stocks and flows. We've used an approach previously followed by researchers at the RBNZ.

Figure 2: Housing equity withdrawal and total household equity withdrawal, 1993-2012



Where to from here?

Looking ahead, our forecasts suggest that equity withdrawal will continue to rise over the next couple of years – at least until higher interest rates start to bite and the housing market starts to cool. That means that we should expect to see consumption growing faster than incomes. By comparison, the RBNZ is expecting household saving rates to start rising again next year.

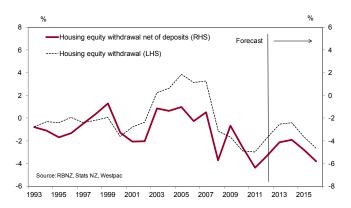
That's shown in figure 3. We've calculated what our forecasts for household debt and ex-quake house-building imply for housing equity withdrawal. As an approximation of total equity withdrawal, we've then also netted out the change in household deposits (we don't know what will happen to the full gamut of household assets).

Importantly, we aren't expecting household borrowing – or housing equity withdrawal – to return to the giddy heights of the mid-2000s. We do expect house prices to rise another 18% over this year and next, and that suggests the pace of household borrowing should pick up further – we think to about 6% annual growth (it's now just under 5%).

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³ Some readers may recognise this measure of total equity withdrawal as the mirror image of the alternative measure of household saving that we presented last year in our article 'Save us!'.

Figure 3: Equity withdrawal - forecasts



As for household deposit growth, consumer confidence has risen appreciably over the last six months, with people feeling less downbeat about their finances and more confident about jobs. That means less need for precautionary saving, suggesting deposit growth will slow modestly from here – we think to about 6-7% a year. Unless we see big increases in households' injections into other assets (such as pension funds or family businesses), the upshot is that housing equity withdrawal should increasingly translate into higher spending.

A virtuous circle?

Housing equity withdrawal is the main way in which rising house prices cause higher consumer spending, but it's probably not the only reason why the two have often followed similar trends. Some of that co-movement probably reflects broader economic trends.⁴

If anything, that increases our confidence that we should expect to see consumer spending pick up in the next few years, along with house prices. Both spending and the housing market respond to similar drivers, such as income growth, migration trends, and economic optimism. We've recently seen most of these turn up, and expect them to pick up further from here. Again, that suggests that a rising housing market will go hand in hand with stronger domestic demand, stronger inflation pressure, and eventually rising interest rates.

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Appendix - our calculations of equity withdrawal in detail

- 1. Housing equity withdrawal is defined as
 - HEW = change in mortgage debt
 - + housing grants
 - residential investment by households (including any transfer costs)
 - net transfers of land and dwellings to households from other sectors.⁵

In our calculations, we've abstracted from housing grants and net transfers of land and dwellings to households. To date, Kiwisaver first home buyer subsidies have been too small to have a significant impact on the results, and our best guess is that land transfers (lifestyle block subdivisions and the like) have broadly moved in line with residential investment.

Official measures of residential investment won't include some household spending on home improvement. Following Smith (2006) we've looked at including retail spending on hardware stores in our estimates, but this mainly seems to change the overall level of housing equity withdrawal, not the shape.

2. Total equity withdrawal is defined as

TEW = change in household debt

- + capital transfers to households
- residential investment by households
- household investment in financial assets
- household net equity injection into privately owned businesses.

In practice, some of these items have a large number of components taken from different data sources. We won't detail these here, but we've hewed closely to the approach developed in Hodgetts et al. (2006) and used in our own article 'Save us!'.⁶ The hardest item to measure is net equity injection into family businesses, however following Hodgetts et al. (2006) we've attempted to account for equity injection into farms.

For calendar 2012 we don't yet have a full set of sectoral national accounts data and have had to make some estimates. In particular, we've assumed that:

- investment in unit trusts increased at the same rate as in 2011
- household consumption of fixed capital was the same share of the housing stock as in 2011
- net purchases of land by households are a constant share of residential investment (about 10%)
- migrant transfers were roughly unchanged from 2011, in line with net migration trends
- agricultural investment broadly moved in line with dairy prices, and net land purchases by farmers moved in line with agricultural investment.

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⁴ That's suggested by studies showing that the housing/consumption link exists for young renters as well as older home-owners – even though rising house prices should make the first group financially worse off. (See Smith (2010), http://www.rbnz.govt.nz/research/discusspapers/dp10_01.pdf.)

⁵ See Smith (2006), http://www.rbnz.govt.nz/research/workshops/14nov06/2895714.pdf.

⁶ See Hodgetts et al (2006), http://www.rbnz.govt.nz/research/workshops/14nov06/2895716.pdf.

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