pensionbriefing

THE UNIVERSITY OF AUCKLAND BUSINESS SCHOOL

A briefing paper from the retirement policy and research centre

Evidence on household wealth from the Reserve Bank

RPRC *PensionBriefing* 04/2008

This *PensionBriefing* analyses the latest (2007) release from the Reserve Bank's annual assessment of assets and liabilities of New Zealand's households.

In summary

Each year, the Reserve Bank publishes information about the assets and liabilities of New Zealand households. Measured in relation to household disposable income, net wealth has more than doubled in the 29 years to 2007. Net housing assets appear to be 72% of total net assets in 2007. However, the Reserve Bank's numbers miss out some of what households own. Including the 'missing' assets would change the picture.

Background

The Reserve Bank of New Zealand (RBNZ) compiles information on the assets and financial obligations of New Zealand households as at 31 December in each year. The most recent data were released in May 2008 and relate to the December 2007 position.

New Zealanders are probably used to hearing they are not good savers; that they rely too much on housing and have borrowed too much. That message may have provided the policy backdrop for initiatives like the New Zealand Superannuation Fund and KiwiSaver.

The evidence for this received wisdom is actually very unclear. The editors of the Retirement Policy and Research Centre's (RPRC) web site PensionReforms (www.PensionReforms.com) have reviewed a number of research papers that raise serious questions about New Zealanders' allegedly poor saving behaviour – see here, here, here and here for reviews of different reports on this issue. A review of the Treasury's unconvincing justification for government interventions to encourage saving is here and of the RBNZ's efforts to explain some of the data difficulties is here.

The RBNZ's evidence based on New Zealanders 'stocks' of assets confirms that New Zealanders have been steadily accumulating net wealth for the last 29 years despite some assets being left out of that analysis.

What the RBNZ collects

At each 31 December, the RBNZ compiles the total of:

- all financial assets and liabilities of New Zealand households, gathered from a number of sources, including surveys of financial institutions carried out by the RBNZ itself, and

- the value of all houses obtained from Quotable Value[1].

The RBNZ then publishes a number of tables, both dollar-based and also calculated in relation to households' total disposable income[2].

Some of the historical data goes back to 1978 – a complete series is available only from 1990.

This *PensionBriefing* uses the data produced by the RBNZ that is related to total household disposable income as this preserves an element of 'real' value over the last 30 years. We suggest this provides a conservative measure for changes in assets and liabilities.

People tend to measure their standard of living in retirement in terms of their income leading up to retirement. It follows that there is some logic in using disposable income as the base against which to measure household wealth in a retirement saving context.

Between 1978 and 2007, nominal (that is, without regard for inflation) household disposable income, as used by the RBNZ, increased from $11 bn to $105 bn. The 2007 figure is 9.5x the nominal 1978 equivalent (an increase of 8.1% a year). In comparison:

- the nominal, pre-tax, national average ordinary time wage increased from $140.65 to $861.55 a week (6.1x or 6.4% a year);
- The Consumer's Price Index increased from 203.25 to 1037.00 (5.1x or 5.8% a year).

So since 1978, nominal household disposable income has increased significantly more than both the nominal pre-tax average ordinary time wage and inflation, as measured by the CPI.

'Wealth' vs, 'saving'

It is important to distinguish these RBNZ numbers from other official statistics on 'household saving' that are often cited in support of the argument that New Zealanders are bad savers.

Macro-economic statistics usually measure 'saving' as the difference between all measured income and expenditure. New Zealand's 'household saving' calculated in this way has been negative since 1993. 'Business saving' and 'government saving' have, however, been positive since 1993[3]. When discussing this 'saving' measure, distinctions (often artificial) have to be drawn between these three categories. The macro-economic statistics measure of saving is a 'flows' measure. Saving as a flow could also be measured as a change in net wealth, while net wealth itself (savings) is a 'stock' measure.

In a retirement saving context, it does not matter so much what individuals have 'put aside' each year for retirement income. It is the real purchasing power of a household's wealth at and in retirement that will underpin the retired household's standard of living.

---

1 This is the value of "all private sector residential dwellings – detached houses, flats, apartments, 'life style blocks' with a dwelling, detached houses converted to flats and 'home and income' properties… Farms and publicly-owned dwellings are not included.

2 "Household disposable income from [Statistics New Zealand] on an SNA basis has consumption of fixed capital and household interest paid (total primary income payable) added back. Imputed rent is included in the income definition."

3 *Selected Issues in the Measurement of New Zealand's Savings*, Statistics New Zealand 2006 – see here.

Rather than saving as a 'flow' concept, this *PensionBriefing* explores 'savings' or net wealth (a stock) to discuss the RBNZ's statistics about what all New Zealand households actually own and owe – in other words, net wealth measured across all households. In the 'stocks' measure, everything is counted, including businesses and directly owned assets.

One important point is that, as discussed below, the RBNZ statistics miss out a significant piece of the households' wealth – that relating to business assets.

The next important point to note is that the RBNZ numbers view all New Zealand households as a group. This is a very approximate look at overall wealth numbers but it is one way of seeing quickly how households as a whole are behaving. A better picture of wealth distribution is possible only through a detailed, time-consuming survey.[4]

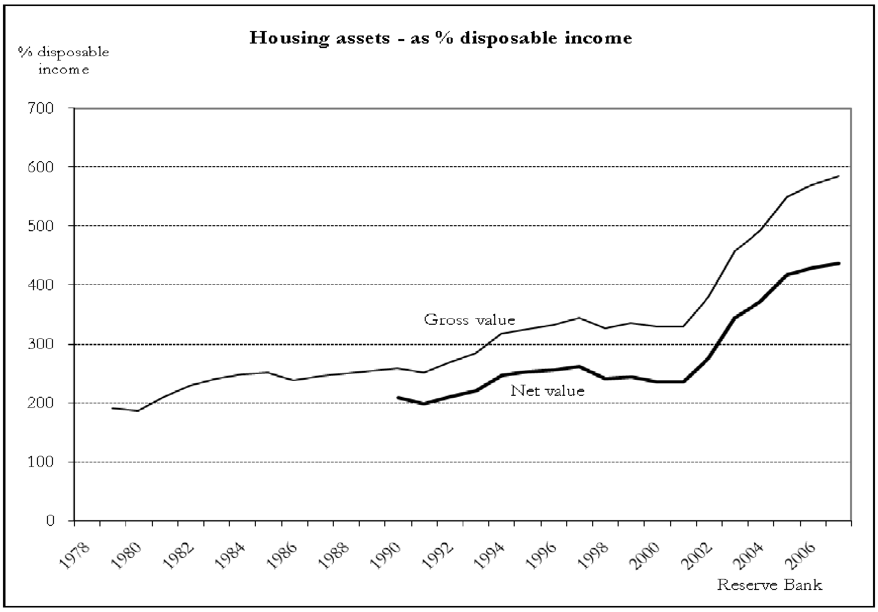
A final point of detail to note is that the RBNZ puts mortgage borrowings into the calculation of financial assets and liabilities to produce the households' 'net financial assets'. In this *PensionBriefing*, we separate financial liabilities into housing debt and 'other'.

With those observations and caveats in mind, we turn our attention to the 2007 numbers.

Value of housing assets

The following charts relate housing liabilities to the housing assets against which they are secured to calculate net housing assets.

Chart 1



Note: The data series for housing values starts in 1979. Financial liabilities were separated between housing and other liabilities only from 1990.

4 Such as the *Household Saving Survey* produced by the Retirement Commission and Statistics New Zealand in 2001.

Chart 1 shows that, in relation to household disposable income, housing debt has increased but not by as much as gross housing value. This gross value has grown from 1.92x disposable income in 1979 to 5.85x in 2007.

Net housing equity has grown from 2.08x in 1990 (the first year for which the information is available) to 4.36x in 2007. Net equity has grown, in relation to disposable income, at 2.6% a year.

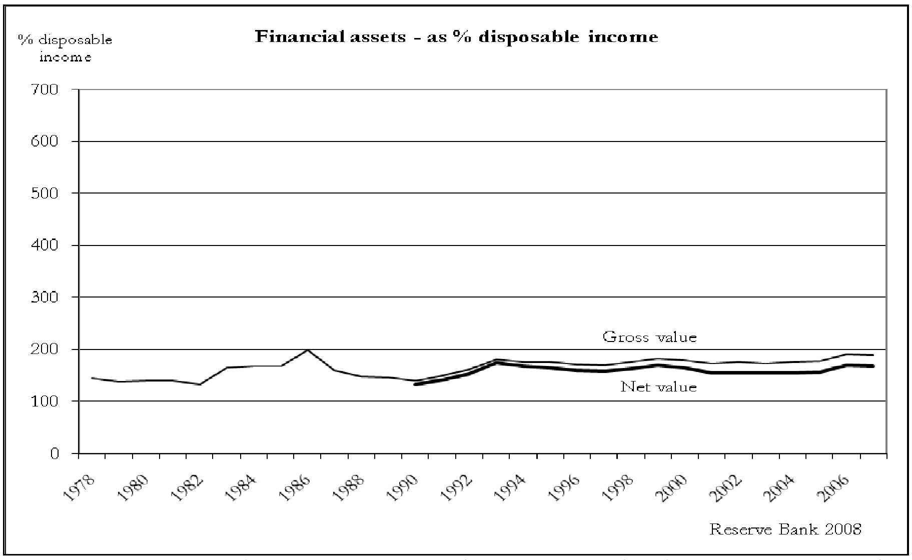
Value of financial assets

Chart 2 looks at just financial assets and liabilities.

"Financial liabilities" exclude housing mortgages, as explained above. What remains are financial liabilities such as credit card debt, hire purchase obligations and other types of loans. Also included as a "financial liability" of households are student loans, which have grown from 0.02x disposable income in 1992 (the year they started) to 0.1x in 2007[5].

"Financial assets" include superannuation, bank deposits and direct investments in shares and bonds.

Chart 2



Note: Financial liabilities were separated in the survey data between housing and other liabilities only from 1990.

Chart 2 shows that, when measured against the disposable income of all New Zealand's households, financial assets have not grown greatly over the 30 years (from 1.45x disposable income in 1978 to 1.67x in 2007)[6].

Financial liabilities (excluding house mortgages) have grown from 0.06x household income in 1990 (the first year for which the information is available) to 0.23x in 2007 and have been static at that level for the last three years. In 2007, 43% of those liabilities were attributable to student loans.

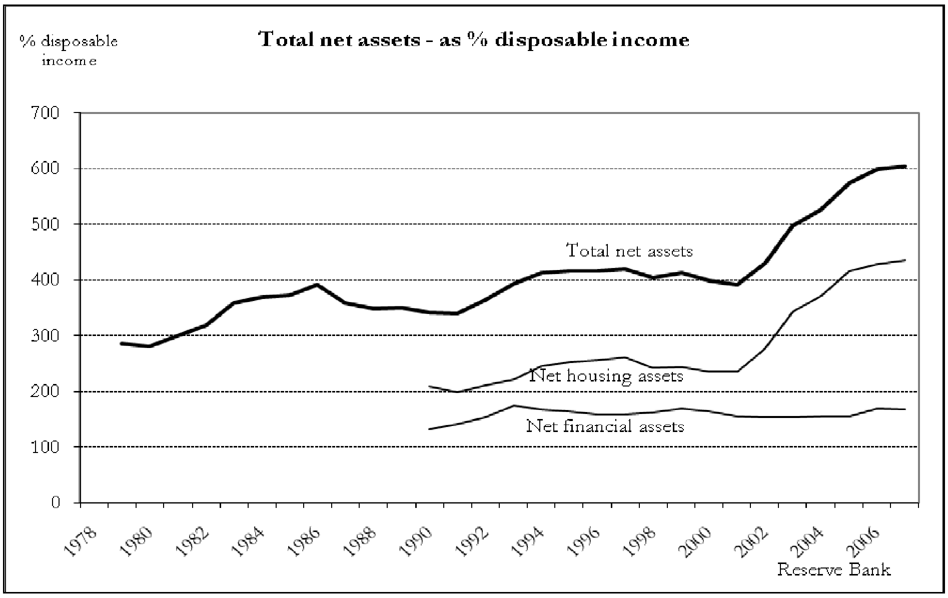
5 As noted in the RBNZ's *Household financial assets and liabilities and housing values: 1978 to 2007*

6 By contrast, the RBNZ's report states that "net financial assets" in December 2007 were only 29% of households' disposable income. That is because the RBNZ deducts house mortgage debt from financial assets rather than from housing assets to which the debt relates.

Net value of households' assets

Chart 3 puts Charts 1 and 2 together.

Chart 3



In summary, the RBNZ finds that the total net worth of all households has grown from 2.85x households' disposable income in 1979 to 6.04x in 2007 (at 2.6% a year).

In other words, using disposable income as the measure, the net worth of New Zealand's households has more than doubled over the last nearly 30 years.

A closer look at the numbers

The following tables look more closely at year by year figures.

Table 1 looks at the numbers in approximate 10 year intervals (the last period is only eight years):

Table 1

Household assets, liabilities and wealth as multiple of disposable income – 1979 to 2007				
	1979	**1989**	**1999**	**2007**
Gross financial assets	1.38x	1.47x	1.76x	1.90x
Non-housing financial liabilities	n.a.	n.a.	0.09x	0.23x
Net financial assets	n.a.	n.a.	1.67x	1.67x
Gross housing assets	1.92x	2.55x	3.27x	5.85x
Housing liabilities	n.a.	n.a.	0.86x	1.49x
Net housing assets	n.a.	n.a.	2.41x	4.36x
Net wealth	2.85x	3.49x	4.03x	6.04x
% p.a. increase since 1979	-	2.0%	1.4%	2.6%

Note: The financial liabilities for 1979 and 1989 were not divided in the data between housing liabilities and other liabilities.

Table 1 shows a relatively rapid rise in households' net wealth as a percentage of disposable income, from 2.85x in 1979 to 6.04x in 2007 – an average increase of 2.6% a year.

Table 1 also shows that housing debt itself has grown in the eight years to 2007 by 0.63x disposable income (from 0.86x to 1.49x). However, net housing assets have grown by much more – by 1.95x disposable income (from 2.41x to 4.36x). On the face of it, New Zealanders as a whole have made a wise choice in their housing investment (so far). It remains to be seen how current changes in the value of houses affect this.

The average increase in net wealth as a proportion of disposable income, as shown in Table 1, has been about 1.5%-2.5% a year over the four measured periods.

Table 2 looks at these same numbers but for just the last four years:

Table 2

Household assets, liabilities and wealth as multiple of disposable income – 2004 to 2007				
	2004	**2005**	**2006**	**2007**
Gross financial assets	1.76x	1.79x	1.92x	1.90x
Non-housing financial liabilities	0.21x	0.21x	0.23x	0.23x
Net financial assets	1.55x	1.55x	1.56x	1.67x
Gross housing assets	4.93x	5.50x	5.70x	5.85x
Housing liabilities	1.21x	1.33x	1.41x	1.49x
Net housing assets	3.72x	4.17x	4.29x	4.36x
Net wealth	5.26x	5.74x	5.98x	6.04x
% increase over last year	-	+9.1%	+4.2%	+1.0%

Table 2 shows that a large increase in net assets occurred in 2005 in relation to disposable income.

Chart 4 shows the percentage change, in net wealth year on year, since 1979, again measured in relation to households' nominal disposable income:

Chart 4

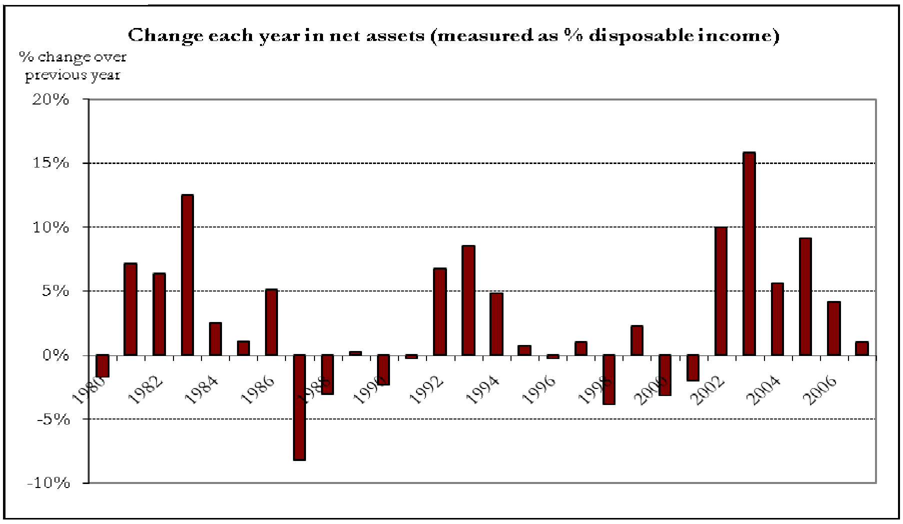


Chart 4 shows a cyclical pattern – there were significant increases in net wealth, calculated in relation to disposable income, in the early years of each of the last three decades. Those have been followed by periods of flat or even negative changes with the largest fall (-8%) occurring in 1987 - the year of the share market crash.

Nine of the measured periods in Chart 4 showed falls in all households' net assets when measured against all disposable income.

This *PensionBriefing* explained above (page 2) that saving is measured in the System of National Accounts as a flow: the difference between income and expenditure in a year. The change in net wealth from year to year, including changes in the capital value of assets in that year, is another way of measuring saving and this is indicated in Chart 4.

The 'stocks' measure of net wealth (referred to as savings) is the accumulated saving over time plus asset value changes.

The 'missing' assets

As noted previously, the RBNZ's numbers do not count all household assets. Most significantly, they miss out most of the business assets owned by households. Before looking at that in more detail, we need to expand on some definitions.

The RBNZ counts assets and liabilities in the balance sheets of all New Zealand households using readily accessible statistics on financial investments, house values, and bank and other borrowings. Values of other assets, especially those that are owned by households but that would be put into the "business" category of the System of National Accounts, are far more difficult to locate or calculate.

Business loans are also an extension (and, ultimately the liability) of the "household". In a country like New Zealand, "businesses" and "households" are closely linked. In fact, it might seem surprising to see them treated separately, particularly in the context of measures of wealth. For example, a farmer's "household" is usually also the farmer's "business". Money borrowed for one might be used in the other but when the farmer retires, the farm is sold, liabilities are repaid and the net proceeds invested for income. The "business" effectively disappears in favour of investments now owned by the "household" but they were always owned by the "household".

For the purpose of assessing whether or not Kiwis are saving, the farmer's 'savings' need to include the net value of the business assets; and so it is for all businesses. Working out what the value of a farm is might be difficult but not as difficult as working out the value of unlisted businesses. However, 'wealth' is what really matters rather than which sector of the economy owns that wealth.

The RBNZ calls its report *Household financial assets and liabilities and housing values* and those specific items are what the report actually measures. However, when we think about what matters in discussions about New Zealanders' saving behaviour, net financial assets and housing are important but are by no means all that matters.

If we want a proper measure for those discussions then all of the assets and liabilities of New Zealand's households should be included. The title of that fuller analysis should move away from the "household" reference, given its association in the System of National Accounts with the expression "household saving"[7] and the artificial distinctions between "households" and "businesses". If the RBNZ's report were a true measure of what New Zealanders owned and owed, it would also need to include "net wealth" in its title.

---

7 "Household saving" is in fact nothing to do with "saving' in the usual sense of that word. It is only the difference between all measured income and all measured spending.

The RBNZ itself acknowledges that its annual series gives only a partial view of the assets of New Zealand's households. As the RBNZ says, "Significant elements of household net worth are not represented."

The RBNZ's report includes this list of the 'missing' assets:

- "Equity in farms
- Equity in unincorporated businesses
- Shares in unlisted incorporated businesses
- Capitalisation of the New Zealand Alternative Market (NZAX), the 'second board' of the New Zealand Stock Exchange
- Direct ownership of assets such as forests
- Consumer durables
- Overseas property owned by New Zealand residents
- Non-equity overseas financial assets
- Notes and coin held by households."[8]

The RBNZ also says that "In addition, it is likely that direct ownership by NZ residents of overseas equities is underestimated in the series presented here."

These are significant omissions in New Zealand's context. In essence, the business assets owned directly by households (other than most locally listed shares) are not counted and, probably, most of households' overseas assets as well[9].

We understand that some work is underway to address these shortcomings but it will not be an easy task. In the meantime, those who use the RBNZ numbers to comment on the financial behaviour of New Zealanders need to take great care to identify the omissions. They have the effect of understating the net worth of New Zealand households to an uncertain degree.

To illustrate the potential significance of these gaps, an informal estimate of most of the 'missing' assets in 2004 showed that the estimated value was about the same amount as the total of all household debt in that year (housing mortgages included). Based on Table 2, that was 1.34x disposable income. Even that estimate missed some assets such as all directly owned commercial real estate and overseas assets so it was also an underestimate.

Importantly, the list of omissions noted by the RBNZ overlooks another significant issue. While the value of the assets missing from the RBNZ's data is unknown, the amount of debt taken on directly by households to acquire some of those assets is known[10]. New Zealand business owners often finance their businesses by borrowing on the security of their homes. That's because it is a more efficient, less restrictive and cheaper way to borrow.

The RBNZ's numbers will count those "business debt" borrowings as "housing debt". As far as we know, there is no information as to what proportion of "housing debt" is in

---

8 *Household financial assets and liabilities and housing values: 1978 to 2007*

9 New Zealand domiciled managed funds (such as superannuation schemes) aside. These will all be included in the RBNZ statistics as such schemes must file RBNZ returns.

10 This also applies to student debt where the liability (the loan) is counted but not the human capital asset acquired (knowledge and skills).

fact "business debt" but anecdotal comment suggests that it could be between one tenth and one fifth of all debt that is currently classified as for housing.

This illustrates again the difficulties involved in treating "household" assets and liabilities separately from "business" assets and liabilities.

Drawing conclusions from the RBNZ numbers

Because the RBNZ numbers do not cover all household assets, it is not possible to draw conclusions about whether New Zealanders are 'bad' accumulators of assets or even whether households have too high a proportion of housing assets or debt on their 'balance sheets'. The last time there was a detailed look at households' 'balance sheets', it seemed that only 43% of the total assets of all New Zealand's 'economic units' was in residential real estate of all kinds (homes, holiday homes, investment properties and time-share arrangements)[11].

Although housing assets may fall in value over the coming 1-2 years, even in real terms, that is unlikely to make a significant difference to the relatively positive picture the RBNZ data portrays up to December 2007 at least. According to the RBNZ numbers, as published, the total net wealth of all New Zealand's households (measured in relation to total 2007 disposable income) would have to fall by more than 35% to return to RBNZ's measured net wealth position -when the year on year change was last negative in 2001. And that would still take no account of the assets that are 'missing' from the RBNZ analysis.

For comments on this briefing paper and for further information please contact:

Michael Littlewood
Co-director, Retirement Policy and Research Centre
University of Auckland
Private Bag 92 019
Auckland 1142
New Zealand

E Michael.Littlewood@auckland.ac.nz
P +64 9 92 33 884 DDI
M +64 (21) 677 160
http://www.rprc.auckland.ac.nz
http://www.PensionReforms.com

11 *The net worth of New Zealanders*, The Retirement Commission and Statistics New Zealand, 2002. The same survey found that 19% of the assets of all New Zealand "economic units" comprised farms, businesses and commercial property.