

**Income Security, Poverty and Housing  
among Older People  
New Zealand Longitudinal Study of Ageing  
(NZLSA)**



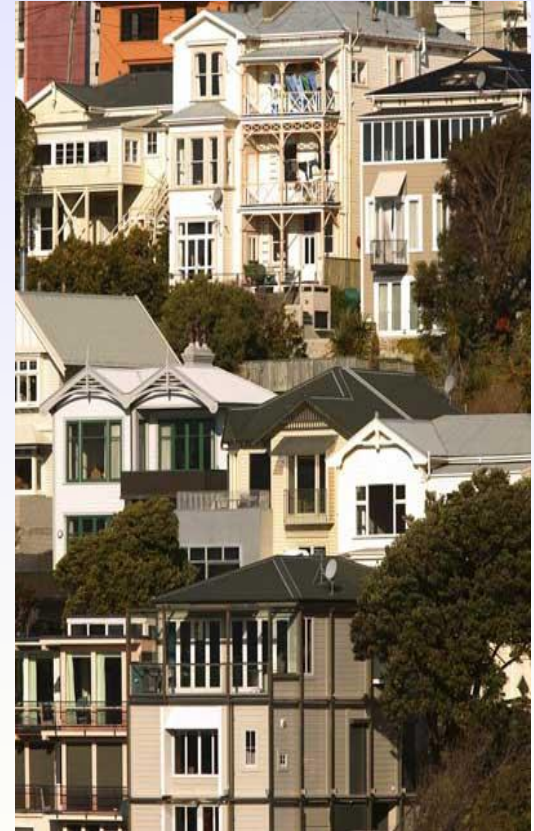
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# Critical Factors that Protect Older New Zealanders from Falling Deeply into Poverty

- The fundamental importance of the universal NZ Superannuation payments.
- The high level of home ownership among the older population 65 years and over has been critical to preventing them from dipping below the poverty threshold.
- Both are susceptible to change and the results of such change could lead quickly to high levels of poverty among the new older population.



# Threats and Challenges for the 'Baby-boomers' as they Become Old

- NZS depends upon political will for its sustainability.
- Debate continues about the level of payments, the age of eligibility and current contributions into the New Zealand Superannuation Fund.
- The increasing trend of falling home ownership could present serious poverty problems if it continues.
- Asset accumulation during the life course, including low income households, can be protective for older citizens and enhance health and wellbeing.



# Median and Mean Before and After Tax Personal and Household Income

Personal Income Before Tax Median	Personal Income Before Tax Mean	Household Income Before Tax Median	Household Income Before Tax Mean
\$33,996.15	\$79,965.86	\$59,993.09	\$123,215.80
Personal Income After Tax Median	Personal Income After Tax Mean	Household Income After Tax Median	Household Income After Tax Mean
\$27,849.98	\$56,765.45	\$47,844.76	\$88,367.12





# Household Income by Age

Age Cat	Before Tax Household Income Mean	After Tax Household Income Mean	N
50-54	128,521	93,710	743
55-59	109,755	80,699	570
60-64	97,366	72,049	541
65-69	75,527	57,432	415
70-74	92,873	66,912	323
75-79	44,695	34,504	242
80-84	38,010	30,314	178

F-test statistic had a p-value of <0.001



# Three Poverty Thresholds

1. 50% of median, equivalent, disposable, household income as applied by OECD and Australia. (Median, equivalent, disposable, household income for NZ in 2010 was \$48,615.38)
2. 60% of median, equivalent, disposable, household income as applied in the European Union as the income indicator of social exclusion and in the UK. (Median, equivalent, disposable, household income for NZ in 2010 was \$48,615.38)
3. A constant value threshold benchmarked to the 2007 median, but adding the cost of living for each year thereafter. 60% of constant value threshold, equivalent, disposable, household income after housing costs estimated at 25%. This type of constant value measure is applied in both the UK and NZ. It is the measure used in both the Social Reports and the Household Incomes in New Zealand Reports published regularly by the Ministry of Social Development. (Constant value threshold, equivalent, disposable, household income for NZ in 2010 was \$44,307.69)



# Percentage Below Each Poverty Threshold

50% of median, equivalent, disposable, household income  
**10.5 percent**

60% of median, equivalent, disposable, household income  
**20.5 percent**

60% of constant value threshold, equivalent, disposable,  
household income after housing costs estimated at 25% of  
income  
**16.0 percent**



# WHOQoL-8 (a 5 point scale) and CASP-12 (a 4 point scale) Sample Questions

## WHOQoL questions

How satisfied are you with your health?

How satisfied are you with your ability to perform your daily living activities?

How satisfied are you with yourself?

How satisfied are you with your personal relationships?

## CASP questions

My age prevents me from doing the things I would like to.

I feel that what happens to me is out of my control.

I feel left out of things.

I can do the things that I want to do.





# Poverty and Wellbeing

We tested the relationship of those above and below all three poverty thresholds with the two scales of wellbeing WHOQoL-8 and CASP-12

We found highly significant relationships between the poverty thresholds and the wellbeing scales with substantially lower wellbeing scores for those below the poverty threshold.

1. 50% of median, equivalent, disposable, household income - T-test statistic had a p-value of  $<0.001$ .
2. 60% of median, equivalent, disposable, household income - T-test statistic had a p-value of  $<0.001$ .
3. 60% of constant value threshold, equivalent, disposable, household income after housing costs estimated at 25% of income - T-test statistic had a p-value of  $<0.001$ .



# Poverty and Wellbeing for Māori and Non-Māori

50% of median, equivalent, disposable, household income

T-test statistic had a p-value of  $<0.001$  for Māori and Non-Māori applying WHOQoL-8 and CASP-12

60% of median, equivalent, disposable, household income

T-test statistic had a p-value of  $<0.001$  for Māori and Non-Māori applying WHOQoL-8 and CASP-12

60% of constant value threshold, equivalent, disposable, household income after housing costs estimated at 25% of income

T-test statistic had a p-value of  $<0.001$  for Māori and Non-Māori applying WHOQoL-8 and CASP-12



# Poverty, Health and Depression

We tested the relationship of those above and below the 60% CV poverty threshold applying the SF-12 Physical and Mental Health Scales and the CES-D-10 Depression Scale.

We found significant relationships between the poverty threshold and both the Health and Depression Scales with substantially lower health and higher depression scores for those below the poverty threshold.

1. SF-12 Physical Health - T-test statistic had a p-value of  $<0.001$ .
2. SF-12 Mental Health - T-test statistic had a p-value of  $<0.001$ .
3. CES-D-10 Depression - T-test statistic had a p-value of  $<0.001$ .



# Total Worth of Assets not including the Family Home

	Percent	Cumulative Percent
Loss	2.3	2.3
\$0	1.9	4.1
\$1 to \$5,000	3.0	7.2
\$5,001 to \$10,000	2.6	9.7
\$10,001 to \$25,000	6.1	15.8
\$25,001 to \$50,000	6.3	22.1
\$50,001 to \$100,000	10.9	33.0
\$100,001 to \$250,000	17.5	50.5
\$250,001 to \$500,000	23.6	74.0
\$500,001 to \$1,000,000	14.5	88.6
\$1,000,001 to \$1,500,000	5.1	93.6
\$1,500,001 to \$2,000,000	3.0	96.6
\$2,000,001 or more	3.4	<b>100.0</b>
<b>Total</b>	<b>100.0</b>	





# Assets and Wellbeing

We tested the relationship between asset accumulation and wellbeing applying WHOQoL-8 and CASP-12 scales.

We found significant relationships between asset accumulation and the wellbeing scales with substantially higher wellbeing scores for those with more assets.

The correlation between asset accumulation and wellbeing, using Pearson's  $r$ , was significant (2-tailed) at the  $<0.01$  level:

- WHOQoL-8  $<0.01$  (correlation coefficient .319)
- CASP-12  $<0.01$  (correlation coefficient .274)



# Assets and Wellbeing for Māori and Non-Māori

We tested the relationship between asset accumulation and wellbeing applying WHOQoL-8 and CASP-12 scales with Māori and Non-Māori.

We found significant relationships between asset accumulation and the wellbeing scales for Māori and Non-Māori with substantially higher wellbeing scores for those with more assets.

The correlation between asset accumulation and wellbeing, using Pearson's  $r$ , for Māori and Non-Māori was significant (2-tailed) at the  $<0.01$  level:

WHOQoL-8  $<0.01$  (Māori correlation coefficient .294 and Non-Māori correlation coefficient .312)

CASP-12  $<0.01$  (Māori correlation coefficient .191 and Non-Māori correlation coefficient .281)



# Assets, Health and Depression

We tested the relationship between asset accumulation and health and depression applying the SF-12 and CES-D-10 scales.

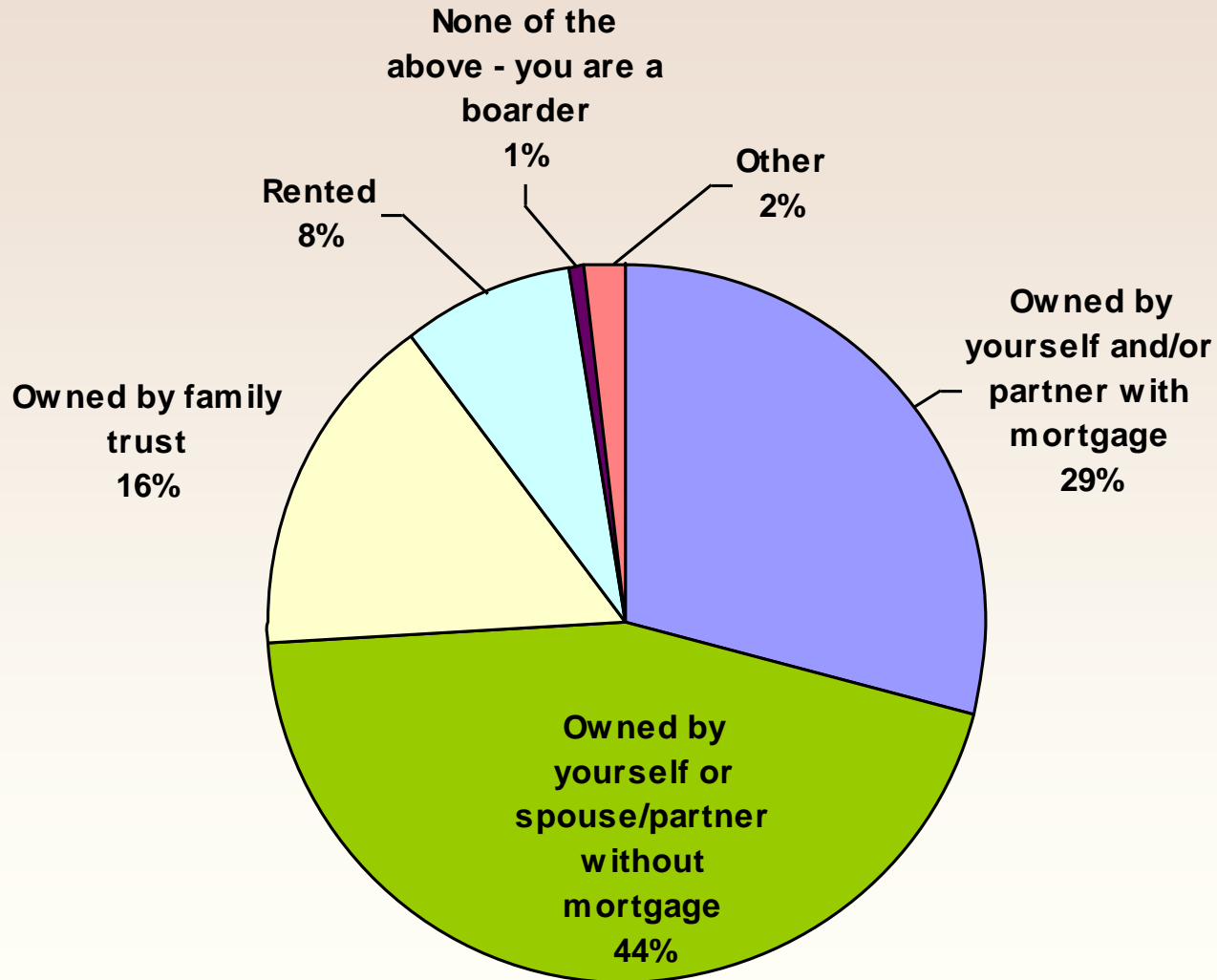
We found significant relationships between asset accumulation and the health and depression scales with substantially higher health scores and lower depression levels for those with more assets.

The correlation between asset accumulation and health and wellbeing, using Pearson's  $r$ , was significant (2-tailed) at the  $<0.01$  level:

- SF-12 Physical Component  $<0.01$  (correlation coefficient .222)
- SF-12 Mental Component  $<0.01$  (correlation coefficient .125)
- CES-D-10  $<0.01$  (correlation coefficient -.231)



# Residence Ownership Status





# Housing Tenure and Wellbeing

We tested the relationship between housing tenure and wellbeing applying the two scales of wellbeing WHOQoL-8 and CASP-12

The tenure categories were: Owned and Not Owned.

We found a statistically significant relationship between housing tenure and wellbeing. Those in the Ownership categories had higher wellbeing scores.

- Housing tenure and WHOQoL-8 T-test statistic had a p-value of <0.001.
- Housing tenure and CASP -12 T-test statistic had a p-value of <0.001.



# Housing Tenure and Wellbeing for Māori and Non-Māori

We also found statistically significant relationships between housing tenure and wellbeing for Māori and Non-Maori. Those in the Ownership categories had higher wellbeing scores.

## Maori

Housing tenure and WHOQoL-8 T-test statistic had a p-value of  $<0.001$ .

Housing tenure and CASP -12 T-test statistic had a p-value of  $<0.001$ .

## Non-Māori

Housing tenure and WHOQoL-8 T-test statistic had a p-value of  $<0.001$ .

Housing tenure and CASP -12 T-test statistic had a p-value of  $<0.001$ .



# Housing Tenure, Health and Depression

We tested the relationship between housing tenure, health and depression applying the SF-12 and CES-D-10 scales.

We found significant relationships between housing tenure and the health and depression scales with substantially higher health scores and lower depression levels for those who owned their own homes.

- Housing tenure and SF-12 Physical Component T-test statistic had a p-value of  $<0.001$ .
- Housing tenure and SF-12 Mental Component T-test statistic had a p-value of  $<0.001$ .
- Housing tenure and CES-D-10 T-test statistic had a p-value of  $<0.001$



# Private Dwelling Estimates by Tenure (%)

Period	Owner-occupied <sup>1</sup>	Rented
30 June 1991	73.6	23.1
30 June 1996	70.5	25.6
30 June 2001	67.8	29.0
30 June 2006	66.9	28.9

<sup>1</sup> Includes dwellings owned by individuals or held in a family trust (from 2006)





# Multiple Regression of Wellbeing 1

- To further investigate the impact of poverty, asset accumulation and housing tenure on wellbeing, we estimated a multiple regression using wellbeing as the dependent variable, and the three factors as the independent variables.
- The results applying the WHOQoL-8 scale showed:
  - F-test statistic had a p-value of  $<0.001$ . This tested the whole model.
  - T-test of significance of the ***poverty, asset accumulation and housing tenure*** coefficients in front of each variable had a p-value of  $<0.001$ .



# Multiple Regression of Wellbeing 2

- To further investigate the impact of poverty, asset accumulation and housing tenure on wellbeing, we estimated a multiple regression using wellbeing as the dependent variable, and the three factors as the independent variables.
- The results applying the CASP-12 scale showed:
  - F-test statistic had a p-value of  $<0.001$ . This tested the whole model.
  - T-test of significance of the ***poverty and asset accumulation tenure*** coefficients in front of each variable had a p-value of  $<0.001$ , but the ***housing tenure*** coefficient showed no significant relationship.



# Multiple Regression of Physical Health

- To further investigate the impact of poverty, asset accumulation and housing tenure on wellbeing, we estimated a multiple regression using physical health as the dependent variable, and the three factors as the independent variables.
- The results applying the SF-12 Physical Component scale showed:
  - F-test statistic had a p-value of  $<0.001$ . This tested the whole model.
  - T-test of significance of the ***poverty and asset accumulation*** coefficients in front of each variable had a p-value of  $<0.001$ , but the ***housing tenure*** coefficient showed no significant relationship.



# Multiple Regression of Mental Health

- To further investigate the impact of poverty, asset accumulation and housing tenure on wellbeing, we estimated a multiple regression using mental health as the dependent variable, and the three factors as the independent variables.
- The results applying the SF-12 Mental Component scale showed:
  - F-test statistic had a p-value of  $<0.001$ . This tested the whole model.
  - T-test of significance of the **asset accumulation** coefficient had a p-value of  $<0.001$ , **poverty** a p-value of  $<0.013$ , but the **housing tenure** coefficient showed no significant relationship.



# Multiple Regression of Depression

- To further investigate the impact of poverty, asset accumulation and housing tenure on wellbeing, we estimated a multiple regression using depression as the dependent variable, and the three factors as the independent variables.
- The results applying the CES-D-10 scale showed:
  - F-test statistic had a p-value of  $<0.001$ . This tested the whole model.
  - T-test of significance of the ***poverty and asset accumulation*** coefficients in front of each variable had a p-value of  $<0.001$ , and the ***housing tenure*** coefficient showed a p-value of  $0.001$ .





# Summary and Conclusions

- Wellbeing/Quality of life is the primary goal of social policy. Two quite different wellbeing/quality of life scales were applied and both demonstrated similar results
- Good health is another major goal of social policy and ill-health impacts severely on fiscal policy and government costs
- Depression is a state of mind that leaves people more susceptible to mental and physical ill-health and a negative view of their quality of life.
- The data here demonstrates consistent statistically significant relationships between income, asset accumulation and housing tenure on the one hand and wellbeing/quality of life, physical and mental health and depression on the other hand. Low incomes, low asset accumulation and renting are consistently associated with low levels of wellbeing, low levels of physical and mental health and higher levels of depression.
- Asset accumulation was the most consistent independent variable linked to the positive outcomes measured in this presentation suggesting that savings behaviour even within low income households is protective.



- Asset accumulation and income are more consistently associated with the good outcomes than homeownership, even though homeownership is significantly associated with them.
- If older people drop below the poverty threshold in larger numbers in the future, it can be expected that their quality of life will reduce and their health will deteriorate.
- Those with a capacity to plan beyond the present through saving can be expected to offset some of the negative outcomes identified in the presentation.
- Given the age associated demographic shift that is currently taking place, these results present serious policy challenges with regard to:
  1. ongoing income adequacy
  2. education about and opportunities for savings and asset accumulation
  3. adequate social housing provision.

