

Household Net Worth Statistics: Year ended June 2015

Embargoed until 10:45am - 28 June 2016

Key facts

For the year ended June 2015:

- The median total net worth of New Zealand households was \$289,000.
- Household wealth in New Zealand was concentrated in the top 20 percent of New Zealand households, which held about 70 percent of total household net worth.
- Owner-occupied dwellings, and investments in shares and other equity, each accounted for about 30 percent of a household's total assets.
- The individual net worth of New Zealanders increased with age. Young people (15–24 years) had the lowest median individual net worth (\$1,000) and older people (65+) had the highest (\$288,000).
- The European population had a higher net worth than other ethnic groups (\$114,000). This compared with \$23,000 for people of Māori ethnicity, \$12,000 for Pacific people, and \$33,000 for the Asian ethnic group.

Authorised by Liz MacPherson, Government Statistician ISSN 2463-6274 28 June 2016



Commentary

- Household and individual net worth
- Distribution of net worth
- Wealthy households have a bigger share of financial assets
- The house we live in is our biggest asset
- Net worth increases with age
- Ethnicity differences appear for net worth

This release provides a picture of the net worth (wealth) of New Zealanders, by looking at their household assets – financial and non-financial – and their liabilities.

See data quality for more details on the concepts and methods we used.

Household and individual net worth

Median New Zealand **household** net worth was \$289,000 in 2014/15. The median value of household assets (what is owned) was \$400,000, and the median value of liabilities (what is owed) was \$51,000.

The median net worth of **individuals** was \$87,000. The median value of an individual's assets was \$160,000; the median value of an individual's liabilities was \$28,000.

Distribution of net worth

Household net worth is not distributed evenly



Source: Statistics New Zealand

The graph illustrates there is a larger proportion of households near the lower end of net worth. Five percent of households had negative net worth, and the largest proportion of households (25 percent) had a net worth between zero and \$100,000. At the higher end of the distribution, 8 percent of households had a net worth above \$1.5 million. This is why the mean (\$631,000) is greater than the median value (\$289,000).

Twenty percent of households (the top quintile) accounted for around 70 percent of total household net worth. In contrast, 40 percent of households (the bottom two quintiles) owned just 3 percent of all household wealth.

Household net worth



1. Under \$39,500_2. \$39,500 to \$183,699_3. \$183,700 to \$399,799_4. \$399,800 to \$814,799_5. \$814,800+ Note: Total net worth forquintile 1 is suppressed Source: Statistics New Zealand

2

The top 10 percent of New Zealand households accounted for around half of total net worth. This is a wealth pattern consistent with the OECD average across countries for which data is readily available. The top 1 percent of New Zealand households had 18 percent of total net worth – the same as the OECD average, but slightly higher than in Australia (where the top 1 percent has 13 percent of net worth).

3

Net worth quintile

4

5





Individual net worth is more concentrated

1

The concentration of wealth for individuals in the top percentiles increased slightly over the past decade. In 2014/15, the top 10 percent of individuals accounted for around 60 percent of net worth, compared with the average of around 55 percent from the Survey of Family, Income and Employment (SoFIE) collections between 2003 and 2010.

Measuring net worth distribution



Wealth shares of individuals - top percentiles

Source: Statistics New Zealand

An alternative way of looking at the (in)equality of net worth distribution is to consider the ratio of mean (average) net worth to median net worth. This is a simple measure of wealth inequality; a value greater than one indicates that most households have net worth less than the average. The larger the ratio, the more the distribution of net worth is concentrated in the wealthy. As the graph below shows, New Zealand is in the middle of the OECD distribution for this measure.



Source: Statistics New Zealand, OECD

Wealthy households have a bigger share of financial assets

Higher quintile households had a greater share of their assets in financial assets (which includes cash and deposits, shares, equity in trusts and businesses, and other financial investments). Approximately two-thirds of household assets for the top quintile were accounted for by financial assets; for other quintiles, the figure was around 20 percent.



Source: Statistics New Zealand

Looking at a more-detailed asset breakdown, the 'other household financial assets' category (which includes shares, equity in trusts and businesses, and other financial investments) accounted for most of the difference between quintiles. This category made up over half of the top quintile's total assets.



The difference reflects the ability of the higher quintile households to invest in financial assets, due to their lack of debt (relative to lower quintile households), as shown in the graph below.



Household liabilities as a proportion of total assets

1. Under \$39,500 2. \$39,500 to \$183,699 3. \$183,700 to \$399,799 4. \$399,800 to \$814,799 5. \$814,800+ Source: Statistics New Zealand

Less well-off households owe as much as they own

The relatively high debt for households in the bottom quintile is reflected in the fact that for every dollar of asset a household in the bottom quintile owned, there was a liability of just over a dollar. This contrasted with the highest quintile, which had only four cents of liabilities for every dollar's worth of assets.

Ratio of household liabilities to household assets by net worth quintile			
Year ended June 2015		Liphilition (f)	
Quintile	Assets (\$)	Liabilities (\$)	
1	1	1.07	
2	1	0.44	
3	1	0.29	
4	1	0.16	
5	1	0.04	
Total households	1	0.12	

The concentration of financial assets in the higher quintiles is illustrated by the Lorenz curves for the asset types. A Lorenz curve is a graphical representation of the distribution of wealth, represented in the example below by household assets. The cumulative percentage of each household asset is plotted against the cumulative percentage of the population. The diagonal 45 degree line represents a hypothetical situation where wealth is equally shared among all members of the population. The extent to which the curve sags below this line indicates the degree of inequality of distribution.

We see the 'other financial assets' category has by far the most-unequal distribution, reflecting the concentration of this asset type in the top quintiles. In contrast, real estate ownership is much more evenly distributed – for those who own property.



The house we live in is our biggest asset

Just over half (51 percent) of all New Zealand households own the house they live in. Almost one-third (30 percent) of a household's total asset value is this house. This does not include dwellings owned through trusts or businesses.

For households that own their own homes, the home's median value tended to increase with the household's net worth quintile. While the median house value for households in the bottom quintile was \$219,000, it was \$617,000 for those in the top quintile.



Median value of owner-occupied dwellings and mortgages

By household net worth quintile Year ended June 2015

1. Under \$39,500 2. \$39,500 to \$183,699 3. \$183,700 to \$399,799 4. \$399,800 to \$814,799 5. \$814,800+ Note: lines show standard error range Source: Statistics New Zealand

Nearly three in five (56 percent) New Zealand households living in their own home had a mortgage; the median mortgage was \$172,000.

As expected, households in the lowest net worth quintile had a lot more debt on their houses than those in the higher quintiles.

Most debt tied up in housing

For every one dollar of assets, New Zealand households had 12 cents of debt in 2014/15. These liabilities included mortgages, education loans, and loans for items such as furniture and cars.

Almost all household debt was tied up with property. Unsurprisingly, mortgages for the home people were living in made up most household debt – over 60 percent of all household liabilities. The next-largest amount of debt was from loans for other real estate – almost one-quarter (24 percent) of all household debt.

Proportions of total household liabilities



Source: Statistics New Zealand

Other real estate held by households

More than 1 in 10 (14 percent) of New Zealand households own real estate other than the home they live in.

Holiday homes, timeshares, commercial and residential investment properties, and land are part of the 'other real estate' category. This accounted for 16 percent of the total non-financial assets held by New Zealand households, and 8 percent of their total household asset value.

Of the households that own other real estate, 6 in 10 (60 percent) had an outstanding loan on the property. The median mortgage for these properties was \$167,000.

The median value of other real estate was \$285,000. Not surprisingly, those in the highest net worth quintile also had the highest median value – \$420,000 worth of other real estate.

Property in trusts

Other than property held directly by New Zealand households, some property (both owneroccupied and other property) was held through family trusts. About 12 percent of owner-occupied dwellings were held by trusts.

The proportion of New Zealand households living in owner-occupied dwellings increases to 59 percent (from 51 percent) when we include dwellings owned by a trust.

One-fifth of households are involved with trusts

Almost one-fifth of New Zealand households (19 percent) had involvement in a trust (322,000 households). This means at least one household member was involved as a settlor, beneficiary, trustee, or with another type of involvement, but excludes those who are only independent trustees.

For households with assets in their trust, the median value of those assets was around \$700,000. For households that had liabilities in their trust, the median value of those liabilities was close to \$300,000. These values are quite large as a big proportion of trust assets and liabilities relate to farms and owner-occupied dwellings.

Household asset and liability holdings in trusts by households						
Year ended June 2015						
	Median		Mean		Total	
	\$(000)	RSE	\$(000)	RSE	\$(million)	RSE
Assets	683	28	1,693	25	276,229	30
Liabilities	297	52	804	48	48,527	58

<u>See data quality</u> for information on how trust wealth was distributed, and how we collected data on trusts.

We collected several demographic characteristics at the individual level. This allows us to make observations about the net worth of individual people. We now look at two of these characteristics (age and ethnicity).

Net worth increases with age

Median individual net worth increases with age. Young people (15–24 years) had the lowest median individual net worth (\$1,000), and older people (65+) had the highest (\$288,000).

Generally, older people have accumulated net worth over their life time. They tend to own their own home outright or have retirement savings by the time they reach retirement age. This is why, on average, their net worth tends to be higher than for other age groups.



Source: Statistics New Zealand

Younger people are more heavily indebted, with 15 to 24-year-olds having debt of around 50 percent of the value of their assets, on average. Most of this debt is for education loans, which accounted for 70 percent of young people's debt. Not many young people own their own home – only 2 percent of young people live in a house they own; they had less than 1 percent of the total assets held in owner-occupied dwellings.

People aged 25 to 44 years old had, on average, debt of around 30 percent of the value of their assets. Although they accounted for around half the total education loans, they also had mortgage debt – 90 percent of their debt related to property.

Individuals aged 45 to 64 years continued the trend of paying down their debt, reducing it to around 10 percent of the value of their assets in 2014/15.

By the time people are 65+, most of their debt is paid off. Residual debt accounted for around 2 percent of their total assets. Two-thirds of this debt was associated with mortgages on the house they lived in -9 percent of people aged 65 + still had a mortgage to pay.



Individuals aged 45 to 64 years had the highest proportion of total assets held in owner-occupied dwellings (48 percent). They also held half of all pension and superannuation savings in New Zealand. This could be because the closer a person is to retirement, the more they tend to have saved, partly through having had more time to establish their nest egg.

Ethnicity differences appear for net worth

Since wealth increases with age, the wealth profile of ethnic groups will be affected by their differing age structures. This makes direct comparisons between ethnic groups misleading. To mitigate the effects of the Māori and Pacific populations having a much younger age structure than the total population, we have adjusted for age through age standardisation. The graph below shows how age standardisation affects the median net worth of ethnic groups.

All statistics analysed by ethnicity referred to in this release, including the tables, are age standardised.



Even after removing the effects of age on the ethnicity data, it is evident there was a large difference in the median net worth of European people, compared with other ethnic groups. The median net wealth of European people was \$114,000, more than three times that of the Asian population (\$33,000), five times that of Māori (\$23,000), and nine times greater than Pacific people (\$12,000). These are individual assets only, and do not include other ownership arrangements (eg Māori collective assets).

For more detailed data see the Excel tables in the 'Downloads' box.

Definitions

Age standardisation adjusts the age structures of different groups so they match each other. This allows us to compare populations (eg different ethnic groups) without showing differences that are due to different age structures.

Aggregate is the sum of all the values of a certain indicator. For example, total household assets is the sum of all household non-financial assets and household financial assets.

Assets are something a person or household owns, such as property or investments.

Average (mean) is the average value – the mean is calculated by adding two or more figures and dividing the sum by the number of figures. Means in this release were calculated using the SAS function proc survey means.

Beneficiary is a person who benefits (gains) from a trust.

Bonds and other debt securities is a certificate issued by a government or public company that promises to repay borrowed money at a fixed interest rate at a certain time. Examples are government saving bonds, corporate bonds, foreign bonds, and other non-saving bonds.

Business: we consider respondents to be in business when they:

- start charging others for the goods/services they provide
- supply goods/services on a regular basis
- intend to make a profit from doing so.

We exclude businesses with shares on any stock exchange, or that are recorded in the investments module.

Capital value is the probable price that would be paid for a property if it had been for sale at the date of the valuation. This is usually the property value shown on the last rates assessment notice from the local authority.

Consumer durables include vehicles such as cars, motor cycles, boats, and aircraft, and contents of the household's principal residence and other housing units (eg kitchen and laundry appliances, furniture, computer and entertainment equipment, clothing, and other personal items, excluding valuables).

Consumer durable loans are loans for the purchase of consumer durables.

Currency and deposits is money in an account with a bank, building society, or other financial institution, and cash over NZ\$1,000 in any currency not held in a bank.

Dwelling ownership aggregates categories from the 'tenure of household' classification. Tenure refers to the occupancy a household has in a private dwelling. It does not refer to the tenure of the land on which the dwelling is situated.

The dwelling can be classified in two ways:

• **Owned or partly owned**: dwellings that are held (or not held) in a family trust, regardless of whether mortgage payments are made or not made for the dwelling.

• **Dwelling not owned**: dwellings where the household does not own the dwelling, and either pays rent or lives there rent-free.

Education loans are loans to cover study expenses. Respondents reported a variety of student loans, including student loans from overseas and from sources other than Studylink.

Equity is the value of an owner's interest in an asset after expenses are paid. For example, the owner of a \$200,000 house that has an \$80,000 loan on it, has equity of \$120,000 on that house.

Household is either one person who usually resides alone, or two or more people who usually reside together and share facilities (eg for eating or cooking) in a private dwelling. A household may contain one or more families, other people in addition to a family, or no families at all, such as unrelated people living together. We don't include non-private dwellings such as hostels, or the rest home and hospital sections of retirement homes (serviced apartments within retirement homes are counted as private dwellings).

Household financial assets are intangible assets whose value comes from a contractual claim, such as currency and deposits, shares, and pension funds.

Household non-financial assets are assets with a physical value, such as real estate, consumer durables, and valuables.

Imputation replaces missing values with actual values from similar respondents. See <u>Imputation</u> in data quality for more information.

Liability is an obligation such as a debt, mortgage, or loan. The liability's holder is obliged, under specific circumstances, to provide a payment or series of payments to whomever they are liable to.

Life insurance funds are policies where the household member could cash in their policy or withdraw funds. These are usually called endowment or 'whole of life' policies. We exclude insurance policies that are only paid out on the loss of life of the household member.

Market value of a property is the probable price the owner would get if they sold at any given date. It depends on market factors at that time.

Median is the point where half the population is above and half below the stated amount. We calculated medians in this release using the SAS function proc survey means.

Mutual funds and other investment funds are collective investment undertakings through which investors pool funds for investment in financial or non-financial assets. Examples are: mutual funds, hedge funds, unit trusts, income trusts, and other managed investment funds.

Net worth is the value of a person or household's assets, minus their liabilities.

Other household financial assets are miscellaneous financial assets, that include loans made to other households, and overseas bank accounts.

Other investment loans are loans to pay for financial assets and valuables, and other investment loans not already collected in other liability categories.

Other loans and liabilities are miscellaneous loans and liabilities. They include amounts outstanding on credit cards, bank account overdrafts, and other lines of credit, if not included elsewhere.

Other real estate covers residential and non-residential buildings (other than owner-occupied dwellings) and land owned by household members. The real estate may be rented or leased to other parties, or it may be used exclusively by the household.

Other real estate loans are loans for constructing, purchasing, or improving other dwellings, buildings, and land. Examples are loans to purchase holiday homes and rental properties for investment purposes.

Owner-occupied dwelling is the main dwelling or other type of housing unit occupied by household members on a regular basis. They include a city dwelling occupied by some household members during the working week, but exclude holiday dwellings used on an occasional basis. The residence may or may not have a mortgage or loan secured against it. The land on which the residence is located is included.

Principal residence loans and other owner-occupied residence loans are loans for constructing, purchasing, or improving the household's owner-occupied residences. Examples are home mortgage loans, home equity lines of credit for home improvement, money borrowed for a deposit on a home purchase, and bridging finance taken out until a home loan is obtained. Questions on reverse mortgages (borrowing against the equity of the property) were not included in the survey.

Pension funds include entitlements in both employment-related social insurance pension schemes and private pension schemes. Pension schemes are sometimes known as retirement plans or superannuation schemes. They may be defined-benefit schemes (where the formula for defining a member's pension is agreed in advance) or defined-contribution schemes, such as KiwiSaver (the amount of the pension depends on the performance of the assets acquired with the member's contributions).

Quasi-settlor is a person in a household who reported being both a trustee and a beneficiary of a trust.

Quintiles are formed by dividing the population into five equal groups, from lowest to highest. The bottom quintile (quintile 1) is the lowest 20 percent of the population, while the top quintile (quintile 5) is the highest 20 percent.

Region The Household Expenditure Survey sample design has five broad regions. The Wellington and Canterbury regional council areas, the Auckland Council area, and the remaining regional council areas, which are grouped as:

- Rest of North Island: Northland, Waikato, Bay of Plenty, Gisborne, Hawke's Bay, Taranaki, and Manawatu-Wanganui
- Rest of South Island: Nelson, Marlborough, Tasman, West Coast, Otago, and Southland.

Sampling weights are the number of units in the population represented by the sample member.

Settlor is a person who transfers or sells assets to a trust.

Shares and other equity includes shares in corporations, equity held in a family trust, and other equity not held in a family trust.

Statistical significance in statistics, is a result considered significant not because it is important or meaningful, but because it is predicted as unlikely to occur by chance alone.

Trustee is a person responsible for managing trust assets.

Unincorporated enterprises are commercial enterprises not incorporated as a legal entity separate from the owner (household or individual); the fixed and other assets used in unincorporated enterprises do not belong to the enterprises but to their owners. They are usually sole proprietor or partnership companies, for example a self-employed plumber.

Valuables are goods whose role is as a store of value. Examples are: precious stones and metals, fine jewellery, works of art, antiques, and stamp and coin collections.

Related links

Next release

Household Expenditure Statistics: Year ended June 2016 will be released on 24 November 2016.

To <u>subscribe to information releases</u>, including this one, please complete the online subscription form.

The <u>Release calendar</u> lists all our upcoming information releases by date of release.

Past releases

See <u>Household Economic Survey</u> for links to past releases.

Related information

Household Economic Survey (Net worth): 2014/15 classifications contains all the classifications used in the HES (Net worth) 2014/15 survey.

Household Economic Survey (Net worth): 2014/15 data dictionary contains variable and data quality information for customers using the HES (Net worth) 2014/15 dataset.

<u>The net worth of New Zealanders</u> reports results from the Household Savings Survey: 2001, the first major national survey of wealth to be conducted in New Zealand.

<u>Survey of Family, Income and Employment</u> collected information on people's work, family, household, income, and net worth. A number of reports and articles can be found on this homepage.

<u>Reserve Bank household balance sheet</u> provides information on the assets and liabilities of New Zealand's household sector, using a number of data sources.

<u>Wealth and disparities in New Zealand</u> (published 2007) presents an analysis of net worth in New Zealand using data from the Survey of Family, Income and Employment conducted in 2003/04.

Household incomes in New Zealand: trends in indicators of inequality and hardship 1982 to 2014 is a Ministry of Social Development report that analyses HES data in depth.

Data quality

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Information on New Zealanders' wealth (assets and liabilities) provided in this release is based on data collected as part of the Household Economic Survey: 2014/15 (HES). As HES measures annual income and housing expenses, we considered it the best survey to attach a module about net worth to, due to its content being closely related. The net worth module is called Household Economic Survey (Net worth).

See <u>Household Economic Survey: 2014/15</u> for more technical information from the original release.

About the survey

HES 2014/15 started in July 2014 and ended in June 2015.

The target population for HES is the usually resident population of New Zealand living in private dwellings, aged 15 years and over. This population does not include:

- overseas visitors who are in New Zealand for less than 12 months
- people living in non-private dwellings such as hotels, motels, boarding houses, hostels, and homes for the elderly
- patients in hospitals, or residents of psychiatric or penal institutions
- members of the permanent armed forces in group living facilities (eg barracks)
- people living on offshore islands (excluding Waiheke Island)
- members of the non-New Zealand armed forces
- non-New Zealand diplomats and their families.

The survey is a sample survey that uses statistical weights to calculate income and expenditure estimates for the total New Zealand population. For HES 2014/15, we used the weights based on

the Census 2013 population.

To capture asset and liability information in enough detail, we increased the sample size for HES 2014/15 from 5,000 to 8,000 households. The increased sample size also led to reduced sample errors for the key HES statistics.

Survey components

HES 2014/15 has four survey components:

- a household questionnaire
- a shortened expenditure questionnaire collecting household housing costs
- an income questionnaire for each household member aged 15 years and over
- a set of non-monetary indicator questions for one member of the household who is 18 years and over (chosen randomly).

The survey, besides collecting information from sampled New Zealand households on the above topics, also collected information on New Zealanders' savings, assets, and liabilities.

Topics covered in the survey to collect data on wealth included:

- property owned (by type of property)
- mortgages
- equity in businesses
- assets and liabilities held in trusts
- superannuation scheme entitlements
- financial assets
- consumer durables
- other miscellaneous debt.

We asked questions on assets and liabilities within other existing HES modules in the income and expenditure questionnaires, or collected the information as separate sets of questions (modules) at the end of the income questionnaire.

Topics covered within existing HES modules include:

- principal residence [housing costs]
- other non-investment properties [other property]
- mortgages for principal residence and non-investment properties [mortgages and loans]
- superannuation schemes [private superannuation]
- New Zealand financial assets [investments]
- New Zealand investment property assets and liabilities [investments]
- overseas property and financial assets [overseas income].

Topics covered in separate modules included:

- life insurance
- equity in businesses
- motor vehicles, collectibles, and cash assets
- household durables
- trusts
- non-property debt.

See <u>Household Economic Survey: 2014/15 flowcharts</u> for more detail – the asset and liability questions added to existing HES modules are coloured blue.

This survey used computer-assisted interviewing.

Household net worth: balance of what you own, less what you owe	
Assets (what you own)	Liabilities (what you owe)
Real estate Owner-occupied residences Other residential and non-residential property	Real estate loans Owner-occupied residence loans Other residential and non- residential property loans
Other physical assets Consumer durables Valuables	Other liabilities Consumer durables loans Other debt (eg credit cards) Education loans
Financial assets Currency and deposits Investments (eg shares, mutual funds) Net equity in unincorporated businesses Net equity in trusts Pension funds (superannuation funds)	
Total assets	Total liabilities
Net worth = Total assets - Total liabilities	

Response rate for HES: 2014/15

The target response rate for HES is 75 percent of eligible households. We achieved a 77.9 percent (post-imputation) response rate for the year ended 30 June 2015.

We calculate the response rate by determining the weighted number of eligible households that responded to the survey as a proportion of the estimated weighted number of total eligible households in the sample.

Adding asset, liability, and saving questions to the survey had little impact on the core HES estimates. The response rate was similar to previous HES collections.

Previous surveys with net worth data

Before the HES (Net worth) module, we had two surveys that measured net worth – the Household Savings Survey (HSS), and the Survey of Family, Income and Employment (SoFIE).

The HSS was the first household survey to measure household net worth in New Zealand. The HSS ran in 2001 as a one-off stand-alone survey funded by the Retirement Commission. It collected information from individuals or couples within a household who were aged 18 years and over. We surveyed approximately 6,600 households in the core sample, and an additional 6,600 were approached and screened for inclusion in the Māori booster sample. The HSS provided statistics on the level, value, composition, and distribution of assets, liabilities, and net worth.

SoFIE first went into the field in October 2002. It was a longitudinal survey that ran for eight years, with the same respondents being revisited yearly to build a picture of how their

circumstances changed over time. SoFIE's sample in the first year of data collection was 15,000 households, but as the years went on, the sample size decreased.

We used a module on assets and liabilities in every second year of SoFIE – it was a condensed version of the HSS questions. The module collected information on the type and value of assets and liabilities.

Comparing net worth over time

Methodological differences between HSS, SoFIE, and HES (Net worth), mean the three surveys are not directly comparable. Differences include questionnaire structure, subject population, and breadth and depth of questions. We advise caution in any comparison customers make between the surveys.

Keep this caution in mind as we compare estimates of net worth between the SoFIE and HES (Net worth) surveys.

The table below presents comparisons of estimates of individual net worth derived from SoFIE and HES (Net worth). As these estimates represent reference periods many years apart, they are adjusted to be expressed for the average prices in 2014/15, using the All-groups CPI. Note: part of the reason for the increase in mean net worth over time is due to house prices rising more than the CPI over this period.

Individua	I net worth, by CPI a	djusted value		
Years end	ded June 2004, 2006,	2008, 2010, and 2015	5	
		Individual net v	vorth	
		Value (expre	ssed in average	prices of 2014/15)
Survey	Reference year	\$(000)		\$(billion)
	Median	Mean	Total	
	2003/04	77.9	200.9	625.0
SoFIE	2005/06	86.0	237.8	764.0
SOLIE	2007/08	95.9	258.4	851.6
	2009/10	103.5	262.6	889.0
HES	2014/15	87.0	296.6	1,054.6

Mean individual net worth increased 13 percent between the 2009/10 and 2014/15 reference periods, representing an average annual increase of around 2.5 percent.



In contrast, median net worth fell from 2009/10, decreasing around 3 percent a year to be 16 percent lower in 2014/15.



Median individual net worth expressed in average prices of 2014/15

The different movements in the mean and the median results from the changing distribution of net worth over this period, as illustrated by comparison with the Gini Coefficient for individual net worth over the periods below.



The increasing concentration of wealth is seen when comparing the very top end of the wealth distribution for the SoFIE and HES results. The top 10 percent, 5 percent, and 1 percent of the net worth distribution accounted for an increased share of overall net worth over the reference periods.



Wealth shares of individuals – top percentiles HES compared with SoFIE

Source: Statistics New Zealand

Also of interest is a comparison of the quintile boundaries between the SoFIE and HES (Net worth) collections. As the graph below shows, the 20th percentile boundary (the value of the top of the bottom quintile) for SoFIE was consistently higher than that for HES (Net worth). This is partly due to the HES (Net worth) collection having improved coverage of trusts and of 'equity in own unincorporated business' than SoFIE. For example, we have better information on households and individuals with low or negative business equity.



Individual net worth quintile boundary ratios (HES 14/15 = 100)

Comparing net worth with Reserve Bank's household balance sheets



The following graph compares Reserve Bank of New Zealand (RBNZ) and HES (Net worth) estimates of assets and liabilities, at a high level.

To make HES estimates comparable with RBNZ estimates, we adjusted the value of household financial assets by moving the property values held in trusts, which were originally reflected under household financial assets/liabilities, to the corresponding asset/liability categories. The adjusted comparable figures are in the table below.

HES and RBNZ values, by asset and liability type Year ended June 2015, and quarter ended June 2015				
Accet or liability type	HES 2014/15	RBNZ June 2015		
Asset or liability type	\$(million)			
Household financial assets	471,930	632,949		
Housing	597,560	618,226		

Other non-financial assets ¹	154,402	
Total assets	1,223,892	1,251,175
Real estate loans	150,479	127,706
Other liabilities	18,861	30,041
Total liabilities	169,340	157,747
Net worth	1,054,552	1,093,429
 These include consumer durables and va estimate. Symbol: not applicable 	aluables, for which RBI	NZ does not provide any

Comparing our figures on household assets, liabilities, or net worth with RBNZ estimates should be done with caution, because:

- The two estimates are based on different data sources. HES estimates are based on data
 provided directly by New Zealand households; RBNZ's estimates are based on
 administrative data sources such as statistical returns and balance sheets of registered
 banks and non-bank lending institutions, share registry information from NZX, and
 CoreLogic (for housing and land values).
- HES (Savings) estimates are based on a sample survey, so are subject to both sampling and non-sampling errors.

There are differences between HES and RBNZ property-value estimates due to:

- HES estimates are based only on dwellings owned by the usual resident population living in private dwellings, RBNZ's estimates cover the total housing stock regardless of the dwelling owner's residence status.
- While HES property-value estimates are based on the rateable capital value (provided by the respondent and based on the rates assessment notice or the QV assessment), RBNZ's estimates are based on current market value (provided by CoreLogic).

It wasn't practical to factor in housing inflation and bring the values to 2015 levels and to make them comparable with RBNZ estimates – rateable values provided by respondents spanned several years.

Total rateable capital value of owner-occupied dwellings, by valuation year Year ended June 2015			
Valuation year	Number of properties	Total rateable capital value \$(million)	
Up to 2008	10,004	3,597	
2009	5,075	2,000	
2010	11,445	4,008	
2011	116,595	50,024	
2012	122,814	46,820	
2013	217,153	79,172	
2014	304,803	144,479	
2015	21,121	9,792	
No year indicated	51,096	21,061	

Despite our best efforts to capture property values from respondents, we couldn't always. Respondents reported having 'other property' early in the interview, but didn't always acknowledge having any such property when later asked for details. With no dollar value provided for such property and given the contradictory responses, we can't determine which response is the correct one.

Recall period

We collected data in this release between 1 July 2014 and 30 June 2015. Data on assets and liabilities was collected on a 'snapshot' basis (ie at the date of the survey or the best estimate the respondent recalled), most housing-cost expenditure was collected as 'latest payment' (meaning the amount most-recently spent on this item).

Reliability of survey estimates

Two types of error are possible in estimates based on a sample survey – sampling error and non-sampling error.

Sampling error is a measure of the variability that occurs by chance because a sample rather than an entire population is surveyed.

Non-sampling errors arise from biases in the patterns of response and non-response, questionnaire design, inaccuracies in reporting by respondents, and errors in recording and coding data. We endeavour to minimise the impact of these errors by applying best practice survey methods and monitoring known indicators (eg non-response).

Sampling errors

Sampling error refers to the variability that occurs by chance because a sample rather than an entire population is surveyed. This is calculated from the variability of the observations in the sample.

We calculate sampling errors using the jackknife method. It is based on the variation between estimates of different subsamples taken from the whole sample.

The tables below summarise the sampling errors for HES: 2014/15 by income source, assets, and liabilities.

Customers should take care when interpreting income, expenditure, or wealth estimates with sampling errors greater than 20 percent. They are less statistically reliable than estimates with sampling errors less than or equal to 20 percent.

Sampling errors for average annual household income, by income source (for households receiving that source of income)		
Year ended June 2015		
Income source (2014/15)	Level sampling error (%)	
Wage and salaries	3.1	
Self-employment	28.8	
Investments	14.4	
Private superannuation	15.4	
New Zealand Superannuation and war pensions	1.8	
Other government benefits	6.3	
Other sources	28.2	
Total regular income	3.2	

Asset and liability type	Leve	Level sampling error (%)			
	Median	Mean	Total	Count	
Owner-occupied dwellings	1.4	3.7	5.1	3.4	
Other real estate	13.8	13.7	16.5	8.2	
Consumer durables	9.6	3.4	3.4	0.5	
Valuables	81.6	16.1	17.4	6.3	
Household non-financial assets	6.5	4.5	4.5	0.2	
Currency and deposits	14.2	12.9	13.3	3.6	
Bonds and other debt securities	97.6	39.9	42.6	17.1	
Equity in own unincorporated enterprises	14.3	35.3	36.8	9.9	
Shares and other equity	28.6	19.0	21.3	6.4	
Mutual funds and other investment funds	69.2	28.1	30.6	21.3	
Life insurance funds and annuities	30.7	29.1	31.9	13.5	
Pension funds	2.4	7.4	7.8	2.2	
Other household financial assets	144.5	33.9	36.0	9.9	
Household financial assets	10.2	13.9	13.9	1.1	
Total household assets	4.7	7.0	7.0	0.2	
Owner-occupied residence loans	11.3	5.3	7.8	5.1	
Other real estate loans	17.0	13.3	17.4	11.4	
Consumer durable loans	39.9	29.7	37.0	12.9	
Education loans	17.1	12.6	12.3	6.1	
Other loans and liabilities	41.4	23.8	23.8	4.6	
Household liabilities	15.6	6.2	6.7	2.5	
Total household net worth	6.8	7.9	7.9	0.0	

Sampling errors for household value, by asset/liability type, and value type (for households with that type of asset/liability)

Contact info@stats.govt.nz for more detailed sampling errors.

Sample design information

We select the sample for HES using a two-stage stratified cluster design. Households are sampled on a statistically representative random basis from areas throughout New Zealand. The sample is stratified by geographic region, urban and rural areas, ethnic density, and socio-economic characteristics.

We obtain information for each member of sampled households that fall within the scope of the survey and meet survey coverage rules.

Proxy

A proxy may provide information only in 'family type' households:

- where the whole household is informed about the survey. All agree to participate, but are not able to be present when we administer the questionnaires
- for the elderly, sick, or mentally incapacitated.

In all cases of proxy interviews, our interviewer must be convinced the proxy is totally familiar with the other respondent's information.

Imputation

Imputation in HES replaces missing values with actual values from similar respondents. We use the nearest-neighbour donor imputation method, where we replace missing values by data values from another record called a donor. A donor is selected by finding a respondent with matching characteristics to the recipient.

There are three situations where we impute for assets and liabilities:

1. For non-trust and non-business asset and liability records where a value is not provided, we replace only that value with a value from a selected donor.

2. For trust and business records where a value is not provided for any asset or liability of the trust or business, we replace all the asset and liability records for that trust or business with those from a selected donor.

3. We impute income questionnaires for household members of eligible responding households that do not fully complete their income questionnaire. The asset and liability records for these people are replaced with the records of the donor used for income imputation.

Imputation is done at the individual level, which may cause inconsistencies at the household level. For example, ownership of a property may appear to add up to more than 100 percent.

Age standardisation

When sub-populations (eg different ethnic groups) have differing age-structures, and there are differences in the distribution of the variable of interest (eg net worth) by age-group, measures such as means and medians can potentially be distorted.

Age standardisation is a commonly applied technique to control for this; it allows more meaningful comparisons between the sub-populations.

One example is that the age structure of the Māori population is considerably different from that of the European population.

Different age structure of HES population



When this is combined with the differing levels of median net worth by age group, as illustrated in the following median net worth age-group graph, there is a clear need to age standardise the mean and median measures.



Source: Statistics New Zealand

We standardise age by re-scaling the underlying weights of the unit record data for each ethnic group – to reflect a 'standard' age distribution. We used the age distribution for the overall population of the net worth sample.

Population weighting and adjustments

Weighting plays a vital role in estimation. Each unit in the sample is given a weight that indicates the number of people it represents in the final population estimate. Weighting ensures that estimates reflect the sample design, adjusts for non-response, and aligns estimates with the current population estimates. For household surveys, deriving the weight is a multi-phase process.

The first stage of weighting involves calculating a unit's initial weight. The initial weight depends

on the sample design and equals the inverse of the selection probability.

The second stage involves adjusting the initial weights to account for unit non-response. This refers to a household without information, or where the amount of information provided (and/or quality of) is insufficient to be a response. The initial weight of a non-responding unit is reduced to zero, while initial weights of responding units are scaled up – by combining factors within the estimation group (eg region, ethnic densities, urban/rural, and interview quarter).

The final stage in the weighting process is integrated weighting. This process ensures we give all eligible responding individuals within a household the same weight so we can produce household statistics. Integrated weighting also aligns estimates with externally sourced population individual and household benchmarks, and adjusts for under-count of specific sub-population groups (eg young males and Māori).

The population used for the integrated weighting in HES was benchmarked to estimates based on the 2013 Census.

HES benchmarks

The person benchmarks used for HES are: regional population estimates; children subpopulation estimates by three age groups; adult sub-population estimates by sex and 13 age groups (including 75 years and over); and adult Māori sub-population estimates by two age groups (including 30 years and over).

The household benchmarks are two categories of household composition (two-adult households and non-two-adult households), and these categories split further by regions.

Population estimates are based on the 2013 Census.

Data validation and editing

As part of the quality check process, HES data goes through a validation process at the end of each quarter of the survey cycle. We look for any unexplained outliers and compare data against previous HES data for any movements we can't explain by real-world changes.

For HES 2014/15, we carried out validation in two phases – the first focused on HES-related topics (income and housing expenditure), the second looked at Net worth related topics (assets, liabilities, and savings). During validation, we noted there were times when respondents did not interpret some questions as we intended. Such responses were edited after we considered the respondent's response to other demographic, household, and personal questions. For instance, although some questions specifically stated not to include assets/liabilities that 'you have already told me about', sometimes respondents did repeat values. Likewise, partners sometimes reported the total value of assets/liabilities rather their own share. We apportioned these appropriately.

Caveats

Property

On occasion, respondents mentioned they had other property, but we scoped this out of the HES part of the questionnaire because it was for rental or commercial purposes. This information was to be collected later in the questionnaire, but when asked later the respondent did not mention it

in the investment, business, or trust sections (where we expected them to). This resulted in under-reporting of the value of property assets.

Bank accounts

Some respondents did not see bank accounts as an investment, and so did not report these (under-reporting again).

Life insurance

Although the question on life insurance aimed to collect a respondent's asset held in life insurance policies (ie where these could be encashed or withdrawn), some respondents answered about their life policies and gave the values their life was insured for. We removed these responses where we identified them.

Businesses

We suspect some respondents did not report all the businesses they owned – whether they had sole ownership, or were in partnership with others.

Family trusts

We only asked the questions on the assets and liabilities of trusts of settlors or quasi settlors (a person in the household who reported being both a trustee and beneficiary of the trust). We did this because those who were only a beneficiary, or only a trustee, were less likely to know about the contents of the trust. Some respondents were unsure of their relationship to the trust, which may have led to fewer respondents identifying as a settlor or quasi settlor, and therefore an under-reporting of trust wealth.

Limits on collected values

To reduce respondent burden, respondents were not asked to provide the value of smaller-value items. This may have resulted in some under-reporting. All assets and liability values we collected had no minimum value unless mentioned in the table below.

Items that needed a minimum value, by type of asset Year ended 2015		
Type of asset	Lower limit collected (\$)	
Valuables	5,000	
New Zealand and foreign currency and vouchers etc	1,000	
Loans to the respondent	1,000	
'Other assets' (eg sporting equipment, cameras, boats, and musical instruments)	5,000	

No value limits were put on any liabilities collected.

Oversampling

We made no attempt to oversample high income/wealth households, due to the practical difficulties associated with identifying this sub-population and collecting from them.

Interpreting the data

Customers need to consider the following when interpreting data from this survey.

- A household's expenditure or income can be influenced by household size, household composition, geographic location, and employment-related factors.
- All income figures refer to gross (before tax) income, and housing-cost expenditure includes GST, where it applies.
- The five broad regions reported are based on the regional council areas of Wellington and Canterbury, and the Auckland Council area. Regions also include the combined 'Rest of the North Island', and 'Rest of the South Island'. This level of geographical breakdown is the lowest available for HES, due to the sample design.
- Where a trust exists that owns assets (or owes liabilities) the entirety of the trust's share of the assets and liabilities were allocated to settlors and quasi-settlors of the trust in the household. Each individual received an equal share of the trust assets/liabilities.
- Where a household (or individual) has equity (assets minus liabilities) held in a trust, the
 net value of all these (the value of all assets less the value of all liabilities) is recorded as
 a single entry as a financial asset in the 'Shares and other equity' component. Note: this
 net equity value can be negative (where the value of the trust liabilities exceeds the value
 of the trust assets).
- The median and mean values used in this release are for individuals/households who had the specific asset or liability. For example, the median value of owner-occupied dwellings is the median value for those who have an owner-occupied dwelling, not the median value for everyone (whether they have an owner-occupied dwelling or not). Table 1.03 in the Excel tables shows differences between the means for those with the specific asset/liability and the means for the total population.

Confidentiality and suppression

We suppress estimates in this release if based on fewer than five people or households for total or mean values, or fewer than 10 people or households for median values. Publishing would be a risk to respondents' confidentiality.

Data is also suppressed for quality reasons if the relative sample error is greater than 50 percent, if cells have a weighted count of less than 3,000 (when producing total count estimates for both people and household numbers), or for reasons above.

Customised data

The tables in this information release do not contain all possible analyses of HES (Net worth) data. We can customise data to users' specifications.

More information

See <u>HES and HES (Income)</u> for more information about HES.

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Tables

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Next release

Household Economic Survey: Year ended June 2016 will be released on 24 November 2016.