



Household net worth data collection 2020/21

Table of Contents

Household net worth data collection 2020/21	3
Household net worth data collection 2020/21	3
Methodology	3
Household Economic Survey flowchart - Expenditure 2020/21	8
Household Economic Survey flowchart - Household 2020/21	8
Household Economic Survey flowchart - Income 2020/21	8
Household Economic Survey flowchart - Material well-being 2020/21	9
Household Economic Survey flowchart - Self Complete 2020/21	9

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#####Description

Information on New Zealanders' wealth (assets and liabilities) provided in this release is based on data collected as part of the HES (Savings) 2020/21. The survey was carried out from 08 August 2020 to 30 June 2021 due to COVID-19 disruptions, for more information on this see [Net worth statistics: Year ended June 2021 – Information and improvements](#).

#####Uncaptured changes

Net worth information is captured for the day the household is interviewed, therefore events that occurred later in the year may not be captured. For example, if a household's property was reassessed after their interview, the change in rateable value would not be captured.

Methodology

Response rate for HNW 2020/21

The sample size for HES 2020/21 was approximately 5,500 households due to COVID-19 disruption. The achieved sample rate was 74.2 percent, and the response rate was 80.9 percent post-imputation.

Achieved sample rate compared with the response rate

The achieved sample rate is calculated as the number of eligible households that responded divided by the total number of dwellings sampled. Essentially, it tells you what percentage of the sample responded to the survey. Expressing the achieved sample as a rate controls for population growth.

		Eligible responding
Achieved Sample Rate	=	
		Ineligible + eligible responding + eligible non-responding

The response rate is calculated as the number of eligible households that responded to the survey as a proportion of the estimated number of total eligible households in the sample.

		Eligible responding
Response rate	=	
		Eligible responding + eligible non-responding

The achieved sample rate differs from the response rate because it includes the ineligible dwellings in the denominator. This difference means that the response rate is particularly sensitive to the classification of household eligibility. As a result, the achieved sample rate is more stable over time than the response rate. While response rates have been declining over time, the impact of any bias arising from this is minimised by non-response adjustment and the calibration to population benchmarks.

Imputation for HNW 2020/21

Imputation replaces missing values with actual values from similar respondents. Imputation was carried out both to replace missing values for the HES variables, and also to impute values for assets and liabilities. There are three situations where we imputed for assets and liabilities:

- 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.
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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.

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.

Sampling errors

We calculate sampling errors for means and totals using the jackknife method. It is based on the variation between estimates of different subsamples taken from the whole sample. The bootstrap method was used for median estimation.

Sampling errors by asset and liability type for HES 2014/15, HES 2017/18, and HES 2020/21 are shown in the tables accompanying the main release.

Customers should take care when interpreting estimates with sampling errors greater than 20 percent – they are statistically less reliable than estimates with sampling errors less than or equal to 20 percent.

Age Standardisation

To mitigate the effects of the Māori and Pacific population having a much younger age structure than the total New Zealand population, we have adjusted for age in the demographics tables (8.01 and 8.02) through age standardisation. Without age standardisation, median and mean figures for the variable of interest (e.g. net worth) by age-group, can potentially be distorted. Age standardisation is a commonly applied technique to control such distortions; it allows more meaningful comparisons between the sub-populations.

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 use the age distribution for the overall population of the net worth sample.

Tables 10.01 and 10.02 are alternatives for demographics data, as they are separated by age groups rather than age-standardised.

Caveats

#####Property There are occasions where respondents mentioned they have other property, but it is scoped out of the HES part of the questionnaire because it is for business purposes. Sometimes the respondent then did not mention it in the property, business, or trust sections (where we expected they would). This may have resulted in under-reporting of the value of property assets. See [Net worth statistics: Year ended June 2021 – Information and improvements](#) for a discussion of the use of capital (rateable) value.

#####Bank accounts In 2014/15 many respondents did not see bank accounts as investments. As a result, the number and value of assets held in bank accounts were undervalued. To improve this, in 2017/18 bank accounts were asked about separately from other investments and details of many more bank accounts were collected. However, quite a few bank accounts with low values were still collected. The same approach was used in 2020/21.

#####Superannuation In 2017/18, we found some respondents said they received superannuation contributions from their employer but did not then give details of a superannuation scheme. This may have led to under-reporting of superannuation schemes. To improve this, a prompt was added to improve respondent understanding. For details, see [Net worth statistics: Year ended June 2021 – Information and improvements](#). There may still be a shortfall with some superannuation schemes being unreported.

#####Life insurance Although the questionnaire asked for the value of life insurance (the value if cashed in today) many respondents gave the value that the life insurance would pay out when the insured person died. For the most obvious cases, the life insurance record was removed.

#####Businesses We suspect some respondents did not report all the businesses they owned – whether they had sole ownership or were in partnership with others. For example, there are occasions where if one person in the household mentioned a business their partner may have felt they did not need to mention it. This has potentially led to under-reporting of business assets. It is suspected that debt in businesses has been under-reported because some respondents may have included the debt in the market value. Some partners living together in a household responded that they both owned all of a business. Where this was identified and could be verified, it was corrected.

#####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. A change in wording of this section was also made to increase respondent understanding and therefore response accuracy, see [Net worth statistics: Year ended June 2021 – Information and improvements](#).

#####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 or liability
Year ended June 2021
Type of asset
Valuables
New Zealand and foreign currency and vouchers etc
Loans to the respondent
Other assets' (e.g. sporting equipment, cameras, boats, and musical instruments)
Type of liability
Loans from family members or friends
'Other debt' (anything that hasn't been covered elsewhere)

#####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. See [Net worth statistics: Year ended June 2021 – Information and improvements](https://www.stats.govt.nz/methods/net-worth-statistics-year-ended-june-2021-information-and-improvements) for a further discussion of this topic.

#####Use of response ranges When respondents were unable to give an exact figure, they were given a series of ranges to pick from. For the sake of calculations, the midpoint of each range was taken.

#####Interpreting the data

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

- A household's net worth and income can be influenced by household size, household composition, geographic location, and employment-related factors.
- 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 the HNW 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).
- Some tables in this release use median and mean values calculated for the entire population, rather than only individuals or households with the specific asset or liability. For example, the median value of owner-occupied dwellings is the median value for everyone (whether they have an owner-occupied dwelling or not), not the median value for only those who have an owner-occupied dwelling. Tables 2.01, 2.02, 3.01, 3.02, 7.01, 7.02, 8.01, 8.02, 9.01, 9.02, 10.01, and 10.02 are calculated in this way, and this is more than in previous releases. Tables 1.03 and 1.04 in the Excel tables of the release shows differences between the means for those with the specific asset/liability and the means for the total population.
- The release separates data into net worth quintiles, however decile data are available on request.

Methodology

Methodology

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

- overseas visitors who expect to be resident in New Zealand for less than 12 months
- people living in non-private dwellings (e.g. 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 (e.g. barracks)
- people living on offshore islands (excluding Waiheke Island)
- members of the non-New Zealand armed forces
- non-New Zealand diplomats and their families.

Children at boarding schools are also not surveyed, but housing costs on behalf of those children are included in the record-keeping of the parent or guardian. The survey population is therefore marginally different from the target population.

For survey purposes, a 'household' comprises a group of people who share a private dwelling and normally spend four or more nights a week in the household. They must share consumption of food or contribute some portion of income towards the provision of essentials for living as a group.

HES components

As in HES (income), HNW has four survey components:

- a household questionnaire
- a housing expenditure questionnaire
- an income questionnaire for each household member aged 15+
- a material well-being questionnaire for one member per household who is aged 18+ (chosen randomly)
- a self-completed demographic questionnaire for each household member aged 15+.

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

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

Household net worth = (what you own) LESS (what you owe)
Assets (what you own)
Real estate
Owner-occupied residences
Other residential and non-residential property
Other physical assets
Consumer durables
Valuables
Financial assets
Currency and deposits
Investments (e.g. shares, mutual funds)
Net equity in unincorporated businesses
Net equity in trusts
Pension funds (superannuation funds)

Household net worth = (what you own) LESS (what you owe)
Assets (what you own)
Real estate
Total Assets

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

Topics related to net worth 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].

Topics covered in separate modules include:

- life insurance
- equity in businesses
- motor vehicles, collectibles, and cash assets
- household durables
- trusts
- non-property debt New Zealand financial assets [investments]
- New Zealand investment property assets and liabilities [investments]
- overseas property and financial assets [overseas income].

Reliability of survey estimates

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

#####Sampling error:

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

We primarily calculated sampling errors using the jackknife method. It is based on the variation between estimates of different subsamples taken from the whole sample. In the case of median values, the bootstrapping method was used.

Given a certain sample size, the level of sampling error for any given estimate depends on the number of sampled households/individuals in the category of interest and the variability of the estimate due to the random nature of the sample selection.

As the size of the sampled group decreases, the relative sampling errors (RSEs – sample error as a percentage of the estimate) will generally increase. For example, the estimated average annual household income from self-employment would have a larger RSE than the estimated average annual household income for households receiving income from wages and salaries.

In the tables accompanying the Household net worth statistics, only income or expenditure estimates with RSEs less than or equal to 20 percent are considered sufficiently reliable for most purposes. Although estimates with RSEs over 21 percent are also included, these should be used with caution. Estimates with RSEs over 100 are also provided, however these are not deemed very useful.

#####Non-sampling errors: 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 (e.g. non-response).

#####Proxy

A proxy may provide information 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 the questionnaires are administered
- children are away at boarding school
- people don't work and have no source of income
- people are elderly, sick, or mentally incapacitated.

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

#####Population weighting adjustments

The population weighting process takes account of under-coverage in the survey for specific population groups, such as young males and Māori.

Weighting plays a vital role in estimation. We give each unit in the sample 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 (and/or quality) of information provided 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 (e.g. 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 (e.g. young males and Māori).

The population used for the integrated weighting was benchmarked to estimates based on the 2018 Census.

#####HES benchmarks

The person benchmarks used for HES are: regional population estimates; children sub-population estimates by three age groups; adult sub-population estimates by sex and 13 age groups (including 75 years and over); adult Māori sub-population estimates by two age groups (including 30 years and over); income distribution of individuals aged 15+; and the number of people receiving any type of benefit.

The household benchmarks are two categories of household composition (two-adult households and non-two-adult households), household income (total gross income from the 2018 Census), and the New Zealand Deprivation Index. These categories are split further by regions.

Population estimates are based on the 2018 Census.

#####Consistency with other periods

Although we adjust survey results for various demographic variables, there can be variability in survey estimates from one survey collection period to the next. This variability is because a different group of households is selected for each survey.

#####Suppressed estimates

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 no longer suppressed if a relative sample error is 51 percent or higher (21 percent for cross-tabulated data).

#####Use of the IDI

Administrative data from the Integrated Data Infrastructure (IDI) is now used to collect sources of income for eligible individuals. Use of administrative data improves income data accuracy.



Household Economic Survey flowchart - Expenditure 2020/21

Instrument Locations

- <https://cdm20045.contentdm.oclc.org/digital/collection/p20045coll1/id/4286/rec/4>



Household Economic Survey flowchart - Household 2020/21

Instrument Locations

- <https://cdm20045.contentdm.oclc.org/digital/collection/p20045coll2/id/1464/rec/11>



Household Economic Survey flowchart - Income 2020/21

Instrument Locations

- <https://cdm20045.contentdm.oclc.org/digital/collection/p20045coll1/id/4256/rec/34>

Household Economic Survey flowchart - Material well-being 2020/21

Instrument Locations

- <https://cdm20045.contentdm.oclc.org/digital/collection/p20045coll1/id/4246/rec/1>

Household Economic Survey flowchart - Self Complete 2020/21

Instrument Locations

- <https://cdm20045.contentdm.oclc.org/digital/collection/p20045coll1/id/4253/rec/1>