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Australian Bureau of Statistics

Information Paper

Information Paper: Survey of Income and Housing, User Guide, Australia

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2011–12

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INTRODUCTION

INTRODUCTORY NOTE

This User Guide contains details about the Survey of Income and Housing (SIH) conducted in 2011–12.

The SIH was conducted annually from 1994–95 to 1997–98, and then in 1999–2000, 2000–01 and 2002–03. Commencing in 2003–04 the SIH has been conducted every two years, and is integrated with the Household Expenditure Survey (HES) every six years.

In 2003–04 and 2009–10 the SIH was integrated with the Household Expenditure Survey (HES). In 2005–06, 2007–08 and 2011–12 SIH were run as a stand alone survey, as it will be again in 2013–14.

The 2011–12 SIH collected information from a sample of 14,569 households over the period July 2011 to June 2012.

This User Guide includes information about the purpose of the survey, the concepts and contents, and the methods and procedures used to collect the data and derive the estimates. It also outlines the differences between the 2011–12 survey and earlier SIH surveys. Its purpose is to help users of the data understand the nature of the survey, and its potential to meet user needs.

The next SIH is being conducted throughout 2013–14. While most of the content on the SIH is the same for each cycle, some content is cyclical. SIH 2013–14 will collect additional information about housing arrangements (such as mobility and satisfaction), last collected in 2007–08. Additional information will also be collected about how Australians are spending their superannuation lump sum payments. To accommodate this cyclical content, topics such as dwelling repairs and maintenance and detailed ethnicity have been excluded.

The ABS would appreciate comments from users on the contents and presentation of information in this User Guide.

Comments should be sent to either: email <living.conditions@abs.gov.au> or phone (02) 6252 6174.

PART 1 CONCEPTS AND DEFINITIONS

CONCEPTS AND DEFINITIONS

Part 1 of this User Guide describes the concepts and definitions used in the 2011–12 Survey of Income and Housing (SIH) including:

- the data items of income, loans, housing, childcare, wealth and imputed rent
- summary statistics such as the Gini coefficient
- the units of analysis supported by the survey.

Changes to concepts and definitions that were introduced in the 2011–12 SIH are described in Part 4 'Changes from previous surveys'.

Terms and definitions used in describing this survey and its data are provided in the Glossary.

1.1 GROSS, DISPOSABLE AND FINAL INCOME

INCOME

Household income consists of all current receipts, whether monetary or in kind, that are received by the household or by individual members of the household, and which are available for, or intended to support, current consumption.

Income includes receipts from:

- wages and salaries and other receipts from employment (whether from an employer or own incorporated enterprise), including income provided as part of salary sacrifice and/or salary packaged arrangements
- profit/loss from own unincorporated business (including partnerships)
- net investment income (interest, rent, dividends, royalties)
- government pensions and allowances
- private transfers (e.g. superannuation, workers' compensation, income from annuities, child support and financial support received from family members not living in the same household).

Receipts that are excluded from income include the following:

- capital transfers such as inheritances and legacies, maturity payments on life insurance policies, lump sum retirement benefits, compensation (except for foregone earnings), capital repayment of loans from other households
- certain current transfers offset against expenditures e.g. lottery and other gambling winnings, non-life insurance claims, government reimbursements of expenditure such as Medicare and Child Care Rebate (CCR)
- capital gains and losses.

More detail on the various components of gross income are included in Part 1.4 'Components of income'.

GROSS INCOME

Gross income is the sum of the income from all sources before income tax, and the Medicare levy have been deducted. Prior to 2005–06, Family Tax Benefit (FTB) paid through the tax system or as a lump sum was excluded from gross income for practical reasons. Since 2005–06 these payments have been included in gross income.

DISPOSABLE INCOME

Disposable income better represents the economic resources available to meet the needs of households. It is derived by deducting estimates of personal income tax and the Medicare levy from gross income. Medicare levy surcharge was also calculated and deducted from gross income while calculating disposable income (as it was for the first time in the 2007–08 SIH).

Income tax is estimated for all households using taxation criteria for 2011–12 and the income and other characteristics of household members reported in the survey.

Prior to 2005–06, the derivation of disposable income also included the addition of FTB paid through the tax system or as a lump sum by Centrelink since, for practical reasons, it was not included in the gross income estimates.

Note that while child support and other transfers from other households are included in the income of the households receiving the transfers, they are not deducted from the incomes of the households making the transfers in deriving disposable income.

FINAL INCOME

Final income is a measure that takes into account the impact of government social transfers in kind (i.e. non-cash government benefits) and indirect taxes on the economic wellbeing of households. More detail on the components of final income are included in Appendix 4 'Social Transfers in Kind' and in *Government Benefits, Taxes and Household Income, Australia, 2009–10* (cat. no. 6537.0).

COMPARISON WITH AUSTRALIAN SYSTEM OF NATIONAL ACCOUNTS

The concepts of income used in the SIH and the HES have many similarities to the household income definition used in the Australian System of National Accounts (ASNA), but also differ in some respects.

A detailed comparison of 2011–12 SIH income estimates with ASNA estimates is provided in Appendix 6 of *Household Income and Income Distribution, Australia, 2011–12* (cat. no. 6523.0).

CURRENT AND ANNUAL INCOME

Current income is the income received by respondents at the time data are collected from them.

For wage and salary earners and recipients of government pensions and allowances such as Centrelink payments, current income is generally based on their most recent payment, as long as that payment is usual. Additional questions are used to obtain information about receipts which may not have been included in the most recent payment. For example, for wage and salary earners, information is collected on irregular overtime, bonuses and non-cash benefits and for recipients of government pensions and allowances, information is collected on reductions to payments due to lump sum advances, and one-off payments such as the Baby Bonus.

Annual income provides a somewhat longer term perspective of income, providing data about income obtained from all sources over a period of a whole year. It has the advantage of being less sensitive to short term variations in income, such as a person having little or no current income for a short period of unemployment, but for which they have adequate resources from past employment to avoid economic hardship. However, annual income has the potential to be limited in its relevance to the current situation of respondents, especially when analysing the combined income of a household which gained or lost adult members during the course of the year. There are also practical difficulties in collecting annual income, for example where respondents have had short periods of time in different jobs, or have received Centrelink payments for short periods of time.

A more detailed study of the differences between current and annual income is provided in Appendix 1 'Current and annual income'.

WEEKLY INCOME

Income is collected using a number of different reporting periods, such as the whole financial year for own unincorporated business and investment income, and the usual payment for a period close to the time of interview for wages and salaries, other sources of private income and government pensions and allowances. The income reported is divided by the number of weeks in the reporting period. Estimates of weekly income from the SIH do not therefore refer to a specific week within the reference period of the survey.

1.3 EQUIVALISED DISPOSABLE HOUSEHOLD INCOME

EQUIVALISED DISPOSABLE HOUSEHOLD INCOME

A major determinant of economic wellbeing for most people is the level of income they and other family members in the same household receive. While income is usually received by individuals, it is usually shared between partners in a couple relationship and with dependent children. To a lesser extent, it may be shared with other children, other relatives and possibly other people living in the same household, for example, through the provision of free or cheap accommodation. This is likely to be the case for children other than dependents and other relatives with low levels of income of their own. Even when there is no transfer of income between members of a household, nor provision of free or cheap accommodation, members are still likely to benefit from the economies of scale that arise from the sharing of dwellings. Therefore household income measures are usually used for the analysis of people's economic wellbeing.

Larger households usually require a greater level of income to maintain the same material standard of living as smaller households, and the needs of adults are usually greater than the needs of children. The income estimates are therefore adjusted by equivalence factors to standardise them for variations in household size and composition, while taking into account the economies of scale that arise from the sharing of dwellings. The resultant estimates are known as equivalised disposable household income. Equivalised disposable household income is calculated by adjusting disposable income by the application of an equivalence scale. This adjustment reflects the requirement for a larger household to have a higher level of income to achieve the same standard of living as a smaller household. Where disposable income is negative, it is set to zero equivalised disposable income.

When household income is adjusted according to an equivalence scale, the equivalised disposable income can be viewed as an indicator of the economic resources available to a standardised household. For a lone person household, it is equal to income received. For a household comprising more than one person, equivalised disposable income is an indicator of the household income that would be required by a lone person household in order to enjoy the same level of economic wellbeing as the household in question.

The concept of equivalised disposable household income is applicable to both households and the persons comprising those households. That is, each person in a household has the same level of equivalised disposable household income as the household itself. The difference between using households or persons as the unit of analysis is discussed in Part 1.9 'Household, income unit, person and loan data'.

Published SIH output includes estimates of equivalised disposable household income but not estimates of equivalised gross household income, although the latter can also be produced.

For more information on equivalised disposable household income see Appendix 2 'Equivalised disposable household income'.

1.4 COMPONENTS OF INCOME

COMPONENTS OF INCOME

Income in the SIH is collected in separate components. This part of the User Guide explains the definitions used for each of those components, and also describes some components of income that are not included in the aggregate income measures included in SIH publications. Data for some of the excluded components are available from the surveys. Each of the detailed income data items available, and the aggregate measures of income, are included in the data item list referred to in Part 2.3 'Data collection and data item description'.

The ABS revised its standards for household income statistics following the adoption of new international standards in 2004 and a review of aspects of the collection and dissemination of income data. Income estimates from 2007–08 apply the new income standards which are reflected in the following definitions of the components of income.

More details on the nature and impact of the change in income measures are available in Appendix 4 'Improvements to income statistics' in *Information Paper: Survey of Income and Housing, User Guide, Australia 2007–08* (cat. no. 6553.0).

Employment income

Employment income is collected in the SIH from each person aged 15 years and over who worked for an employer or in his/her own limited liability business. It comprises all payments received by individuals as a result of their current or former involvement in paid employment.

The aggregate current income estimates produced from the SIH include the usual pay that respondents received in the most recent pay period. They include wages and salaries, amounts salary sacrificed, tips, commissions, piecework payments, penalty payments and shift allowances, remuneration for time not worked (e.g. sick and holiday pay) and workers' compensation paid through the payroll. In addition, other components such as non-cash benefits, bonuses, termination payments and payments for irregular overtime worked are all included.

The aggregate annual income estimates produced from the SIH include total income from all jobs in the financial year prior to the survey. Appendix 1 'Current and annual income' illustrates the differences between the current and annual estimates of wage and salary income.

Own unincorporated business income

Own unincorporated business income is collected from all persons aged 15 years and over who are working as owners or partners in unincorporated enterprises. Own business income is the share of the profit/loss of the enterprise accruing to the person. Profit/loss consists of the value of the gross output of the enterprise after the deduction of operating expenses and an allowance for depreciation of assets used in producing the output. Losses occur when operating expenses and depreciation are greater than gross receipts and are treated as negative incomes.

Since profit or loss calculations are often only made by businesses on a quarterly or annual basis, it is not possible to collect data on current income in the same way as can be done for wages and salaries or current cash transfer income. Instead, survey respondents are requested to provide an estimate of their own business income they expect to receive in the current financial year. Responses are likely to be less accurate when collected early in the year and more accurate when collected later in the year, and there is some likelihood that responses will tend to be too optimistic or too pessimistic,

Own unincorporated business income continued

resulting in some bias in the aggregate estimate. However, this methodology gives better results than the methodology used in surveys up to and including 2002–03 that simply extrapolated reported own business income from the previous financial year onto the current period. Under the previous methodology, estimates could also have a strong downwards bias – particularly for new businesses – but could also be significantly upwardly biased if the current business circumstances had turned down from the previous year.

Investment income

Investment income includes interest and dividend income received as a result of the ownership of financial assets such as bank accounts and shares, and rent and royalty income received from the ownership of non-financial assets. The SIH 2011-12 also includes income from offset accounts, which is an estimate of the amount households saved in interest on their loans, as a component of income.

The rent component of investment income is measured on a net basis, that is, gross rent less operating expenses and depreciation allowances. Interest paid on money borrowed to purchase shares or units in trusts is also netted off income earned from these sources. All other components, for which associated expenses are normally relatively small, are on a gross basis.

Rent comprises receipts from residential properties, other than owner-occupied dwellings, and from non-residential properties. Operating expenses deducted from gross rent include repairs and maintenance expenses, rates, interest payments and the like. If the operating expenses plus depreciation allowances are greater than the gross rent, net rental income is negative.

Current investment income is collected by asking survey respondents for an estimate of their total expected income in the financial year, as described above for own unincorporated business income.

Government pensions and allowances

Government pensions and allowances are cash transfer payments made by government entities to persons under social security and related government programs. They are primarily paid by Centrelink, the Family Assistance Office or the Department of Veterans' Affairs, and include pensions paid to aged persons, Newstart Allowance, benefits paid to veterans and their survivors, study allowances for students, Family Tax Benefit (FTB), etc.

Some government payments are excluded from income as they are considered to be either a reimbursement of expenditure or a capital transfer. In deciding whether a government payment should be included in income, the intent of the government payment is considered. Government payments considered to be reimbursements of expenditure include the Medicare rebate, Child Care Rebate (CCR) and Child Care Benefit (CCB), and payments considered to be capital transfers, including the First Home Owner Grants Scheme (as it is designed to help first home buyers purchase their own home) are not included as income.

The Baby Bonus (formerly known as the Maternity Payment) introduced in July 2004, is included as income, recognising that the intention of the payment is to offset some of the extra consumption costs incurred with the birth of a child. Similarly, Child Disability Assistance Payment paid to recipients of Carer Allowance, is also included as part of income.

Government pensions and allowances continued

Paid Parental Leave, introduced on 1 January 2011, is also included as income as per the Baby Bonus. Under the Paid Parental Leave scheme, eligible working parents can get government funded pay when they take time off from work to care for a newborn or recently adopted child. The income test for paid parental leave requires that the parent or parents earn no more than $150,000 in the year previous to the child's birth. People who meet the eligibility requirements must decide which payment, paid parental leave or baby bonus, is best suited to them, as both payments cannot be received for the same child.

The one-off Clean Energy Advance payment paid in May 2012 and June 2012 is included in income from government pensions or allowances. This one-off payment was paid to pensioners, other income support recipients, families receiving Family Tax Benefit payments and Senior Supplement recipients, provided they met eligibility requirements.

Also included in income from government pensions and allowances is the one-off Education Tax Refund that was paid to eligible families in June 2012. This one-off payment was made payable to families receiving Family Tax Benefit Part A, plus young people in school receiving Youth Allowance and some other income support and veterans' payments, providing they met the age and education requirements.

Values of FTB paid as a lump sum and one-off payments regarded as income are annualised, that is, treated as though they were paid evenly through the year. Therefore the amount included in current weekly income is the total payment for the year divided by 52.14, the average number of weeks in a year. The payments are assigned to all respondents who would have met the eligibility criteria at the time that they were interviewed, even if the payments were only announced after the interview took place. If an annualised approach was not taken, a few respondents receiving the benefit would include a large amount in the current income, and most people eligible for the benefit would not include any payment because it was not received in the fortnight before the interview.

All pensions received from overseas are included under government pensions and allowances.

For further information regarding modelled government payments and allowances in the 2011–12 SIH, refer to Part 2.5 'Income tax and other modelled data items'.

Other income

Other income includes non-government pensions such as superannuation and life insurance pensions, regular annuity benefits, private scholarship or study allowances, workers' compensation not paid through the payroll, child support payments (non-government), income from accident/sickness insurance, and other current transfers received from family members living in other households such as parental allowances paid to students living away from home.

Note that, while child support and financial support received from other family members not living in the same household are included in the income of the households receiving the transfers, they are not deducted from the disposable income of the households making the transfers.

Other income continued

Workers' compensation payments are made to injured employees to compensate for foregone earnings and to meet ongoing medical costs. While regular workers' compensation receipts have been included in previously published results, lump sum receipts were not. Commencing in the SIH 2007–08, both forms of workers' compensation are included in the published estimates.

A cut-off has been applied to significant lump sum amounts, where it was considered likely that part of the receipt would be saved to meet future expenses, rather than to support current consumption. Two methods were applied in determining the cut-off limit. For respondents who reported some wage and salary income, the cut-off was applied at the equivalent of three months pay, based on the greater of the respondent's reported wages and salaries and average weekly earnings. For those reporting no wage or salary income, the cut-off was applied at the equivalent of 52 weeks average weekly earnings.

Most severance, termination and redundancy payments and payments for unused leave are relatively small amounts, but some very large amounts were reported in the 2011–12 SIH. These were treated in the same manner as the reported large amounts in the 2009–10 SIH, that is, an adjustment was applied on the basis of the current weekly income that would have been earned over a three-month period which was calculated to be the average time of unemployment between jobs. Amendments were made to both current financial year and previous financial year data if required.

Children's income

Estimates of the income of children aged less than 15 years are not available from the SIH. Children's income was collected in the 2003–04 and the 2009–10 HES, and is expected to be collected in the 2015–16 HES.

Income tax and Medicare levy

In the 2011–12 SIH, estimates of income tax, the Medicare levy and the Medicare levy surcharge relate to the liability associated with the income being reported by respondents, regardless of when it is actually paid. In other words, an accrual rather than cash-based concept is used.

1.5 LOW INCOME HOUSEHOLDS

LOW INCOME HOUSEHOLDS

While income generally provides a useful indicator of economic wellbeing, some circumstances present particular difficulties. For example, some households report extremely low and even negative income in the survey, which places them well below the safety net of income support provided by social security pensions and allowances. Households may under report their incomes in the survey at all income levels, including low income households. However, households can correctly report low levels of income if they incur losses in their unincorporated business or have negative returns from their other investments.

There are a variety of other circumstances where households in the lowest income decile may not face the risk of economic hardship. Some households have very low consumption requirements, particularly if their housing costs are low e.g. if they own their home outright. Some respondents report nil or low income because they are between jobs, were waiting to start a new job, or were on holidays without pay. The current incomes of these people may not well reflect their overall economic circumstances.

For some time, the ABS has noted that households at the lowest end of the income distribution have, on average, expenditures higher than those households with somewhat higher levels of income. For this reason the ABS has adopted the practice of using persons in the second and third deciles of the income distribution, when describing the characteristics of people on low incomes.

To gain a better understanding of the characteristics of households at the lower end of the income distribution, the ABS has used data from the 2009–10 SIH and HES to analyse the relationship between the income, expenditure and wealth of these households. The estimates of income, net worth and expenditure have been adjusted for differences in household size and composition, that is, they are on an equivalised basis. The purpose of this is to maximise the comparability of the three aggregates. The process used to equivalise net worth and expenditure is the same as that used in the equivalisation of income. For more information on equivalised income see Appendix 2 'Equivalised disposable household income'.

LOW INCOME HOUSEHOLDS *continued*

TABLE 1.5.1 MEAN INCOME, EXPENDITURE AND NET WORTH, by Equivalised Disposable Household Income Decile, 2009–10

Decile	Mean weekly equivalised disposable household income $	Mean weekly equivalised expenditure on goods and services $	Mean equivalised net worth $'000
Lowest	247	459	309
Second	382	439	237
Third	477	516	255
Fourth	572	599	278
Fifth	668	641	268
Sixth	774	700	319
Seventh	900	778	358
Eighth	1 051	875	405
Ninth	1 282	991	477
Highest	2 125	1 329	1 158
All households	***848***	***732***	***407***

In 2009–10, the average household expenditure of persons in the lowest income decile was higher than the average household expenditure by persons in the second income decile. Persons in the lowest income decile also had higher average household net worth than persons in the second, third, fourth and fifth income deciles. Since the average household expenditure of persons in the lowest income decile was higher than that of persons in the second income decile, it can be expected that the persons in the lowest income decile typically had a higher standard of living than the persons in the second income decile.

A more detailed analysis of people living in low economic resource households was published in a feature article in *Household Wealth and Wealth Distribution, Australia, 2009–10* (cat. no. 6554.0).

Although expenditure data was not collected in 2011–12, analysis on people living in households with low economic resources such as low income and low wealth, is provided in a feature article 'Low economic resource households' in *Household Income and Income Distribution, Australia, 2011–12* (cat. no. 6523.0).

1.6 GINI COEFFICIENT

INTRODUCTION

There are many ways to illustrate aspects of the distribution of income and to measure the extent of income inequality. In the SIH five main types of indicators are used – means and medians, frequency distributions, percentile ratios, income shares, and Gini coefficients. This part of the publication describes how these indicators are derived.

MEAN AND MEDIAN

Mean household income (average household income) and median household income (the midpoint when all persons or households are ranked in ascending order of household income) are simple indicators that can be used to show income differences between subgroups of the population.

The main income measure used in published SIH output is equivalised disposable household income, and the means and medians are person weighted. That is, they are calculated with respect to the relevant number of persons. This enables people in large households to have the same contribution to the mean/median as people living alone, and is possible because equivalised disposable household income is an indicator of the economic resources available to each individual in a household.

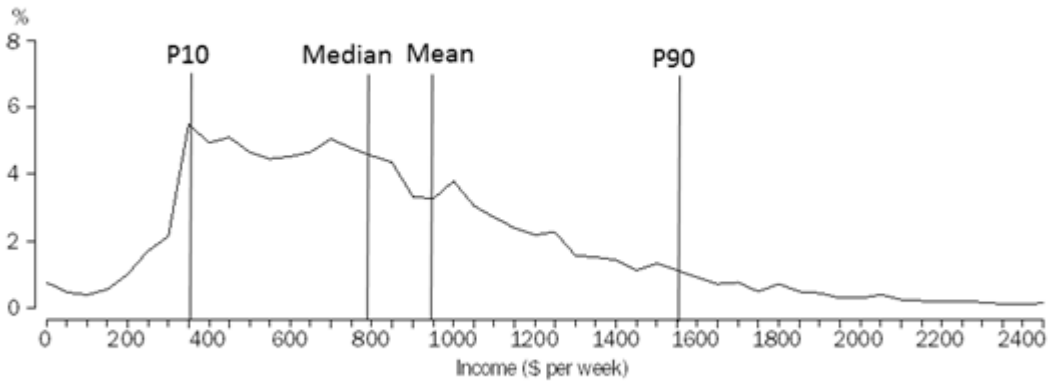
The method for calculating person weighted means and medians is described in Part 2.7 'Calculation of population counts, means, medians and other estimates'.

In some tables describing households, the mean and median of gross household income are also shown. These measures are calculated with respect to the relevant number of households, not persons. They are sometimes known as household weighted measures.

FREQUENCY DISTRIBUTION

A frequency distribution illustrates the location and spread of income within a population. It groups the population into classes by size of household income and gives the number or proportion of people in each income range. A graph of the frequency distribution is a good way to portray the essence of the income distribution. Graph 1.6.1 shows the proportion of people within $50 household income ranges.

GRAPH 1.6.1 DISTRIBUTION OF EQUIVALISED DISPOSABLE HOUSEHOLD INCOME, 2011–12



Note: Persons with an income between $25 and $2,500 are shown in $50 ranges on the graph

Source: Household Income and Income Distribution, Australia, 2011–12 (6523.0)

Frequency distributions can provide considerable detail about variations in the income of the population being described, but it is difficult to describe the differences between two frequency distributions. They are therefore often accompanied by other summary

FREQUENCY DISTRIBUTION *continued*

statistics, such as the mean and median. Taken together, the mean and median can provide an indication of the shape of the frequency distribution. As can be seen in the graph above, the distribution of income tends to be asymmetrical, with a small number of people having relatively high household incomes and a larger number of people having relatively lower household incomes. The greater the asymmetry, the greater will be the difference between the mean and the median.

QUANTILE MEASURES

When persons (or any other units) are ranked from the lowest to the highest on the basis of some characteristic such as their household income, they can then be divided into equally sized groups. The generic term for such groups is quantiles.

Quintiles, deciles and percentiles

When the population is divided into five equally sized groups, the quantiles are called quintiles. If there are 10 groups, they are deciles, and division into 100 groups gives percentiles. Thus the first quintile will comprise the first two deciles and the first 20 percentiles.

SIH publications frequently present data classified into income quintiles, supplemented by data relating to the second and third deciles combined. The latter is included to enable quintile-style analysis to be carried out without undue impact from very low incomes which may not accurately reflect levels of economic wellbeing. (See Part 1.5 'Low income households').

Equivalised disposable household income is the income measure used to define the quantiles shown in SIH publications, and the quantiles each comprise the same number of persons, that is, they are person weighted.

Upper values, medians and percentile ratios

In some analyses, the statistic of interest is the boundary between quantiles. This is usually expressed in terms of the upper value of a particular percentile. For example, the upper value of the first quintile is also the upper value of the twentieth percentile and is described as P20. The upper value of the ninth decile is P90. The median of a whole population is P50, the median of the third quintile is also P50, the median of the first quintile is P10, etc.

Percentile ratios

Percentile ratios summarise the relative distance between two points on the income distribution. To illustrate the full spread of the income distribution, the percentile ratio needs to refer to points near the extremes of the distribution, for example, the P90/P10 ratio. The P80/P20 ratio better illustrates the magnitude of the range within which the incomes of the majority of the population fall. The P80/P50 and P50/P20 ratios focus on comparing the ends of the income distribution with the midpoint (the median).

INCOME SHARES

Income shares can be calculated and compared for each income quintile (or any other subgrouping) of a population. The aggregate income of the units in each quintile is divided by the overall aggregate income of the entire population to derive income shares.

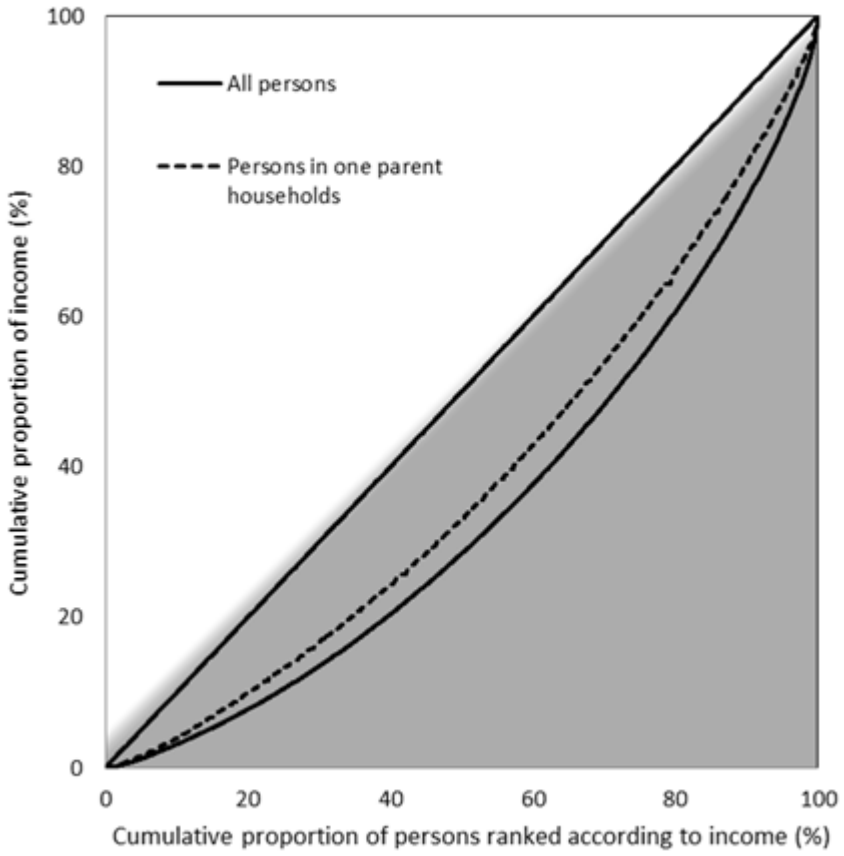
GINI COEFFICIENT

The Gini coefficient is a single statistic that summarises the distribution of income across the population.

GINI COEFFICIENT *continued*

The Gini coefficient can best be described by reference to the Lorenz curve. The Lorenz curve is a graph with the horizontal axis showing the cumulative proportion of the persons in the population ranked according to household income and with the vertical axis showing the corresponding cumulative proportion of equivalised disposable household income. The graph then shows the income share of any selected cumulative proportion of the population, as can be seen in the following Graph 1.6.2.

GRAPH 1.6.2 LORENZ CURVES



If income were distributed evenly across the whole population, the Lorenz curve would be the diagonal line through the origin of the graph. The Gini coefficient is defined as the ratio of the area between the actual Lorenz curve and the diagonal (or line of equality) and the total area under the diagonal. The Gini coefficient ranges between zero when all incomes are equal and one when one unit receives all the income, that is, the smaller the Gini coefficient the more even the distribution of income.

Normally the degree of inequality is greater for the whole population than for a subgroup within the population because subpopulations are usually more homogeneous than full populations. This is illustrated in the graph above, which shows two Lorenz curves from the 2011–12 SIH. The Lorenz curve for the whole population of the SIH is further from the diagonal than the curve for persons living in one parent, one family households, with at least one dependent child. Correspondingly, the calculated Gini coefficient for all persons was 0.320 while the coefficient for the persons in the one parent households included here was 0.245.

GINI COEFFICIENT *continued*

The Gini coefficient is discussed in more detail, along with the Theil index and Atkinson index, in Appendix 3 'Gini coefficient and other single statistic summaries of income distribution'.

1.7 CHILD CARE

CHILD CARE

Data on child care including usage, costs, and barriers to labour force participation due to child care related reasons were included in the SIH for the first time in 2007–08. These topics were added to the SIH to meet user requirements and provide data items examining the interactions between child care use, income and labour force participation. These data items are not intended to provide a detailed exploration of child care: this can be found in *Childhood Education and Care, Australia, June 2011* (cat. no. 4402.0) and *National Early Childhood Education and Care Collection: Concepts, Sources and Methods, 2012* (cat. no. 4240.0.55.001).

DATA COLLECTION

Child care information was collected from households containing resident children aged 0–12 years. The information was obtained from an adult who permanently resided in the household and was deemed to be the 'best person' able to provide this information. In the majority of cases this was the child's parent, step-parent or guardian.

Questions about type(s) of child care used (formal, informal and other), pattern of care with other parent living elsewhere, school attendance, preschool attendance and cost of care were asked in relation to each child aged 0–12 years in the household. If formal or informal care was used by a child in the last four weeks, further questions about cost, child care benefit and hours used were asked for each episode of care.

DEFINITIONS

Data was collected on child care used in the four weeks prior to the personal interview, and as such most data items relate to 'last four weeks'. In addition, data is available for care types used 'in the last week' where the number of hours of care used last week was one or more.

Child Care Benefit (CCB)

CCB is assistance in the form of a payment made by the Australian Government to help with the costs of child care for families who use either approved or registered child care. The scheme is means-tested and allocates an hourly amount that can either be remitted to child care consumers after child care has been paid, or child care organisations can receive the CCB from the Government, therefore reducing the child care fees payable by the amount of the benefit.

Child Care Rebate (CCR)

The Child Care Rebate (CCR), which was known as the Child Care Tax Rebate (CCTR) prior to July 2009, is a payment to help families using approved child care for work, training or study related reasons. The then CCTR tax offset was initially introduced on 1 July 2004 for families and was administered by the Australian Taxation Office (ATO). Those with a tax liability could offset this to the value of 30% of their out-of-pocket child care costs up to $4,000 per recipient per child per year (indexed). For the 2006–07 financial year and subsequent years, the CCTR was removed from the tax system to be delivered as a Family Assistance payment through the Family Assistance Office. From July 2008 the CCTR increased to 50% of out-of-pocket child care costs up to $7,500 (indexed) per child per year for approved child care. From July 2009 the CCTR was renamed the CCR and the entitlement calculated as 50% of out-of-pocket child care costs up to $7,778 (indexed) per child per year for approved child care. In 2011–12 the maximum amount of CCR per child per year was $7,500.

Cost of care

The cost, gross of Child Care Benefit (CCB), to parents for a child to attend care, was collected in the 2011–12 SIH. Estimates of CCB and CCR are collected from the child care questions, however there has been a significant gap between the reported number of households receiving assistance and the total value of that assistance, compared to administrative records. In SIH 2011-12, CCB and CCR have been modelled to improve the estimates of these payments. Child care assistance provided to households by the government (including the administrative overhead), is a social transfer in kind (see Appendix 4).

Formal and informal child care

Formal care is defined as regulated care away from the child's home. The main types of formal care are before and/or after school care, long day care, family day care, occasional care and vacation care.

Informal care is defined as non-regulated care, arranged by a child's parent/guardian, either in the child's home or elsewhere. It comprises care by (step) brothers or sisters, care by grandparents, care by other relatives (including a parent living elsewhere) and care by other (unrelated) people such as friends, neighbours, nannies or babysitters. It may be paid or unpaid.

Barriers to labour force participation due to child care related reasons

Data on barriers to labour force participation due to child care related reasons was collected from parents/guardians of children aged 0–12 years in the selected household who were unemployed, did not have a job or worked part time. The data collected includes: whether people would like a job if child care was available; whether they would like to work more hours if child care was available; whether child care prevents them from working/working more hours; and what are all the reasons and the main reason child care prevents them for working/working more hours. This detail is available at the person level.

USING THE DATA

Units for analysis

The income unit is the preferred unit of analysis for child care. Resources at the income unit level are usually shared between partners in a couple relationship and with dependent children. However, there are limitations on the data provided at this level. At the income unit level, child care data are aggregated from lower levels and as such may apply to more than one child in an income unit. For example, in an income unit where more than one child was cared for by a parent living elsewhere with differing frequencies of care, the item 'Most frequent pattern of care with child's other parent living elsewhere' relates to the most frequent care pattern used by one of the children.

More than one type of care could be selected, therefore some items are multiple response in nature. An explanation of how to use these multiple responses is provided for CURF users as part of additional information available on the SIH 2011–12 microdata page.

1.8 WEALTH OR NET WORTH

WEALTH OR NET WORTH

Household wealth is represented by the household's net worth. In the SIH, the term 'net worth' is used in preference to 'wealth' because it more precisely reflects the nature of information captured in the SIH. Net worth is calculated as the difference between the stock of household assets and the stock of household liabilities. Net worth is positive when the value of household assets is more than the value of household liabilities. Likewise, net worth is negative when household liabilities exceed household assets.

While there may be individual ownership of assets, the benefit of asset ownership is shared at least to some extent between members of the household. Therefore it is household net worth that is of most interest in analysing the economic wellbeing of individuals.

Assets can take many forms including:

- produced tangible fixed assets that are used repeatedly and for more than one year, such as dwellings and their contents, vehicles, and machinery and equipment used in businesses owned by households
- intangible fixed assets such as computer software and artistic originals
- business inventories of goods
- offset accounts
- value of own unincorporated businesses
- non-produced assets such as land
- financial assets such as bank deposits, shares, superannuation account balances and the outstanding value of loans made to other households or businesses.

Liabilities are primarily the value of loans outstanding including:

- mortgages
- borrowings from other households
- investment loans
- credit card debt
- debt on other loans such as personal loans to purchase vehicles, and study loans.

In the 2011–12 SIH, some asset and liability data are collected on a net basis rather than collecting for each component listed above. For example, if a survey respondent owns or part owns a business, they are asked how much they would receive if they sold their share of the business and paid off any outstanding debts.

For more details on the various components of wealth see *Household Wealth and Wealth Distribution, Australia, 2011–12* (cat. no. 6554.0).

While net worth data were collected in the 2003–04, 2005–06 and 2009–10 SIH, they were not collected in the 2007–08 SIH. Comprehensive wealth data was collected in 2011–12, and is next scheduled for collection in the 2013–14 SIH.

COMPARISON OF WEALTH BETWEEN SIH AND THE AUSTRALIAN SYSTEM OF NATIONAL ACCOUNTS

While the concepts of net worth used in the SIH have many similarities to the household net worth definition used in the Australian System of National Accounts (ASNA), they also differ in many respects.

The SIH wealth data are collected from households and can be used to analyse the distribution of wealth across the population and to compare levels of wealth between various population subgroups.

COMPARISON OF WEALTH BETWEEN SIH AND THE AUSTRALIAN SYSTEM OF NATIONAL ACCOUNTS *continued*

The ASNA estimates the net worth by using many different data sources and provides a comprehensive picture of the household sector as a whole, presented within a national accounting framework.

The sources of data used in the two data sets provide somewhat different decomposition of the aggregate amounts, and detailed item level comparisons between the data sets are difficult. It is therefore only possible to draw broad conclusions about the differences in aggregate wealth provided by the two data sets. A detailed comparison of 2003–04, 2005–06, 2009–10 and 2011–12, SIH and ASNA net worth estimates is available in *Household Wealth and Wealth Distribution, Australia, 2011–12* (cat. no. 6554.0).

1.9 HOUSEHOLD, INCOME UNIT, PERSON AND LOAN DATA

HOUSEHOLD, INCOME UNIT, PERSON AND LOAN DATA

The SIH collects information with respect to households and all the people comprising those households. It is therefore possible to produce aggregate data from the survey to households, persons, or combinations of persons within the household such as income units. Analysts can choose the unit of analysis most suited to their purposes. The data item list referred to in Part 2.3 'Data collection and data item description' shows which data items are available for each unit type supported by the SIH.

Households

A household consists of one or more persons, at least one of whom is at least 15 years of age, usually resident in the same private dwelling. The persons in a household may or may not be related. They must live wholly within one dwelling. A group of people who make common provision for food and other essentials of living but live in two separate dwellings are in two separate households.

Most of the published output from the SIH uses the household as the unit of analysis and relates to household characteristics.

Income units

An income unit is one person, or a group of related persons within a household, whose command over income is assumed to be shared. Income sharing is assumed to take place within married (registered or de facto) couples, and between parents and dependent children. The income unit is similar, but not identical, to the unit used in determining the eligibility of people for many government pensions and allowances such as Centrelink payments.

Income data and selected income unit characteristics are available on an income unit basis from the SIH, although they are not included in any published tables from the surveys.

Persons

Data at the person level are available for each person aged 15 years and over usually resident in the households included in the SIH. Data relating to characteristics of children aged under the age of 15 years are only available at the household level.

Loans

A household may have one or more loans, and data are available for the characteristics of each loan. These characteristics include the main purpose of the loan, its security, the amount borrowed, and the principal outstanding and weekly repayment, although they are not included in detail in any published tables from the surveys.

UNITS USED IN SIH PUBLISHED OUTPUT

Analysis of income data is usually carried out using household income measures. As explained in Part 1.3 'Equivalised disposable household income', it is usually most appropriate to examine household income when considering economic wellbeing because of the sharing that occurs between members of households. Part 1.3 also explains that income comparisons are improved if the household income measure is adjusted to reflect the size and composition of the household.

However, when analysing income distribution, it is the number of people who belong to households with particular characteristics, rather than the number of households with those characteristics, that is of primary interest. This leads to the preference for the equal representation of those persons in such analysis. For example, if the person is used as the unit of analysis rather than the household, then the representation in the income distribution of each person in a household comprising four persons is the same as that

UNITS USED IN SIH PUBLISHED OUTPUT
continued

for each person in a household comprising two persons. In contrast, if the household were to be used as the unit of analysis, each person in the four person household would only have half the representation of each person in the two person household.

Therefore, the income distribution measures from the SIH are all calculated with respect to persons, including children. Such measures are sometimes known as person weighted estimates because the unit of analysis is the person, even though all the characteristics being described are characteristics of the household to which the person belongs. The method of calculation is described in Part 2.7 'Calculation of population counts, means, medians and other estimates'.

Similarly, estimates of net worth are published using the household as the basic unit of analysis.

1.10 REFERENCE PERSON

REFERENCE PERSON

In some analyses it is useful to describe a household or income unit using characteristics that are in essence attributes of persons. For example, the analyst may wish to classify households into 'older households' and 'younger households'. One approach often used is to designate one member of the household or income unit as the reference person and assume that the characteristics of that person are descriptive of the household or income unit more generally. The reference person is chosen through a set of operating procedures designed to identify the person most likely to be representative of the household or income unit. Households or income units can then be classified according to the age of the reference person, occupation of the reference person, country of birth of the reference person, etc.

Household reference person

The reference person for each household is chosen by applying, to all household members aged 15 years and over, the selection criteria below – in the order listed – until a single appropriate reference person is identified:

- the person with the highest tenure when ranked as follows: owner without a mortgage, owner with a mortgage, renter, other tenure
- one of the partners in a registered or de facto marriage, with dependent children
- one of the partners in a registered or de facto marriage, without dependent children
- a lone parent with dependent children
- the person with the highest income
- the eldest person.

For example, in a household containing a lone parent (owner with a mortgage) with a non-dependent child, the one with the higher tenure – i.e. the lone parent – will become the reference person. However, if both individuals have the same tenure (e.g. a couple, owners with a mortgage), the one with the highest income will become the reference person.

Income unit reference person

The reference person for an income unit is the male partner in a couple income unit, the parent in a lone-parent income unit and the person in a one-person income unit.

1.11 HOUSING STATISTICS

HOUSING UTILISATION

The concept of housing utilisation applied in the SIH is based upon a comparison of the number of bedrooms in a dwelling with a series of household demographics such as the number of usual residents, their relationship to one another, age and sex. There is no single standard measure for housing utilisation. However, the Canadian National Occupancy Standard (CNOS) is applied in the SIH and is widely used internationally.

The CNOS for housing appropriateness is sensitive to both household size and composition. The measure assesses the bedroom requirements of a household by specifying that:

- there should be no more than two persons per bedroom
- children less than five years of age of different sexes may reasonably share a bedroom
- children less than 18 years of age and of the same sex may reasonably share a bedroom
- single household members 18 years and over should have a separate bedroom, as should parents or couples
- a lone person household may reasonably occupy a bed sitter.

The CNOS variable compares the number of bedrooms required with the actual number of bedrooms in the dwelling. Households living in dwellings where this standard cannot be met are considered to be overcrowded.

HOUSING COSTS AND HOUSING STRESS

Housing costs are the recurrent outlays made by household members in providing shelter for themselves. The data collected on housing outlays in the SIH are limited to major outlays on housing, that is, mortgage repayments, rent, property and water rates as well as body corporate fees.

Only payments which relate to the dwelling occupied by the household at time of interview, that is, a respondent's usual place of residence, are included. Housing costs only include mortgage/loan payments if the purpose of the loan at the time it was initially taken out was primarily to buy, build, add to, or alter the occupied dwelling.

There are a number of limitations with the housing costs information obtained in the SIH, due to practical data collection considerations. These limitations should be especially borne in mind when comparing the housing costs of different tenure and landlord types, that is when comparing the costs of owner occupiers with the costs of renting households, and when comparing the costs of households renting from state and territory housing authorities with the costs of other renters.

- Households are sometimes reimbursed some or all of their housing costs. Commonwealth Rent Assistance (CRA), paid by the Australian Government to qualifying recipients of income support payments is an important type of reimbursement of relevance to these statistics. If rent assistance receipts were subtracted from gross housing costs, it has been estimated that the housing costs of households receiving rent assistance would be about 19% lower on average, and the housing costs of all households renting from landlord other than state/territory authorities would be about 7% lower on average.

HOUSING COSTS AND HOUSING STRESS *continued*

- Mortgage repayments made by owners with a mortgage include both the interest component and the principal or capital component. For many purposes it is more appropriate to consider repayments of principal as a form of saving rather than as a recurrent housing cost. It reflects the purchase of a housing asset by increasing the equity in the property held by the household and is an addition to the wealth of the occupants. The 2011–12 SIH indicates that about 24% of the housing costs of owners with a mortgage comprised repayments of the principal on loans. The equivalent proportions in 2009–10 and 2007–08 were 33% and 32% respectively.
- A fuller measure of housing costs include a range of outlays necessary to ensure that the dwelling can continue to provide an appropriate level of housing services. These include repairs, maintenance and dwelling insurance, and are costs that tend to be incurred by owner occupier households but not by renting households. If these costs were added to SIH housing costs estimates, the estimates of housing costs would be more than doubled for owners without a mortgage and would increase by about 13% for owners with a mortgage.

Housing Costs and Household Income

Housing costs are often a major component of total living costs. Therefore housing costs are often analysed as a proportion of total income, sometimes referred to as affordability ratios. However, comparisons between these measures are subject to the limitations of housing cost estimates obtained in the SIH that are described in the previous paragraph. Housing affordability ratios derived from SIH data are further impacted by the inclusion of CRA in the value of income collected. CRA is estimated, on average, to represent about 5% of the reported income of households receiving CRA and about 1% of the reported income of all households renting from landlords other than the state/territory authorities.

To illustrate the difficulties discussed above, consider two couples that are renting their dwellings. Both receive government pensions of $400 per week. One rents from a public housing authority and pays rent of $100 per week. The other pays $135 rent per week to a private landlord and receives CRA of $35 per week. In SIH, the housing costs of the latter household would be recorded as $135 and their income would be recorded as $435. The couple renting from the public housing authority has a housing costs/income ratio of 25%. The housing costs/income ratio for the latter household would be derived as 31%. However, if CRA receipts are excluded from housing costs and income, the housing costs/income ratio for the latter couple is also 25%, highlighting that there is no substantive difference between the housing costs or income situation of the two couples. The treatment of CRA is of particular importance when considering changes in affordability ratios over time, since there has been a shift from providing public housing to providing CRA as a means of supplying affordable housing to low income people.

While housing costs can be a major component of total living costs, the difference between the housing costs of a larger household and a smaller household would not be expected to be as great as the difference in many other costs, such as food or clothing. In other words, larger households can be expected to experience economies of scale in the supply of housing. This means that if a larger household and smaller household both have the same standard of living, it could be expected that on average the larger household will have a lower housing costs/income ratio. Therefore relatively high housing costs/income ratios are more of a concern with respect to larger households

Housing Costs and Household Income continued

than smaller households. This should be borne in mind when comparing ratios across different household sizes.

In comparing households' housing costs with their income, it should be noted that households have a variety of housing preferences. Some people may choose to live in an area with high property values because it is close to their place of employment and therefore they have lower transport costs. Some people choose to incur relatively high housing costs because they prefer a relatively high standard of housing compared with other consumption possibilities. High mortgage repayments might reflect a choice to purchase a relatively expensive home, or pay off a mortgage relatively rapidly, as a form of investment.

Housing stress

Households with relatively low income, and housing costs greater than a certain proportion of income, often 30%, are sometimes said to be in "housing stress". The ABS does not use this term in its published output.

1.12 IMPUTED RENT ESTIMATES

IMPUTED RENT ESTIMATES

In May 2008 the ABS released household level estimates of imputed rent, derived from data reported in the 2003–04 and 2005–06 SIH for the first time, (*Experimental Estimates of Imputed Rent, Australia, 2003–04 and 2005–06* (cat. no. 6525.0)).

The availability of imputed rent estimates allows the analysis of household income to be extended to include the imputed rental incomes that flow to people living in homes owned by the occupant and those paying subsidised rent. Such imputations allow for more meaningful comparison of the income circumstances of people living in different tenure types, and to understand changes over time in income levels and the distribution of income when tenures may be changing over time.

Including imputed rent as part of household income and expenditure conceptually treats owner-occupiers as if they were renting their home from themselves, thus simultaneously incurring rental expenditure and earning rental income. Imputed rent is included in income on a net basis (i.e. the imputed value of the services received less the value of the housing costs incurred by the household in their role as a landlord).

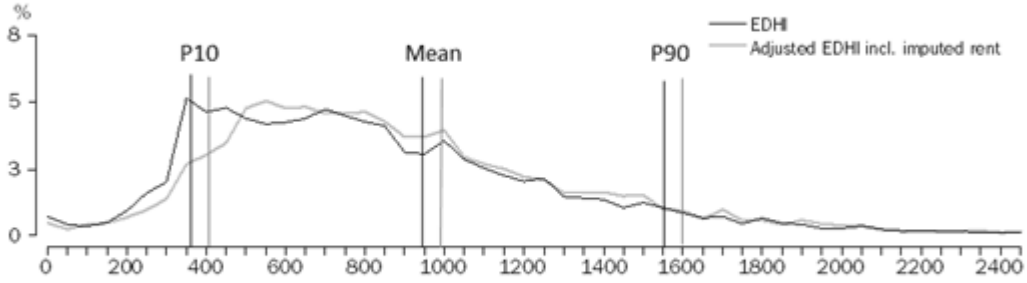
Net imputed rent is estimated as gross imputed rent less reported housing costs. For owner occupiers, the housing costs subtracted are those which would normally be paid by landlords (i.e. rates, mortgage interest, insurance, repairs and maintenance). For households paying subsidised rent (e.g. tenants of an employer or of a state/territory housing authority) and households occupying their dwelling rent-free, the housing costs that are subtracted are largely made up of the reported rent paid, but other housing costs incurred, such as rates, are also subtracted for some tenure types. In the case of tenants of state/territory housing authorities, the net imputed rent estimates have been benchmarked to administrative data on the mean weekly rental subsidy.

Hedonic regression is used to estimate the market value of the rental equivalent of an owner-occupied dwelling. Data from the SIH on reported rents paid by private market renters is regressed on the characteristics of their rented dwellings (e.g. location and dwelling structure). The estimated coefficients are then applied to the corresponding characteristics of owner-occupied and other dwellings to produce imputed values of the gross rental equivalence for these dwellings.

Impact on Income Distribution

The addition of net imputed rent to disposable household income has a partial equalising effect on the distribution of household income. This result reflects that, for many home owners in lower income ranges the family home that they own is the largest asset held by the household, and the net imputed rent income from that asset is a relatively large proportion of the household's incomes. In higher income ranges the net imputed rent income is a relatively smaller proportion of the household's incomes. This equalising effect of accounting for net imputed rent in income analysis is illustrated in the following frequency distribution graph, table and discussion of a range of distribution measures.

GRAPH 1.12.1 DISTRIBUTION OF EQUIVALISED DISPOSABLE HOUSEHOLD INCOME (EDHI), WITH AND WITHOUT IMPUTED RENT, 2011–12



Notes: Income ($ per week)
Persons with an income between $50 and $2,500 are shown in $50 ranges on the graph

Source: Household Income and Income Distribution, Australia, 2011–12 (6523.0)

PART 2 SURVEY METHODOLOGY

SURVEY METHODOLOGY

Part 2 of this User Guide describes the methodology used for the 2011–12 SIH, including:

- information about the scope, coverage and sample
- data collection and processing
- benchmarks and weighting
- estimates and reliability of estimates.

Changes to survey methodology in 2011–12 are described in Part 4 'Changes from previous surveys'.

2.1 SCOPE AND COVERAGE

SCOPE

The SIH collect information by personal interview from usual residents of private dwellings in urban and rural areas of Australia (excluding very remote areas), covering about 97% of the people living in Australia. Private dwellings are houses, flats, home units, caravans, garages, tents and other structures that were used as places of residence at the time of interview. Long-stay caravan parks are also included. These are distinct from non-private dwellings which include hotels, boarding schools, boarding houses and institutions. Residents of non-private dwellings are excluded.

Usual residents excludes:

- households that contain members of non-Australian defence forces stationed in Australia, and
- households that contain diplomatic personnel of overseas governments
- households in collection districts defined as very remote - this has only minor impact on aggregate estimates except in the Northern Territory where such households account for about 23% of the population.

For most states and territories the exclusion of people in very remote areas has only a minor impact on any aggregate estimates that are produced because they constitute just a small proportion of the population. Very remote and remote areas are defined by the assignment of an Accessibility/Remoteness Index of Australia (ARIA) score. ARIA is a remoteness value (a continuous variable between 0 and 15) that measures the physical distance which separates people in a particular area and where their goods, services and opportunities for social interaction may be accessed. The range of ARIA scores have been categorised as follows:

- Least Remote: defined as having an ARIA score less then 5.95
- Remote: defined as having an ARIA score greater than or equal to 5.95 but less than 10.5
- Very Remote: defined as having an ARIA score greater than or equal to 10.5.

The ARIA categories and how ARIA scores are calculated are further explained in the *Australian Standard Geographical Classification (ASGC)* (cat. no. 1216.0).

COVERAGE

Information was collected only from usual residents. Usual residents were residents who regarded the dwelling as their own or main home. Others present were considered to be visitors and were not asked to participate in the survey.

2.2 SIH SAMPLE DESIGN AND SELECTIONS

SAMPLE DESIGN

The SIH sample was designed to produce reliable estimates for broad aggregates of total income for households resident in private dwellings for Australia, for each state and for the capital cities in each state and territory. More detailed estimates should be used with caution, especially for Tasmania, the Northern Territory and the Australian Capital Territory (see Part 2.8 'Reliability of estimates').

In the 2011–12 SIH dwellings were selected through a stratified, multistage cluster design from the private dwelling framework of the ABS Population Survey Master Sample. Selections were distributed across a twelve month enumeration period so that the survey results are representative of income patterns across the year.

The May 2009 Budget funded an expansion in the SIH sample for an extra 4,200 households, located outside capital cities. This expansion was to better support Council of Australian Governments (COAG) performance indicator reporting, particularly in regard to housing affordability and home ownership measures required under COAG intergovernmental agreements. This sample expansion was maintained in the 2011–12 SIH.

For the 2009–10 SIH and HES there was an additional sample of metropolitan households whose main source of income was government pensions, benefits and/or allowances. The main purpose of this additional sample was to support improved analysis for the Pensioner and Beneficiary Living Cost Index (PBLCI). This additional sample was not maintained in the 2011–12 SIH sample.

SELECTED DWELLINGS, SAMPLE LOSS AND SELECTED HOUSEHOLDS

In 2011–12, 21,643 dwellings were initially selected for the SIH sample. When fieldwork commenced some dwellings selected for inclusion in the SIH sample were found to be out of scope units. Collectively these are referred to as sample loss, and are composed of the following groups:

- dwellings that are out of scope of the survey, under construction, demolished, or converted to non-private dwellings or non-dwellings
- vacant private dwellings
- private dwellings that contain only either out of scope residents (e.g. dwellings occupied by foreign diplomats and their dependants), or visitors.

In 2011–12, sample loss was 3,345 dwellings, 15.5% of the selected sample.

Sometimes dwellings that have been selected for inclusion in a survey are found to comprise more than one actual dwelling because, for example, an additional residence such as a 'granny flat' has been added to the original dwelling. In such cases, each actual dwelling becomes a separate household. Occasionally the residents of a selected dwelling request that their details be provided separately from other dwelling residents, for privacy reasons. A separate household is then created for each such group of residents. In 2011–12, 43 selected dwellings were split into two households, four were split into three households, and three were split into four or more households.

The net result was that 18,298 households were approached to complete the SIH.

RESPONDING HOUSEHOLDS AND FINAL SAMPLE

In scope households selected for inclusion in the survey can be categorised as responding or non-responding households. Responding households are either fully responding or partially responding. In the SIH, some information missing from partially responding households is imputed, as described in Part 2.4 'Data Processing'.

Non-responding households include:

- households affected by death or illness of a household member
- households in which the significant person(s) in the household did not respond because they could not be contacted, had language problems or refused to participate
- households in which the significant person(s) did not respond to key questions.

The final sample on which estimates were based, is composed of persons for which all necessary information is available. The information may have been wholly provided at the interview (fully-responding) or may have been completed through imputation for partially responding households. Of the selected dwellings, there were 18,298 in the scope of the survey, of which 14,569 (80%) were included as part of the final estimates. The final sample consists of those 14,569 households, comprising 28,258 persons aged 15 years old and over.

Table 2.2.1 shows the distribution of the final samples between states and territories and between capital cities and the balance of state for persons aged 15 years and over.

TABLE 2.2.1 SIH FINAL SAMPLE, Number of households – 2011–12

	CAPITAL CITY		*BALANCE OF STATE*		*TOTAL*	
	Households	*Persons*(a)	*Households*	*Persons*(a)	*Households*	*Persons*(a)
	no.	*no.*	*no.*	*no.*	*no.*	*no.*
NSW	1 512	3 179	946	1 733	2 458	4 912
Vic.	1 389	2 858	1 127	2 104	2 516	4 962
Qld	995	1 984	984	1 912	1 979	3 896
SA	1 212	2 339	1 115	2 005	2 327	4 344
WA	1 060	2 089	1 239	2 348	2 299	4 437
Tas.	549	1 027	1 040	1 928	1 589	2 955
NT	462	877	70	129	532	1 006
ACT	869	1 746	—	—	869	1 746
Aust.	***8 048***	***16 099***	***6 521***	***12 159***	***14 569***	***28 258***

— nil or rounded to zero (including null cells)

(a) Number of persons aged 15 years and over

2.3 DATA COLLECTION AND DATA ITEM DESCRIPTION

INTERVIEW PROCEDURES

Experienced ABS interviewers were used to collect SIH data. They were given comprehensive training and were provided with detailed written instructions to complement the survey documents.

Information for each household was collected using:

- a household level computer assisted personal interview questionnaire which collected information on household characteristics, housing costs and certain assets and liabilities for all households
- an individual level computer assisted personal interview questionnaire which collected information on income, certain assets and liabilities, and personal characteristics from each usual resident aged 15 years and over in all households.

Interviewers made an initial contact visit, in which they obtained information on the numbers and characteristics of people usually resident in the dwelling. If a responsible adult was not available, the interviewer called back at another time. The interviewer also arranged a convenient time to call back to conduct the interviews.

During the actual survey interview, the interviewer:

- completed one household questionnaire for each household (information was provided by a household spokesperson who was nominated as the best person to provide information on the financial situation of the household)
- completed an individual questionnaire for each usual resident aged 15 years and over
- completed a proxy interview when the parent/guardian of children in the household aged 15–17, didn't give permission for them to be personally interviewed, or when a person was incapable of answering on their own behalf.

If the usual resident could not be present for the interview, additional interviews were arranged to ensure that all usual residents were covered by the survey.

DATA COLLECTION INSTRUMENTS

A representation of the computer-assisted interview questionnaires used in the SIH can be downloaded as separate .pdf files from the "Downloads" tab of the website entry for this publication.

DATA ITEMS AVAILABLE

A listing of all the data items available from the SIH can be downloaded from under "Downloads" tab of the website entry for this publication. For more details about the data items, see Part 3 'Data availability'.

2.4 DATA PROCESSING

DATA PROCESSING

Computer based systems were used to collect and process the data from the 2011–12 SIH with a software program known as BLAISE. A variety of methods were employed to process and edit the data, reflecting the different questionnaires used to collect data from the household and individual components of the surveys. These processes are outlined below.

Coding and input editing of household and individual questionnaires

Internal system edits were applied in the computer-assisted interview (CAI) questionnaires to ensure the completeness and consistency of the responses being provided. The interviewer could not proceed from one section of the interview to the next until responses had been appropriately completed.

A number of range and consistency edits were programmed into the CAI questionnaire. Edit messages automatically appeared on the screen if the information entered was either outside the permitted range for a particular question, or contradicted information already recorded. These edit queries were resolved on the spot with respondents.

Data from the CAI questionnaires were electronically loaded to the processing database on receipt in the ABS office in each state or territory. Office checks were made to ensure data for all relevant questions were fully accounted for and that returns for each household and respondent were obtained. Problems identified by interviewers were resolved by office staff, where possible, based on other information contained in the schedule, or on the comments provided by interviewers.

Computer-assisted coding was performed on responses to questions on country of birth, occupation and industry of employment to ensure completeness. Data on relationships between household members were used to delineate families and income units within the household, and to classify households and income units by type.

Additional editing

A range of edits was also applied to the household and individual information to double check that logical sequences had been followed in the questionnaires; that specific values lay within expected ranges; and that relationships between items were consistent.

Unusually high values (termed statistical outliers) were investigated to determine whether there had been errors in entering the data. Such values were also examined for their effect on aggregate estimates for Australia and action was taken where necessary.

Imputation for missing records and values

Some households did not supply all the required information but supplied sufficient principal information to be retained in the sample. Such partial responses occur when:

- income or other data in a questionnaire are missing from one or more non-significant person's records because they are unable or unwilling to provide the data
- all key questions are answered by the significant person(s) but other questions are not answered
- not every person aged 15 years and over residing in the household responds but the significant person(s) provide answers to all key questions.

In the first and second cases of partial response above, the data provided are retained and the missing data are imputed by replacing each missing value with a value reported by another person with similar characteristics (referred to as the donor).

Imputation for missing records and values continued

For the third type of partial response, the data for the persons who did respond are retained, and data for each missing person are provided by imputing data values equivalent to those of a fully responding person (the donor).

Donor records are randomly selected by finding fully responding persons with matching information on multiple characteristics (such as state, sex, age, labour force status and income) as the person with missing information. As far as possible, the imputed information is an appropriate proxy for the information that is missing. Depending on which values are to be imputed, donors are randomly chosen from the pool of individual records with complete information for the block of questions where the missing information occurs.

The final SIH sample includes 5,850 households which had at least one imputed value. For 29.4% of these households only a single value was missing, and most of these were for income from superannuation or income from interest and investments.

2.5 INCOME TAX AND OTHER MODELLED DATA ITEMS

MODELLED DATA ITEMS

Some data items of interest cannot reliably be collected from respondents, and some cannot be collected at all. However, it is sometimes possible to utilise other information provided by respondents as a basis for estimating the data items of interest. This process is referred to as modelling.

Income tax and the Medicare levy

As described in Part 1.1 'Gross, disposable and final income', disposable income is calculated by deducting income tax (including the Medicare levy) from gross income. The model is based on the liability rules described in the Tax Pack for the year concerned, the income reported by respondents, and other characteristics of household members reported in the survey.

Estimates of income tax are modelled, rather than collected from respondents, for a number of reasons.

- As noted in Part 1.4 'Components of income', an accruals approach is taken to estimating these items. The estimates should therefore relate to the tax liability being incurred with respect to the income being reported by the respondent in the survey. For estimates of current income (see Part 1.2 'Current, annual and weekly income'), the current income tax liability is calculated as though the current income is the average income for the whole year. If actual income fluctuates during the year, respondents are unlikely to have an actual income tax assessment that is relevant to the required estimate.
- In addition to income changes during the course of the year, full year income tax assessments may be affected by changes in family or other circumstances of the respondent which are not described in the survey, and are best ignored when deriving an income tax estimate to use with the other survey data.
- Income tax assessments are only made after the end of the financial year, and therefore are not yet available at the time that current income is collected from respondents.
- The income tax assessment of respondents may be affected by certain expenditures which they make, such as donations to charities or other particular circumstances which are not captured in the survey. For many purposes it is desirable to exclude the impact on tax liabilities of specific influences which are not captured in the survey.
- The SIH provides sufficient relevant information to allow a relatively comprehensive tax model to be constructed.

The Medicare levy surcharge was also modelled and deducted from gross income in the calculation of disposable income.

Family tax benefit

Family Tax Benefit (FTB) are received from the Family Assistance Office either as fortnightly payments, a lump sum after the end of the financial year, or a combination of both. Payments received as fortnightly payments, collected in the SIH were used in the derivation of "Current weekly income from family tax benefits". Components received in the form of lump sum payments are modelled using responses to the FTB questions relating to method of payment, as well as other demographic and income information. From the 2005–06 SIH onwards, income from FTB supplements has also been modelled.

Family tax benefit continued

Prior to 2005–06, the modelled components were not included in estimates of FTB and hence were not included as government pensions and allowances or in gross income. For practical reasons they were included as negative adjustments in the modelling of income tax. Therefore while not included in gross income, they were included in disposable income and equivalised disposable income.

Baby Bonus

Information on the Baby Bonus, formerly known as the Maternity Payment, was collected in the 2011–12 SIH for the current and previous financial year. Recipients of the Baby Bonus receive income for 26 weeks (in 13 instalments), and payments are paid at the same rate to all eligible recipients. The Baby Bonus rate was calculated using the total value of the payment at the time of interview divided by 26 weeks, to calculate the average weekly amount received. The amount was allocated to those who reported they received the Baby Bonus.

Paid Parental Leave

The Paid Parental Leave payment was introduced from 1 January 2011, therefore the 2011–12 SIH collected information on Paid Parental Leave payments received in the current year and second half of the previous financial year only. With the late introduction of the Paid Parental Leave scheme, information on the Paid Parental Leave payments were collected separately, asking whether the payment was received, the duration of receiving the payment, and whether the payment was included as wages and salary. Similar to the Baby Bonus, the same rate was payable to all eligible recipients, and received as income for up to 18 weeks. The Paid Parental Leave rate was calculated using the total value of the payment at the time of interview divided by 18 weeks to calculate the average weekly amount received. The amount was allocated to those who reported they received paid parental leave.

Pension Supplement, Seniors Supplement, and Utilities Allowance

The Pension Supplement and the Seniors Supplement were introduced on 20 September 2009. The Pension Supplement replaced Utilities, Telephone and Pharmaceutical allowances for recipients of Age Pension, Carer Payment, Wife Pension, Widow B Pension, Bereavement Allowance, Disability Support Pension, Parenting Payment and Service Pensions, as well as other income support payments if a person has reached age pension age.

The Seniors Concession Allowance and Telephone Allowance were combined into the Seniors Supplement which is targeted at self-funded retirees of age pension age who do not qualify for an age pension because of assets or income levels.

The Utilities Allowance was paid to recipients of the Widow Allowance and Partner Allowance who are under age pension age and to Disability Support Pension recipients younger than 21 years without children, to assist with the cost of utility bills.

Estimates for the Pension Supplement, Seniors Supplement, and Utilities Allowance were modelled in the 2011–12 SIH.

Clean Energy Advance

The Clean Energy Advance (CEA) is a tax-exempt lump sum payment, paid to pensioners, other income support recipients, families receiving Family Tax Benefit payments and Seniors Supplement recipients, provided they meet eligibility requirements. As part of the Household Assistance Package, an initial payment was paid to eligible families and parents, seniors and individuals during May and June 2012. As the announcement of the

Clean Energy Advance continued

CEA payments were made in early 2012, payments were not able to be fully captured in the 2011–12 SIH. Therefore the CEA was modelled in SIH 2011–12 for eligible households using the applicable rates.

Education Tax Refund

In early 2012, the Australian Government announced changes to the Education Tax Refund (ETR). Previously, families had to have receipts for expenditure on education expenses and apply to receive the ETR as a refundable tax offset through the Australian Taxation Office. To ensure more families receive assistance with the costs of educating their children, it was announced that the ETR will be replaced by the Schoolkids Bonus from 1 January 2013. However, a transitional one-off payment was made to all eligible families in June 2012. As the changes to the ETR were only announced in early 2012, payments were not able to be fully captured in the 2011–12 SIH. Therefore, the ETR payment was modelled for SIH 2011–12 and allocated to all households receiving Family Tax Benefit Part A, plus young people in school receiving Youth Allowance and some other income support and veterans' payments, providing they meet the age and education requirements.

Child Care

Child Care Benefit (CCB) is a payment from the Australian Government payment that assists families with the costs of registered or approved child care. The scheme is means-tested and allocates an hourly amount that can either be remitted to child care consumers after child care has been paid, or child care organisations can receive the CCB from the Government, therefore reducing the child care fees payable by the amount of the benefit.

Child Care Rebate (CCR) is also an Australian Government payment that, like CCB, assists families with the cost of child care. Unlike CCB, it is not a fixed hourly rate, but a refund of 50% of child care costs (after any rebates like CCB), up to a per child, per year limit ($7,500 per child per year in 2011–12). Families are eligible for CCB for up to 50 hours a week per child. Although certain requirements must be met to qualify for CCR, the eligibility tests are different from those for the CCB.

Estimates of CCB and CCR are collected from the child care questions, however there has been a significant gap between the reported number of households receiving assistance and the total value of that assistance, compared to administrative records. In SIH 2011–12, CCB and CCR have been modelled to improve the estimates of these payments.

Previous output items on the reported amount of CCB and CCR received at the Person and Child Care level are no longer available. The modelled amounts of CCB and CCR are available at the household and income unit level.

2.6 BENCHMARKS AND WEIGHTING OF SURVEY RESULTS

BENCHMARKS AND WEIGHTING

Weighting is the process of adjusting results from a sample survey to infer results for the total in scope population whether that be persons or households. To do this, a 'weight' is allocated to each sample unit (e.g. a person or a household). The weight is a value which indicates how many population units are represented by the sample unit. The first step in calculating weights for each unit is to assign an initial weight, which is the inverse of the probability of being selected in the survey. For example, if the probability of a household being selected in the survey was 1 in 600, then the household would have an initial weight of 600 (that is, it represents 600 households).

An adjustment is then made to the initial weights to ensure that seasonal variation is appropriately represented in survey estimates. After this initial adjustment, the sum of the weights of households in each quarter is in proportion to the length of the quarter (which align across the financial year with pension indexation dates rather than calendar quarters).

The initial weights are then calibrated to align with independent estimates of the population of interest, referred to as 'benchmarks'. Weights calibrated against population benchmarks ensure that the survey estimates conform to the independently estimated distribution of the population rather than to the distribution within the sample itself.

Most of the independent person and household benchmarks are based on demography estimates of numbers of persons and households in Australia. The benchmarks are adjusted to include persons and households residing in private dwellings only and to exclude persons living in very remote areas, and therefore do not, and are not intended to, match estimates of the Australian resident population published in other ABS publications. The demography estimates of persons (estimated resident population - ERP) and households used in SIH 2011–12 are built up from the 2006 Census.

In the 2011–12 SIH, as in 2007–08 and 2009–10, all persons in each household were assigned a weight. This differs from the 2005–06 SIH where children aged 0–14 years were not given separate weights, but household counts of the number of children were benchmarked to population totals.

The benchmarks used in the calibration of the final weights for the 2011–12 SIH were:

- number of persons —
  - by state or territory by age by sex
  - in five year age groups up to 80+ years for all states and territories (excluding NT)
  - in five year age groups up to 70+ years for the NT
  - by state or territory by labour force status ('Employed', 'Unemployed' and 'Not in the labour force': 'Employed' and 'Unemployed' combined for NT)
  - by state by capital city/balance of state (excluding NT and ACT which use only state)
- numbers of households —
  - state by household composition (number of adults (1,2 or 3+) and whether or not the household contains children) (excluding NT which uses only number of adults of 1+).

BENCHMARKS AND WEIGHTING *continued*

The independent person and household benchmarks are based on demography estimates of numbers of persons and households in Australia. The benchmarks are adjusted to include persons and households residing in private dwellings only and to exclude persons living in very remote areas, and therefore do not, and are not intended to, match estimates of the Australian resident population published in other ABS publications.

Estimation

Estimates produced from the SIH are usually in the form of averages (e.g. average weekly income of couple households with dependent children), or counts (e.g. total number of households that own their dwelling or total number of persons living in households that own their own dwelling). For counts of households, the estimate was obtained by summing the weights for the responding households in the required group (e.g. those owning their own dwelling). For counts of persons, the household weights were multiplied by the number of persons in the household before summing. The SIH collects data on the number of people, including children, in each household but separate records with income and other detailed data were only collected for people aged 15 years and older.

Average income values are obtained in two different ways, depending on whether mean gross household income or mean equivalised disposable household income is being derived. Estimates of mean gross household income are calculated on a household weighted basis. They are obtained by multiplying the gross income of each household by the weight of the household, summing across all households and then dividing by the estimated number of households. For example, the mean gross household income of couple households with dependent children is the weighted sum of the gross income of each such household divided by the estimated number of those households.

Estimates of mean equivalised disposable household income are calculated on a person weighted basis. They are obtained by multiplying the equivalised disposable income of each household by the number of people in the household (including children) and by the weight of the household, summing across all households and then dividing by the estimated number of people in the population group. Appendix 3 'Gini coefficient and other single statistic summaries of income distribution' illustrates the differences between mean gross household income calculated on a household weighted basis and mean equivalised disposable household income calculated on a person weighted basis.

2.7 COUNTS, MEANS, MEDIANS AND OTHER ESTIMATES

COUNTS

Counts of income units or households are derived by summing the weights assigned to each income unit or household record of interest. Counts of persons can also be obtained this way if only persons aged 15 years and over are required. However, there are not separate records for persons under the age of 15 years, therefore counts of persons including those under 15 years have to be derived by first multiplying each household weight by the number of persons in the household and then summing the products.

MEANS

The mean, or average, value of a data item is usually calculated by selecting all the survey records for the population of interest, multiplying the value of the data item in each record by the weight of the record and summing the resultant products, and then dividing the total by the sum of the weights of the records. For example, the mean gross income of Queensland households is the weighted sum of the gross income of each such household divided by the sum of the weights relating to each such household.

However, for some purposes, means for a household variable may be required with respect to all people in a population group, including children aged under 15 years. Such measures (referred to as person weighted measures) are often used when analysing equivalised household income. Estimates of mean equivalised disposable household income in SIH published output are obtained by multiplying the equivalised disposable income of each household by the number of people in the household (including children) and by the weight of the household, summing across all households and then dividing by the estimated number of people in the population group. (The estimated number of people in the population group is calculated as outlined above in the section 'counts', by first multiplying each household weight by the number of persons in the household and then summing the products).

MEDIANS

Medians divide the population of interest into halves. To identify the median record, the population is first ranked in ascending order according to the data item of interest. Except for person weighted measures of household variables, the weights of the records are then accumulated until half the population is accounted for. The record at which this occurs is the median record, and its value for the data item of interest is the median value. For person weighted measures of household variables, the household weights are multiplied by the number of persons in the household before accumulation.

OTHER ESTIMATES

An analogous approach is used for other quantile measures.

Calculation of the Gini coefficient is included in Appendix 3 'Gini coefficient and other single statistic summaries of income distribution'.

2.8 RELIABILITY OF ESTIMATES

RELIABILITY OF ESTIMATES

The estimates provided from the SIH are subject to two types of error, non-sampling and sampling error. These are discussed below.

Comparisons between estimates from surveys conducted in different periods, for example, comparison of 2011–12 SIH estimates with previous cycle estimates, are also subject to the impact of any changes made to the way the survey is conducted. For further details on changes between cycles see Part 4 'Changes from previous surveys'.

Non-sampling error

Non-sampling error can occur in any collection, whether the estimates are derived from a sample or from a complete collection such as a census. Sources of non-sampling error include non-response, errors in reporting by respondents or recording of answers by interviewers and errors in coding and processing the data.

Non-sampling errors are difficult to quantify in any collection. However, every effort is made to reduce non-sampling error to a minimum by careful design and testing of the questionnaire, training of interviewers and data entry staff and editing and quality control procedures during data processing.

One of the main sources of non-sampling error is non-response by persons selected in the survey. Non-response occurs when people cannot or will not cooperate or cannot be contacted. Non-response can affect the reliability of results and can introduce a bias. The magnitude of any bias depends upon the level of non-response and the extent of the difference between the characteristics of those people who responded to the survey and those who did not.

The following methods were adopted to reduce the level and impact of non-response:

- Primary Approach Letters (PALs) were posted to selected SIH households prior to enumeration
- document cards were provided to respondents to suggest having financial statements and similar documents handy at the time of interview to assist with accurate responses
- face-to-face interviews with respondents
- the use of interviewers who could speak languages other than English, where necessary
- Proxy Interviews conducted, when consent is given, with a responsible person answering on behalf of respondents incapable of doing so themselves
- follow-up of respondents if there was initially no response
- imputation of missing values
- ensuring that the weighted data is representative of the population (in terms of demographic characteristics) by aligning the estimates with population benchmarks.

Sampling error

The estimates are based on a sample of possible observations and are subject to sampling variability. The estimates may therefore differ from the figures that would have been produced if information had been collected for all households. A measure of the sampling error for a given estimate is provided by the standard error, which may be expressed as a percentage of the estimate (relative standard error).

Sampling error continued

The estimates from the SIH are based on information obtained from the occupants of sampled dwellings. Therefore, the estimates are subject to sampling variability and may differ from the population parameters that would have been observed if information had been collected for all dwellings.

One measure of the likely uncertainty is given by the standard error estimate (SE), which indicates the extent to which an sample estimate might have varied compared to the population parameter because only a sample of dwellings was included. There are about two chances in three that the sample estimate will differ by less than one SE from the population parameter that would have been obtained if all dwellings had been enumerated, and about 19 chances in 20 (the 95% confidence level) that the difference will be less than two SEs. Another measure of the likely difference is the relative standard error (RSE), which is obtained by expressing the SE as a percentage of the estimate.

For estimates of population sizes, the size of the SE generally increases with the level of the estimate, so that the larger the estimate the larger the SE. However, the larger the sampling estimate the smaller the SE becomes in percentage terms (RSE). Thus, larger sample estimates will be relatively more reliable than smaller estimates.

Estimates in the SIH publication with RSEs of 25% or less are considered reliable for many purposes. Estimates with RSEs greater than 25% but less than or equal to 50% are annotated by an asterisk to indicate they are subject to high SEs and should be used with caution. Estimates with RSEs of greater than 50%, annotated by a double asterisk, are considered too unreliable for general use and should only be used to aggregate with other estimates to provide derived estimates with RSEs of less than 50%.

RSEs for the SIH have been derived using the delete-a-group jackknife method. If needed, SEs can be calculated using the estimates and RSEs.

COMPARATIVE ESTIMATES

Proportions and percentages

Proportions and percentages, which are formed from the ratio of two estimates, are also subject to sampling errors. The size of the error depends on the accuracy of both the numerator and the denominator. For proportions where the denominator is an estimate of the number of households in a grouping and the numerator is the number of households in a sub-group of the denominator group, the formula for the RSE is given by:

$$RSE\%\left(\frac{x}{y}\right) = \sqrt{[RSE\%(x)]^2 - [RSE\%(y)]^2}$$

Differences between estimates

The difference between survey estimates is also subject to sampling variability. An approximate SE of the difference between two estimates (x–y) may be calculated by the formula:

$$SE(x-y) = \sqrt{[SE(x)]^2 + [SE(y)]^2}$$

This approximation can generally be used whenever the estimates come from different samples, such as two estimates from different years or two estimates for two non-intersecting subpopulations in the one year. If the estimates come from two populations, one of which is a subpopulation of the other, the standard error is likely to

Differences between estimates continued

be lower than that derived from this approximation, but there is no straightforward way of estimating how much lower.

Significance testing

For comparing estimates between surveys, or between populations within a survey, it is useful to determine whether differences are 'real' differences between the corresponding population characteristics or simply the result of sampling variability. One way to examine this is to determine whether the difference between the estimates is statistically significant. This is done by calculating the standard error of the difference between two estimates (x and y), using the formula above, and using that to calculate the test statistic using the formula below.

$$\frac{|x-y|}{SE(x-y)}$$

If the value of this test statistic is greater than 1.96 (at the 95% confidence level) then there is good evidence of a statistically significant difference between the two population estimates with respect to that characteristic. Otherwise, it cannot be stated with confidence (at the 95% confidence level) that there is a real difference between the population estimates.

PART 3 DATA AVAILABILITY

DATA AVAILABILITY

Part 3 of this User Guide describes the range of data available from the 2011–12 SIH in both published and unpublished form.

More detailed information can be obtained by telephoning the Living Conditions Client Services team on Canberra (02) 6252 6174 or by emailing <living.conditions@abs.gov.au>.

3.1 PUBLICATIONS

PUBLICATIONS

The publications available from the 2011–12 SIH are listed below. All can be downloaded free of charge from the ABS website: <www.abs.gov.au>.

User Guide

This publication, *Survey of Income and Housing User Guide, Australia, 2011–12* (cat. no. 6553.0) describes the definitions, concepts, methodology and estimation procedures used in the 2011–12 SIH. Additional material available as part of this publication include the questionnaires, interviewer prompt cards and a list of SIH output data items. For further information see Part 3.3 'Supporting material'.

Income

Household Income and Income Distribution, Australia, 2011–12 (cat. no. 6523.0) presents estimates of the income and other characteristics of households and persons resident in private dwellings in Australia, compiled from the 2011–12 SIH. It includes estimates of the distribution of income across the population.

Detailed tables provide estimates of equivalised disposable household income by state and territory, and other income estimates by household characteristics. The value of social transfers in kind (STIK) for sub-populations are also available on the ABS website.

Wealth

Household Wealth and Wealth Distribution, Australia, 2011–12 (cat. no. 6554.0) provides estimates of household net worth, or wealth, classified by various characteristics. It also includes summary measures of the distribution of household net worth in Australia. Classifications used to describe households include net worth quintile, income quintile, main source of household income, family composition, tenure type and geographic location. Estimates of the various assets and liabilities comprising net worth are provided, along with estimates of household income, household size and other characteristics.

Housing

Housing Occupancy and Costs, Australia, 2011–12 (cat. no. 4130.0) presents data from the 2011–12 SIH on Australian housing occupancy and costs, and it relates these to characteristics of occupants and dwellings such as tenure, family composition of household, dwelling structure, age, income and main source of income. It also includes the value of dwelling estimates and information on recent home buyers.

3.2 SPECIAL DATA SERVICES

SPECIAL DATA SERVICES

The published data are only a small portion of the data collected in the surveys. The ABS offers specialised consultancy services to assist data users with more complex statistical information needs. Users may wish to have the unit record data analysed according to their own needs, or require tailored tables incorporating data items and populations as requested by them. A wide range of data items are available — the detailed list of these is in Appendix 5.

Data published from the 2011–12 Survey of Income and Housing is released using the *Australian Statistical Geographical Classification (ASGC)* (cat. no 1216.0), however data is available using the new *Australian Statistical Geographical Standard (ASGS)* (cat. no 1270.0.55.001) as a customised data request. For details on the levels of geography available from SIH 2011–12, please refer to Appendix 5 'Data item listing'.

Tables and other analytic outputs can be made available electronically or in printed form. However, as the level of detail or disaggregation increases with detailed requests, the number of contributors to data cells decreases. This may result in some requested information not being able to be released due to confidentiality or sampling variability constraints. All specialist consultancy services attract a service charge and clients will be provided with a quote before information is supplied. For further information, contact ABS information consultants on 1300 135 070, (international callers +61 2 9268 4909).

3.3 SUPPORTING MATERIAL

SUPPORTING MATERIAL

Supporting material is available to assist data users in analysing the data from the survey. A representation of the computer assisted interview questionnaire, and prompt cards used in the SIH is available on the ABS website. They can be downloaded from the "Downloads" tab of the website entry for this publication.

3.4 CONFIDENTIALISED UNIT RECORD FILES (CURFS)

CONFIDENTIALISED UNIT RECORD FILES (CURFS)

For clients wanting to produce their own tabulations and conduct manipulations of survey estimates, a file containing unit records relating to almost all of the survey respondents will be available. To protect the confidentiality of individual persons and households some data items are removed from the file and the level of detail for some items is reduced.

To assist potential CURF clients, additional information will be available on the SIH 2011–12 microdata product page (cat. no. 6541.0.30.001) when the CURF is available for release, including information about:

- the file contents, structures, record types, units of analysis and data items available on the CURFs
- the use weights for deriving estimates and calculating relative sampling errors
- using specific data items, including income, housing costs, geography, flags and multiple response items
- comparison with previous SIH CURF releases
- examples of steps taken to preserve the confidentiality of respondents
- sample tabulations of the differences in key estimates generated from unconfidentialised and confidentialised files
- conditions of CURF release, access and use.

Further information

The Microdata Entry page on the ABS website contains links to microdata related information to assist users to understand and access microdata. For further information users should contact the microdata access team by email: microdata.access@abs.gov.au or telephone (02) 6252 7714.

Clients wishing to access the microdata should read the How to Apply for Microdata web page. Clients should familiarise themselves with the User Manual: Responsible Use of ABS CURFs and other related microdata information which are available via the Microdata web pages, before applying for access through MiCRO.

CHANGES FROM PREVIOUS SURVEYS

A number of changes have been made to the SIH since it was first conducted in 1994–95. The changes were designed to improve the quality of the surveys, however, these may have an impact on the assessment of changes over time. Part 4 outlines main changes over time, for each of the surveys.

The final sample sizes for SIH cycles from 1994–95 is shown in Table 4.1. The sample sizes can give an indication of the reliability of the estimates produced from the surveys.

TABLE 4.1 PREVIOUS SIH SAMPLE SIZES

	CAPITAL CITY	*BALANCE OF STATE*	*TOTAL*
	no.	*no.*	*no.*
1994–95	4 438	2 381	6 819
1995–96	4 588	2 375	6 963
1996–97	4 715	2 530	7 245
1997–98	4 649	2 376	7 025
1999–2000	4 327	2 310	6 637
2000–01	4 397	2 389	6 786
2002–03	6 657	3 554	10 211
2003–04	7 077	4 284	11 361
2005–06	6 405	3 556	9 961
2007–08	6 258	3 087	9 345
2009–10	11 324	6 747	18 071
2011–12	8 048	6 521	14 569

4.1 CHANGES IN THE 2011–12 SIH

CHANGES IN THE 2011–12 SIH

The 2011–12 SIH content was largely similar to the 2009–10 SIH with some changes in questions, definitions and methodology.

Key changes to the 2011–12 SIH include:

- the 2009–10 SIH was integrated with the Household Expenditure Survey while the 2011–12 SIH was run as a stand alone survey
- a decrease in fully responding sample size from 18,071 households in 2009–10 to 14,569 households in 2011–12. The expansion in the 2009–10 sample for an extra 4,200 households outside capital cities to support housing indicator reporting was maintained. The additional sample of metropolitan households whose main source of income was a government pension, benefit and/or allowance included in the 2009–10 SIH and HES samples to improve analysis for the Pensioner and Beneficiary Living Cost Index was not maintained
- an additional benchmark for the value of government benefit cash transfers used in 2009–10 was not required in 2011–12
- disability questions for persons aged 15 years and over were not asked in 2011–12, but will be collected in 2013–14
- Child Care Rebate (CCR) and Child Care Benefit (CCB) have been modelled to improve estimates of both the payment amounts and the number of households receiving assistance
- selected social transfers in kind variables have been modelled in 2011–12, and analysis included in Appendix 4 of this publication.

CHANGES TO THE SURVEY SAMPLE

The expansion in the 2009–10 sample for an extra 4,200 households was maintained in the 2011–12 SIH. This additional sample of households outside capital cities better supports Council of Australian Governments (COAG) performance indicator reporting, particularly in regard to housing affordability and home ownership measures required under COAG intergovernmental agreements.

The additional sample of metropolitan households whose main source of income was a government pension, benefit and/or allowance included in the 2009–10 SIH and HES samples has not been maintained in the 2011–12 sample. The main purpose of this additional sample was to support improved analysis for the Pensioner and Beneficiary Living Cost Index (PBLCI).

CHANGES TO GOVERNMENT PENSIONS AND ALLOWANCES

Paid Parental Leave (PPL) was introduced on 1 January 2011 as an alternative to the Baby Bonus. Under the Paid Parental Leave scheme, eligible working parents can get government funded pay when they take time off from work to care for a newborn or recently adopted child. The income test for PPL requires that the parent or parents earn no more than $150,000 in the year previous to the child's birth. People who meet the eligibility requirements must decide which payment, paid parental leave or baby bonus, is best suited to them, as both payments cannot be received for the same child.

One-off government payments included in SIH 2011–12 are the Clean Energy Advance and the one-off Education Tax Refund.

CHANGES TO GOVERNMENT PENSIONS AND ALLOWANCES *continued*

The Clean Energy Advance payment is a tax-exempt lump sum payment, paid in May and June 2012 to help low and middle income households meet the impacts of carbon pricing on living expenses for up to 12 months. This is a one-off payment paid to pensioners, other income support recipients, families receiving Family Tax Benefit payments and Seniors Supplement recipients, provided they met eligibility requirements.

One-off Education Tax Refund payments were paid in June 2012 as part of the transition to the new Schoolkids Bonus and in place of the Education Tax Refund for the 2011–12 financial year. The one-off payment was made payable to families receiving Family Tax Benefit Part A, plus young people in school receiving Youth Allowance and some other income support and veterans payments, providing they met age and education requirements. The Schoolkids Bonus replaces the Education Tax Refund from January 2013.

OTHER CHANGES

Errors in processing the 2009–10 income data have been corrected, resulting in an average decrease of $1 for mean equivalised disposable household income across all households. This was reflected largely in a decrease of 0.04% in the mean equivalised disposable household income of households in the second and third deciles. The income estimates for 2009–10 shown in this publication have been revised. The second edition of the 2009–10 CURF includes the revised estimates.

Data published from the 2011–12 Survey of Income and Housing is released using the *Australian Statistical Geographical Classification (ASGC)* (cat. no 1216.0), however data is available using the new *Australian Statistical Geographical Standard (ASGS)* (cat. no 1270.0.55.001) as a customised data request. For details on the levels of geography available from SIH 2011–12, please refer to Appendix 5 'Data item listing'.

Information on offset accounts has been separately collected for the first time in SIH 2011–12. An offset account is an account with a financial institution that is linked to a home loan. The balance in offset accounts reduces the interest charged on the loan. The SIH 2011–12 includes the value of offset accounts as a component of wealth. Income from offset accounts, which is an estimate of the amount households saved in interest on their loans, is included as a component of income.

4.2 CHANGES IN THE 2009–10 SIH AND HES

CHANGES IN THE 2009–10 SIH AND HES

The 2009–10 SIH content was largely similar to the 2007–08 SIH with some changes in questions, definitions and methodology.

Key changes to the collection include:

- the 2009–10 SIH was integrated with the 2009–10 Household Expenditure Survey as in 2003–04
- an increase in the sample size from 9,345 households in 2007–08 to 18,071 households in 2009–10 due to a 10,800 base sample, an expansion in the SIH sample for an extra 4,200 households, located outside capital cities as well as an additional sample of metropolitan households whose main source of income was a government pension, benefit and/or allowance
- the inclusion of a benchmark for the value of government benefit cash transfers to ensure that the survey estimate of government benefit cash transfers is maintained at a proportion of aggregate benefit cash transfers that is consistent with previous SIH cycles (this benchmark was last used in the 2000–01 SIH)
- housing data on dwelling condition, characteristics, mobility, finance and rental arrangements collected in 2007–08 were not collected in 2009–10
- wealth data items on assets and liabilities were collected in 2009–10 (last collected in 2005–06 SIH)
- disability questions were asked for persons aged 15 years and over in the 2009–10 SIH.

CHANGES TO THE SURVEY SAMPLE FOR THE SIH AND HES

The May 2009 Budget funded an expansion in the SIH sample for an extra 4,200 households, primarily located outside capital cities. This expansion was to better support Council of Australian Governments (COAG) performance indicator reporting, particularly in regard to housing affordability and home ownership measures required under COAG intergovernmental agreements.

For the 2009–10 SIH and HES there was also an additional sample of metropolitan households whose main source of income was a government pension, benefit and/or allowance. These pensioner sample households were enumerated using a separate sample design, but the fully responding in scope households from this sample were included in the final SIH samples.

CHANGES RELATING TO SPECIFIC DATA ITEMS

In addition to the changes already listed for 2009–10, there were also a number of changes that related to specific data items.

Income measures

In 2007–08, the ABS revised its standards for household income statistics following the adoption of new international standards in 2004 and review of aspects of the collection and dissemination of income data. The 2007–08 and 2009–10 income estimates for the SIH and the HES apply the new income standards. Information about ABS' improved household income measures, is available in Part 4.2 'Changes in the 2007–08 SIH'.

As these standards have now been implemented for more than the 2007–08 cycle in which they were introduced, current income items have had some label changes.

Income measures continued

- In 2007–08, they were labelled as '2007–08 basis' items to be clearly identified from '2005–06 basis' and earlier items used prior to the introduction of the new standards. From 2009–10, all income items using the current income standard now have no qualifier in the label, as they no longer apply to a specific survey cycle. For example, the item 'Total current weekly income from all sources (2007–08 basis)' is now 'Total current weekly income from all sources'.
- Income items about the 'Principal source of income' are now labelled 'Main source of income', consistent with the new standards.

Other Changes

There have been changes to some pensions and allowances paid by the government, resulting in both the deletion of items and the addition of new items. This is consistent with previous cycles, where changes to government pensions and allowances made since the last survey cycle are implemented. In the 2009–10 SIH, particular changes in government pensions and allowances resulted in new modelled items and changes in populations. The introduction of the Pension Supplement and the Seniors Supplement on 20 September 2009 was a significant change, and occurred while the 2009–10 SIH was in the field. As a result, the Pension Supplement and Seniors Supplement were modelled from data collected from respondents based on their reported payments and eligibility. The Utilities Allowance now forms part of these supplements for some recipients, but is still paid separately to recipients of some pension and allowance recipients. As a result, comparisons with data from 2007–08 and earlier are not possible for affected items, as eligible populations have changed in addition to payment types. See Part 2.7 'Income tax and other modelled data items' for more detail about these changes.

Errors in processing the 2007–08 income estimates have been corrected, resulting in an average increase of $3 for mean equivalised disposable household income across all households. This was reflected largely in a 1.3% increase in the mean equivalised disposable household income of households in the highest quintile. The income estimates for 2007–08 shown in this publication have been revised.

4.3 CHANGES IN THE 2007–08 SIH

CHANGES IN THE 2007–08 SIH

The 2007–08 SIH was largely similar to the 2005–06 SIH, but there were some changes in topics, definitions and methodology.

CHANGES IMPACTING ON ALL DATA ITEMS

The main changes which could impact on all data items were:

- the final sample size of the SIH decreased from 9,961 in 2005–06 to 9,345 in 2007–08
- benchmarks based on the 2006 Census have been used for the 2007–08 SIH; in 2005–06 benchmarks were based on the 2001 Census
- more detailed age benchmarks were used when determining the weights to be allocated to each unit in 2007–08 estimates. Section 2.6 contains further information on benchmarks used for weighting.
- imputation procedures were changed: in 2007–08, as in 2003–04, all households where one or more people did not respond were imputed if the non–responding person was not a 'significant' person; in 2005–06, all households where one or more people did not respond were treated as non–responding.

CHANGES RELATING TO SPECIFIC DATA ITEMS

There were also a number of changes that relate to specific data items.

Improvements to income measures

The ABS has undertaken a major review of its income standards, to ensure that its standards and practice appropriately reflected new international standards for household income statistics (promulgated in 2004) and suitably addressed a range of outstanding methodological and collection issues. The 2007–08 SIH income estimates are the first to apply the changes.

Changes in the income measures used in the 2007–08 survey are:

- Employment income now includes all payments received by individuals as a result of their current or former involvement in paid employment. In addition to the regular and recurring cash receipts previously included, the new income measures also include non-cash benefits, bonuses, termination payments and payments for irregular overtime.
- Interest paid on money borrowed to purchase shares or units in trusts is now netted off income earned from these sources when deriving income estimates.
- Income earned as a silent partner in a partnership and some private trust income is now classified to investment income rather than unincorporated business income. The questions developed to effect this change also improved the reporting of income from these sources.
- Lump sum workers' compensation receipts are now included.
- A wider range of data on financial support received from family members resident outside the household is now included. In addition to regular payments previously collected, financial support has been extended to include other forms of financial support , including goods and services received which were purchased by others e.g. rent, education, food, clothing, car registration and utilities. Capital transfers, such as the purchase of property or cars, were excluded.

Some limits have been placed on the new inclusions, where the magnitude of the individual amounts received exceed that likely to be used to support current consumption e.g. termination payments, workers compensation payments.

Improvements to income measures continued

Some classification changes have also been made. Commencing in SIH 2007–08, income earned as a silent partner in a partnership and some private trust income has been classified to investment income, rather than to unincorporated business income. This change does not affect trust income resulting from the recipient working in their own business, which continues to be classified as unincorporated business income. The questions developed to effect this change also improved the reporting of income from these sources.

Refer to Appendix 4 'Improvements to income statistics' for more information on the changes to income measures.

Inclusion of child care data

There were additional questions on use of child care, including preschool for a selected child, covering type, time used, costs and child care benefit received. In addition, there were new data items on barriers to labour force participation due to child-care related reasons. See Part 1 'Concepts and definitions' for further information.

Inclusion of additional housing data

The SIH 2007–08 included additional housing topics to enable reporting on the broader housing circumstances of non–Indigenous Australians. The ABS will collect additional information on housing in the SIH every six years. For 2007–08, housing topics include: housing mobility, housing condition and dwelling characteristics, home purchase for first home buyers, household finances of owners with a mortgage, rental arrangements and the affairs of renters, and neighbourhood. Refer to Appendix 6 'Additional Housing Topics' for more information on additional housing data.

Inclusion of data on ethnicity

There were additional questions relating to country of birth of each parent, first language spoken, main language spoken at home, and proficiency in spoken English.

Changes to financial support received from or provided to family members not in the household

In SIH 2007–08, a wider range of data on financial support received from and paid to family members resident outside the household was collected. Previously these were mainly limited to regular payments for spousal maintenance and child support. In 2007–08, respondents were asked to include other forms of financial support, including goods and services received which were purchased by others e.g. rent, education, food, clothing, car registration and utilities. Capital transfers, such as for the purchase of property or cars, were excluded.

Inclusion of data on tenure type for income units and persons

The 2007–08 SIH collected information on the tenure and landlord type for income units and persons. New data items have been included at the person level relating to tenure, landlord type and weekly rent payments. New data items have also been included at the income unit level relating to tenure and landlord type. The last time this information was available from the SIH was 2002–03.

Improvement in selection of household reference person

Improvements have been made in the way the household reference person is identified in the 2007–08 SIH. In 2005–06, the household reference person was identified by applying selection criteria about relationships, income and age. However, this method did not always identify the correct reference person for analytical purposes, particularly in some group households (where one person may be the owner and other unrelated individuals are also living in the dwelling) or first home buyers (where the first home buyer may not be selected as the household reference person based simply on

Improvement in selection of household reference person continued

relationship income and age. In 2007–08, tenure has been added as a criterion in determining the household reference person. See the Glossary for detailed information about the selection criteria used to identify the household reference person.

Commonwealth Rent Assistance

New data items have been included at the income unit and person levels relating to the receipt of Commonwealth Rent Assistance and the amount received. Commonwealth Rent Assistance is a non-taxable income supplement paid through Centrelink to individuals and families who rent in the private rental market. It is only paid to recipients of another government benefit or pension, and paid in conjunction with that other payment. Reported amounts of Commonwealth Rent Assistance were added to the relevant reported benefit or pension during processing where it was identified that the amount had not been included.

Loans level data

The 2005–06 SIH CURFs contained housing cost data items at the household level relating to the amounts owing on mortgages and unsecured loans for housing and other purposes. The 2007–08 SIH CURFs also contain those data items, but also include a new loans level, containing data items relating to each reported loan belonging to a household. See Appendix 1 for a list of data items available on the new loans level.

Other changes

Some changes have also been implemented within the derivation process to correct errors detected when calculating the disposable income for some households in receipt of tax offsets. Estimates for 2005–06 have been updated to rectify these errors in the 2007–08 publications.

4.4 CHANGES IN THE 2005–06 SIH

CHANGES IN THE 2005–06 SIH

The 2005–06 SIH was similar to the 2003–04 SIH, but there were some changes in definitions and methodology.

CHANGES IMPACTING ON ALL DATA ITEMS

- The main changes which could impact on all data items were:
- the 2003–04 SIH was integrated with the Household Expenditure Survey while the 2005–06 SIH was run as a stand alone survey
- the final sample size decreased from 11,361 households in 2003–04 to 9,961 in 2005–06
- the scope of the survey was changed slightly—in 2003–04, all people living in Indigenous communities were out of scope; in 2005–06 they were out of scope only if they were living in very remote areas
- benchmarks based on the 2001 Census were used, and the benchmarks were consistent with the scope in that people living in very remote areas in all states and territories were excluded; in 2003–04, benchmarks were based on the 1996 Census and did not exclude people living in very remote areas, except in the Northern Territory where people living in areas defined as sparse were excluded
- more detailed age benchmarks were used when determining the weights to be allocated to each unit in 2005–06 estimates;
- imputation procedures were changed—all households where one or more people did not respond were treated as non-responding; in 2003–04 these were imputed if the non-responding person was not a 'significant' person.

CHANGES RELATING TO SPECIFIC DATA ITEMS

There were also a number of changes that relate to specific data items.

Inclusion of all salary sacrificed income

In the published output from the 2005–06 survey, all amounts salary sacrificed were included in wages and salary estimates. In output from previous surveys, estimates included only some salary sacrificed amounts. The 2003–04 estimates published in the 2005–06 issue of *Household Income and Income Distribution, Australia* (cat. no. 6523.0) were also revised to include additional salary sacrificed amounts. The changed treatment of salary sacrifice did not impacted significantly on the estimates. In 2005–06 the Gini coefficient on the new method was 0.307, compared with 0.304 when compiled on the former method. Including all salary sacrifice in the income estimates for 2005–06 added 0.003 points to the Gini coefficient and $5 (0.8%) to mean weekly equivalised disposable household income.

Improvements to family tax benefit estimates

Improvements were made to estimates relating to current income from family tax benefit (FTB). Prior to 2005–06, the FTB item only included FTB received as fortnightly payments. FTB paid through the tax system or as a lump sum was excluded for practical reasons. The items 'Total current weekly income from government pensions and allowances' and 'Total income from all sources' also excluded these components, but they were included in measures of disposable income. In 2005–06 the new FTB item 'Current weekly income from family tax benefits (modelled)' included all FTB payments, regardless of whether they were received fortnightly, via the tax system or as a lump sum. It also included payments of FTB supplement. Some components of the FTB item used in 2005–06 were modelled using information on income and household demographics reported in the survey. All income aggregates included the new item. It

should be noted that there was little impact on comparability of estimates of disposable income as a result of the change, since disposable income has always included modelled components relating to FTB paid through the tax system or as a lump sum.

Housing costs definition

The housing costs measure used in the 2005–06 issue of *Housing Occupancy and Costs, Australia* (cat. no. 4130.0.55.001) was slightly different from the measure used in prior issues. In prior issues housing costs comprised: rates payments for owners; rates and housing loan payments for owners with a mortgage; and rent payments for renters. In 2005–06, information on housing costs for other tenure types which was first collected in the 2003–04 survey was included. The definition of housing costs was no longer dependent on tenure — it is defined as the sum of rent payments, rates payments, and mortgage or unsecured loan payments if the initial purpose was primarily to buy, add or alter the dwelling. The revised definition added only about $1 (less than 1%) to mean weekly housing costs.

Other changes

There were changes to some pensions and allowances paid by the government, resulting in new items for maternity payment, utilities allowance, seniors concession allowance and one-off payment to older Australians.

A number of changes were made to the derivation process used to estimate income tax liability. In prior surveys estimates of imputed tax payable included an adjustment to subtract estimated FTB payments made through the tax system or as a lump sum. This ensured that FTB payments made through the tax system or as a lump sum were included in disposable income. This adjustment was no longer required since such payments are included in gross income estimates.

4.5 CHANGES IN THE 2003–04 SIH

INTEGRATION OF HES AND SIH

The 2003–04 SIH was integrated with the 2003–04 HES. This integration was achieved by selecting a subsample of the households in the SIH survey and asking them the additional questions required for HES purposes. The HES subsample comprised 6,957 of the 11,361 households responding to the SIH. The main advantages of integrating the surveys are:

- respondent burden is lower
- the data collection costs are lower
- the resultant dataset is richer because HES and SIH results are more comparable than previously.

However, in order to achieve this integration, some changes were required to both surveys which impact on comparability with previous surveys.

In addition, it is possible that the integration of the surveys affected the non-response bias in the SIH. The response rates for the HES subsample are lower than achieved in the SIH-only sample component because of the reluctance of some respondents to provide the extra information required in the HES part of the survey. The non respondents to the 2003–04 survey may therefore have different characteristics to the non respondents of previous SIHs, resulting in different non-response bias.

DATA ITEMS REMOVED

A few data items collected in previous surveys were not collected in the 2003–04 SIH. These include:

- income unit level tenure — in 2003–04 tenure is available at the household level only
- labour force status in each of the 7 months prior to the interview
- full-time/part-time status in each of the 7 months prior to the interview
- month left school.

CHANGES IN CONCEPTS, DEFINITIONS AND CLASSIFICATIONS

In previous SIHs, the household reference person was chosen from an income unit within the household that had the highest tenure type. Tenure type was collected for households but not for income units in the 2003–04 SIH. The tenure type of income units was therefore not used in determining which person in the household is to be designated as household reference person.

In the published output from the surveys, the data item "family composition of household" replaced the item "household composition". The new item better met user requirements for the treatment of households with dependent children.

CHANGES IN METHODOLOGY

Changes to survey methodology

There were a number of changes to the survey methodology introduced in 2003–04. Some of these were a consequence of the integration of the HES and SIH. The main changes which could impact on all data items were:

- previous SIH cycles had selected dwellings from those that had been respondents for eight months in the Monthly Population Survey (MPS), whereas in 2003–04 the SIH sample was drawn from dwellings not recently included in an ABS household survey (possible change in response bias)
- the sample size of the SIH was increased from 10,211 households (comprising 19,400 persons aged 15 and over) in 2002–03 to 11,361 households (comprising 22,315 persons aged 15 and over) in 2003–04 (lower sample error)
- interviewer use of a laptop computer (this may have improved data capture)

Changes to survey methodology continued

- editing and imputation procedures were changed — in particular because the SIH sample is no longer drawn from households who have participated in the MPS, responses given in the MPS are no longer available as a basis for imputation.

Changes to specific data items

The changes in survey methodology relating to specific data items were:

- current income from own unincorporated business and investments was measured using respondents' estimates of expected income in the current financial year, whereas previously these data items were estimated based only on information about reported income for the previous financial year — this change had a significant impact on the coverage of such income streams in current income measures
- the collection of details about the assets and liabilities of the household may have improved the quality of reporting of associated income streams
- the instrument wording was changed to explicitly ask that reported dividends include the value of imputation credits — previously this direction was only included in interviewer instructions
- information relating to some household loans was collected using a different methodology — for those loan accounts that have a redraw facility and have regular income (such as wages) deposited into them, respondents were not asked to provide a 'usual repayment' — instead they were asked to provide the amount that the principal outstanding usually decreases by in a 6 month period and this was used in conjunction with information collected on interest to derive a repayment amount
- details of previous financial year income were collected from all persons — in previous SIHs this information was not collected from people who had only arrived in Australia in the current financial year
- details of hours worked were collected from all employed persons — in previous SIHs, this information was only available for employees
- unlike previous SIHs, data on repayments and principal outstanding on mortgages for other purposes (ie for purposes other than building, buying, altering or adding to the selected dwelling) excludes mortgages that were used for business or investment purposes.

4.6 CHANGES IN EARLIER SURVEYS

CHANGES IN EARLIER SURVEYS

The SIH cycles from 1994–95 to 2002–03 are comparable. These files were reprocessed in 2003 to apply consistent demographic benchmarks to all years, and to incorporate the latest demographic estimates in the benchmarks. Changes over this period are generally minor and are summarised below:

- the sample size was fairly constant at about 7,000 households from 1994–95 to 2000–01, but increased to 10,211 in 2002–03
- an extra benchmark was used in the weighting process in 1999–2000 and 2000–01 to compensate for an apparent fall in the coverage of government benefit payments in those years
- any changes to government pensions and allowances have been incorporated
- the 2nd edition of the *Australian Standard Classification of Occupations, Second Edition (ASCO)* (cat. no. 1220.0) was introduced from 1996–97 for coding of occupation.

In addition, the item nature of occupancy was replaced by tenure type from 1995–96. Prior to 1995–96 owner occupiers were classified as either owners or purchasers. A purchaser had a mortgage or loan secured against the dwelling, and the loan was used to purchase or build the dwelling. An owner had no loan secured against the dwelling for the purpose of building or purchasing. From 1995–96, owner occupiers are classified as owners without a mortgage and owners with a mortgage. This change to the classification was made to reflect the increasing diversity in financial instruments, in particular the increasing use of loans secured against dwellings being used for non-housing purposes. Such secured loans have implications for the security of tenure and a household with such a loan is classified as an owner with a mortgage in the new classification.

ABBREVIATIONS

ABS	Australian Bureau of Statistics
ACT	Australian Capital Territory
ARIA	Accessibility/Remoteness Index of Australia
ASGC	Australian Standard Geographical Classification
ASGS	Australian Statistical Geography Standard
ASNA	Australian System of National Accounts
Aust.	Australia
CAI	computer assisted interviewing
CCB	Child Care Benefit
CCR	Child Care Rebate (formerly known as Child Care Tax Rebate: CCTR)
CCTR	Child Care Tax Rebate
CNOS	Canadian National Occupancy Standard
COAG	Council of Australian Governments
CPI	Consumer Price Index
CRA	Commonwealth Rent Assistance
CURF	confidentialised unit record file
DVA	Australian Government Department of Veterans Affairs
ERP	estimated resident population
FBT	Fringe Benefits Tax
FTB	Family Tax Benefit
GFS	Government Finance Statistics
GST	goods and services tax
HECS	Higher Education Contribution Scheme
HELP	Higher Education Loan Program
HES	Household Expenditure Survey
HH	household
HIES	Household Income and Expenditure Survey
IU	income unit
MPS	Monthly Population Survey
NSW	New South Wales
NT	Northern Territory
OECD	Organisation for Economic Co-operation and Development
PAYG	pay-as-you-go tax
PBLCI	Pensioner and Beneficiary Living Cost Index
PHIR	Private Health Insurance Rebate
PPL	paid parental leave
Qld	Queensland
ROGS	Report on Government Services
RSE	relative standard error
SA	South Australia
SE	standard error
SEIFA	Socio-Economic Indexes for Areas
SFSS	Student Financial Supplement Scheme
SIH	Survey of Income and Housing
STIK	social transfers in kind
Tas.	Tasmania

Vic.	Victoria
WA	Western Australia

APPENDIX 1 CURRENT AND ANNUAL INCOME

INTRODUCTION

The Survey of Income and Housing (SIH) produces estimates of 'current' income and estimates of full year, or annual, income with respect to the 'previous financial year'. Current income refers to estimates of income being received at the time the data were collected from respondents. Current income provides the most up to date information available and in some cases the most accurate information available. But it also has some disadvantages. This Appendix discusses the differences in 'current' and 'annual' income measures and presents comparative estimates on both bases.

Table A1.2 in this Appendix compares current gross income with previous financial year gross income for common reference years. For example, the previous financial year income for reference year 1995–96 is compiled from data collected in the 1996–97 SIH, whereas the current income for reference year 1995–96 is compiled from data collected in the 1995–96 SIH.

WAGE AND SALARY INCOME

For wage and salary income, Table A1.2 in this Appendix shows that, for each reference year up until 2002–03 aggregate income collected on a previous financial year basis was greater than aggregate income collected on a current basis.

Current wage and salary income relates to usual income from the last payment received by the respondent. The reference period for any individual respondent is likely to be the previous week, fortnight or month, depending on the length of the pay period for the job(s) in which the respondent is employed. The length of the reference period is collected in the survey so that the value can be scaled to a common basis such as dollars per week (as presented in tables in the main body of the publication *Household Income and Income Distribution, Australia, 2011–12*, (cat. no. 6523.0)) or dollars per year (as presented in Table A1.2 in this Appendix).

Additional questions are used to obtain information about receipts which may not have been included in the most recent payment. For example, for wage and salary earners for surveys prior to 2007–08, information on irregular overtime, bonuses and non-cash benefits was only collected on a previous financial year basis.

However from 2007–08 onwards, wages and salaries collected on a current basis include irregular overtime, bonuses and non-cash incomes. Therefore current and previous year measures are likely to be very much closer in coverage than in previous cycles.

GOVERNMENT PENSIONS AND ALLOWANCES

Current government pensions and allowances also relate to income from the last payment received. Benefits are normally received fortnightly. As with wages and salaries, there are some benefit components, such as quarterly seniors supplement that may not be included in estimates of current income. It would be expected that estimates of current government pensions and allowances could be slightly less than previous financial year estimates, reflecting potential omission of such supplementary payments and possible part years effects in the previous year.

Estimates of government pensions and allowances reported on a previous financial year basis, for the five years that can be compared (1994–95 to 2002–03) were 3.9% lower than estimates of government pensions and allowances reported as current income, as can be seen in Table A1.2 in this Appendix.

In cases where it appears likely that an individual SIH respondent has failed to report previous financial year benefits, previous year benefit income is imputed. For example, where a respondent has reported receiving a current benefit such as the age pension, is of an age that would qualify for the age pension in the previous year, and that person has not reported receiving significant income from other sources in the previous financial year, it can be assumed that they probably would have also received the age pension in the previous financial year. In such cases, previous financial year age pension has been imputed on the basis of the amount reported as current income, adjusting for benefit rate changes over the previous 12 months.

GOVERNMENT PENSIONS AND ALLOWANCES *continued*

However, imputation for previous year benefit income, based on likely ongoing entitlement, is not possible for benefits such as Newstart or Youth Allowance, and Table A1.2 in this Appendix indicates that, in aggregate, previous financial year income falls short of current income after the implementation of the imputation procedure described in the previous paragraph.

OWN UNINCORPORATED BUSINESS INCOME

Estimates of current income from own unincorporated business are quite different in nature to the estimates of current income for the two income sources discussed above.

The concept of business income is a net concept. It is the profit or loss derived by deducting operating expenses (including depreciation) from the value of gross output. In the past, many unincorporated businesses did not calculate profit and loss data more than once a year, and for many businesses there are revenues earned or costs incurred only infrequently during the year. Hence, in earlier surveys, SIH respondents were not asked to provide a value of current business income distinct from the value of business income received in the previous financial year.

Up to and including the 2002–03 SIH cycle, for respondents who had been in business in the previous financial year and who were currently still in business, their current own unincorporated business income was estimated to be the same amount as the previous year income (including if it was a loss), or scaled up to a full year basis if the business only operated for part of the previous year. It was implicitly assumed that any business only commencing operations in the current year would have zero income.

Since the 2003–04 SIH, respondents who currently operated an unincorporated business have been asked to estimate their income from the business for the full current financial year. In many cases, respondents could refer to the Business Activity Statements prepared for the Australian Taxation Office to help them provide an estimate. Even where this was not possible, especially for those respondents interviewed early in the financial year, the respondents are likely to be able to provide a more reasonable estimate than that generated by the methodology used in previous cycles. Under the previous methodology, estimates could have a strong downwards bias, particularly for new businesses, but could also be significantly upwardly biased if the current business circumstances had turned down from the previous year. There is also some likelihood that respondent estimates under the new methodology may be either optimistic or pessimistic and the estimates may have some bias. The new methodology has particularly resulted in far fewer households being recorded with current business incomes that are negative, zero or only slightly positive.

INVESTMENT INCOME

Investment income includes interest and dividend income received as a result of the ownership of financial assets, and rent and royalty income received from the ownership of non-financial assets. The rent component of investment income is measured on a net basis, that is, gross rent less operating expenses. Interest paid on money borrowed to purchase shares or units in trusts is also netted off income earned from these sources. All other components, for which associated expenses are normally relatively small, are on a gross basis.

As for own unincorporated business income, since the 2003–04 SIH, respondents are asked to provide an estimate of their expected investment income in the current financial year. In earlier surveys, estimates of current investment income were derived by simply assuming that current income was equal to previous financial year income.

OTHER INCOME

The remaining income sources include superannuation and life insurance pensions, child support, workers' compensation, scholarships and other current transfers received from family members living in other households. These are collected both on a current basis and on a previous financial year basis. From 2007–08 onwards, the coverage of inter

OTHER INCOME *continued*

household transfers has been widened to include less regular paid transfers that are intended to support current consumption.

COMPARISON OF ESTIMATES

There are two major advantages of the current income estimates compared to previous financial year income estimates. First, they are more up to date. From 2003–04 this applies to all forms of income. For previous surveys, this applies for wages and salaries, for government pensions and allowances and for 'other' income (as defined in the preceding paragraph), which together accounted for 88% of total current income in 2002–03. Second, they appear to be more accurately reported for government pensions and allowances, and may also be more accurately reported for those elements of wages and salaries that are included in current income and for 'other' income.

On the other hand, up until the 2005–06 survey, the previous financial year estimates had the major conceptual advantage of being annual estimates with more complete coverage of income components. They have a longer time perspective, which while allowing short-term fluctuations in income to have an influence, do not allow short-term situations to potentially dominate the measure being compiled. If a short-term fluctuation has an undue influence on a current income measure, the measure is not a good indicator of underlying economic wellbeing. From 2007–08 the changes to capture irregular bonuses, overtime and non-cash incomes in wages and salaries have addressed the major coverage gaps in current income measures.

The previous financial year income estimates also have the attraction of being internally consistent with respect to the time periods to which the underlying income data relate. Prior to 2003–04 the total current income estimates were compiled from a mix of data collected on a current basis and on a previous financial year basis. This shortcoming was addressed in 2003–04 and subsequent years, with the current income estimates for business and investment income being the respondents' estimates of income for the full current financial year.

When analysing previous financial year data, it should be noted that the composition of the household, employment status of members of the household, etc., all relate to the current period. If the composition of the household has changed, previous financial year household income estimates relate to a quasi household. In many cases this will not have a marked effect on the data. If, for example, an additional adult joined the household, their previous financial year income will be included in total 'household' income for the previous financial year, but their presence will be reflected in the household composition data that are used for calculating the equivalising factor for that previous year, muting the impact of the artificially inflated previous year income for the household.

However, the impact of household composition changing between the previous and current years can be more marked. For example, a household may have had an additional member in the previous year and that person may have provided the bulk of the income for the household. But since SIH can only include the previous financial year income of the household members remaining at the time of interview, the household may incorrectly appear to have had very low income in the previous year, perhaps well below the levels which would have entitled members to social security benefits.

Similarly, prior to the 2003–04 SIH, previous financial year data were not collected for respondents who had only arrived in Australia in the current financial year. Therefore any previous financial year income they received while overseas did not contribute to the previous financial year income compiled for the household for 2001–02 and earlier years. But their presence is reflected in the equivalising factor applied to the income of the rest of the household, resulting in an underestimate of equivalised income of the household. While it is possible to omit such households from income distribution calculations, that has not been done for the tables included in this Appendix.

COMPARISON OF ESTIMATES *continued*

Table A1.3 in this Appendix provides income distribution indicators compiled from previous financial year data. It provides alternative estimates to the current income estimates provided in Table 1, *Household Income and Income Distribution, Australia, 2011–12* (cat. no. 6523.0).

Comparisons can be made between the two tables for five of the reference periods 1994–95 to 2002–03 and a summary of the change over the eight years span of the estimates is given in Table A1.1 below.

TABLE A1.1 SELECTED INCOME DISTRIBUTION INDICATORS, Equivalised disposable household income

		CURRENT INCOME BASIS			PREVIOUS FINANCIAL YEAR BASIS			
		1994–95	*2002–03*	*% change*	*1994–95*	*2002–03*	*% change*	*Difference in % change*
Mean income per week in 2011–12 dollars								
Low income(a)	$	308	346	12.3	313	350	11.8	–0.5
High income(b)	$	1 078	1 252	16.1	1 096	1 282	17.0	0.8
Income shares								
Low income(a)	%	10.8	10.6	–1.9	10.7	10.5	–1.9	—
High income(b)	%	37.8	38.3	1.3	37.6	38.4	2.1	0.8
Percentile ratios								
P90/P10	ratio	3.78	4.00	5.8	3.90	4.02	3.1	–2.7
P80/P20	ratio	2.56	2.63	2.7	2.62	2.63	0.4	–2.4
Gini coefficient	no.	0.302	0.309	2.3	0.302	0.312	3.3	1.0

— nil or rounded to zero (including null cells)

(a) Persons in the 2nd and 3rd income deciles after being ranked by their equivalised disposable household income

(b) Persons in the top income quintile (9th and 10th deciles) after being ranked by their equivalised disposable household income

The previous financial year estimates show stronger growth in real incomes between 1994–95 and 2002–03 for the high income group, compared with current income estimates. The previous financial year estimates show a greater decline in the income share of the low income group and a greater increase in the income share of the high income group, resulting in greater growth in the Gini coefficient. For these indicators, the previous financial year estimates show a greater increase in income inequality than the current income estimates. However, the previous financial year estimates give a smaller increase in the P90/P10 and P80/P20 ratios, indicating a smaller increase in income inequality than shown by the current income estimates.

TABLE A1.2 CURRENT AND PREVIOUS FINANCIAL YEAR GROSS INCOME(a)

	1993–94	*1994–95*	*1995–96*	*1996–97*	*1997–98*	*1998–99*	*1999–2000*
	$b	$b	$b	$b	$b	$b	$b
Wages and salaries							
Current income	na	194.7	199.3	211.6	223.6	na	251.1
Previous financial year income(b)	194.7	204.4	219.1	232.2	na	257.7	277.0
Government pensions and allowances							
Current income	na	34.3	36.5	38.6	39.0	na	41.2
Previous financial year income(b)	30.7	32.8	34.9	36.2	na	37.7	40.5
Own unincorporated business income							
Current income	na	18.8	23.2	21.4	23.6	na	28.7
Previous financial year income(b)	18.5	22.8	22.5	24.4	na	27.5	25.9
Investment income							
Current income	na	10.7	10.9	14.4	13.2	na	17.3
Previous financial year income(b)	10.9	11.0	14.3	13.0	na	17.3	15.7
Other income							
Current income	na	7.2	7.9	8.2	9.9	na	10.5
Previous financial year income(b)	6.6	7.0	7.5	8.4	na	8.5	9.7
Total income							
Current income	na	265.8	277.8	294.3	309.3	na	348.9
Previous financial year income(b)	261.4	278.0	298.4	314.2	na	348.7	368.8

na not available

(a) Historic data in the table are not adjusted for the changes in the Consumer Price Index

(b) Compiled from the Survey of Income and Housing (SIH) of the year following the reference year. There was no SIH conducted in 1998–99, 2001–02, 2004–05, 2006–07 or 2008–09

TABLE A1.2 CURRENT AND PREVIOUS FINANCIAL YEAR GROSS INCOME(a), continued

	2000–01	*2001–02*	*2002–03*(b)	*2003–04*(b)	*2004–05*(b)	*2005–06*(b)	*2006–07*(c)
	$b	$b	$b	$b	$b	$b	$b
Wages and salaries							
Current income	268.3	na	308.4	341.7	na	402.1	na
Previous financial year income	na	311.2	327.1	na	377.4	na	444.3
Government pensions and allowances							
Current income	46.5	na	49.6	56.3	na	61.1	na
Previous financial year income	na	44.6	48.3	na	52.0	na	52.6
Own unincorporated business income							
Current income	27.7	na	33.2	31.2	na	39.4	na
Previous financial year income	na	31.3	28.0	na	35.8	na	37.4
Investment income							
Current income	16.3	na	16.2	21.6	na	29.3	na
Previous financial year income	na	16.6	19.1	na	26.4	na	33.4
Other income							
Current income	11.7	na	15.1	17.7	na	19.7	na
Previous financial year income	na	13.1	16.5	na	17.8	na	25.6
Total income							
Current income	370.5	na	422.5	468.6	na	551.6	na
Previous financial year income	na	416.9	439.0	na	509.4	na	593.3

na not available

(a) Historic data in the table are not adjusted for the changes in the Consumer Price Index

(b) The 2002–03, 2003–04, 2004–05 and 2005–06 data have been recompiled to reflect new treatments of income, where data are available to support this calculation were collected

(c) Wages and salaries measured in 2007–08 and 2009–10 on a current financial year basis, and for 2006–07 and 2008–09 on a previous financial year basis, expressly include irregular overtime and irregular bonuses as well as non-cash wages and salaries and termination payments not collected in previous survey cycles

TABLE A1.2 CURRENT AND PREVIOUS FINANCIAL YEAR GROSS INCOME(a), continued

	2007–08(b)	*2008–09*(b)	*2009–10*(b)	*2010–11*	*2011–12*
	$b	$b	$b	$b	$b
Wages and salaries					
Current income	513.1	na	546.6	na	615.4
Previous financial year income(c)	na	503.1	na	568.4	na
Government pensions and allowances					
Current income	65.2	na	79.3	na	88.7
Previous financial year income(c)	na	77.1	na	74.4	na
Own unincorporated business income					
Current income	40.7	na	40.5	na	46.4
Previous financial year income(c)	na	34.7	na	37.4	na
Investment income					
Current income	43.4	na	39.3	na	41.3
Previous financial year income(c)	na	35.7	na	38.5	na
Other income					
Current income	31.6	na	33.3	na	39.4
Previous financial year income(c)	na	30.1	na	35.5	na
Total income					
Current income	694.0	na	739.0	na	831.3
Previous financial year income(c)	na	680.7	na	754.1	na

na not available

(a) Historic data in the table are not adjusted for the changes in the Consumer Price Index

(b) Wages and salaries measured in 2007–08 and 2009–10 on a current financial year basis, and for 2006–07 and 2008–09 on a previous financial year basis, expressly include irregular overtime and irregular bonuses as well as non-cash wages and salaries and termination payments not collected in previous survey cycles

(c) Compiled from the Survey of Income and Housing (SIH) of the year following the reference year. There was no SIH conducted in 1998–99, 2001–02, 2004–05, 2006–07 or 2008–09

TABLE A1.3 INCOME DISTRIBUTION INDICATORS(a), PREVIOUS FINANCIAL YEAR INCOME

Person weighted indicator		*1993–94*	*1994–95*	*1995–96*	*1996–97*	*1998–99*	*1999–2000*	*2001–02*	*2002–03*
Mean income per week(b)									
Lowest quintile	$	216	226	233	234	238	243	242	249
Second quintile	$	372	376	380	377	402	407	424	426
Third quintile	$	520	518	524	529	567	569	591	594
Fourth quintile	$	694	696	699	715	758	763	793	787
Highest quintile	$	1 086	1 096	1 114	1 143	1 220	1 246	1 267	1 282
All persons	$	578	583	590	600	637	646	663	667
Second and third deciles	$	307	313	318	315	332	338	346	350
Income per week at top of selected percentiles(b)									
10th (P10)	$	249	254	259	261	269	273	275	281
20th (P20)	$	303	311	319	315	328	337	342	349
30th (P30)	$	372	376	379	377	402	404	422	423
40th (P40)	$	444	443	449	446	480	482	508	510
50th (P50)	$	521	517	524	529	565	570	589	593
60th (P60)	$	597	600	600	612	659	660	683	680
70th (P70)	$	683	691	697	710	754	758	790	781
80th (P80)	$	813	815	809	826	881	891	923	917
90th (P90)	$	995	989	990	1 013	1 075	1 109	1 123	1 130
Income share									
Lowest quintile	%	7.5	7.8	7.9	7.8	7.5	7.5	7.3	7.5
Second quintile	%	12.9	12.9	12.9	12.6	12.6	12.6	12.8	12.8
Third quintile	%	18.0	17.8	17.8	17.6	17.8	17.6	17.8	17.8
Fourth quintile	%	24.0	23.9	23.7	23.8	23.8	23.6	23.9	23.6
Highest quintile	%	37.6	37.6	37.8	38.2	38.3	38.6	38.2	38.4
All persons	%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Second and third deciles	%	10.6	10.7	10.8	10.5	10.4	10.5	10.4	10.5
Ratio of incomes at top of selected income percentiles									
P90/P10	ratio	4.00	3.90	3.82	3.89	4.00	4.06	4.08	4.02
P80/P20	ratio	2.68	2.62	2.54	2.62	2.68	2.64	2.70	2.63
P80/P50	ratio	1.56	1.58	1.55	1.56	1.56	1.56	1.57	1.55
P20/P50	ratio	0.58	0.60	0.61	0.60	0.58	0.59	0.58	0.59
Gini coefficient	no.	0.304	0.302	0.302	0.308	0.312	0.313	0.312	0.312

(a) Compiled from data collected in the Survey of Income and Housing of the year following the reference years. Income is equivalised disposable household income

(b) In 2009–10 dollars, adjusted using changes in the Consumer Price Index

TABLE A1.3 INCOME DISTRIBUTION INDICATORS(a), PREVIOUS FINANCIAL YEAR INCOME *continued*

Person weighted indicator		*2004–05*(b)	*2006–07*(c)	*2008–09*(d)	*2010–11*
Mean income per week(d)					
Lowest quintile	$	258	248	268	287
Second quintile	$	454	470	515	524
Third quintile	$	633	671	729	737
Fourth quintile	$	835	923	980	997
Highest quintile	$	1 412	1 624	1 667	1 695
All persons	$	718	787	832	848
Second and third deciles	$	369	377	414	425
Income per week at top of selected percentiles(d)					
10th (P10)	$	293	291	312	331
20th (P20)	$	367	375	412	424
30th (P30)	$	450	468	514	523
40th (P40)	$	543	574	620	630
50th (P50)	$	634	670	728	734
60th (P60)	$	726	780	837	852
70th (P70)	$	829	923	973	993
80th (P80)	$	976	1 084	1 154	1 166
90th (P90)	$	1 205	1 362	1 446	1 465
Income share					
Lowest quintile	%	7.2	6.3	6.5	6.8
Second quintile	%	12.6	11.9	12.4	12.4
Third quintile	%	17.6	17.1	17.5	17.4
Fourth quintile	%	23.3	23.4	23.6	23.5
Highest quintile	%	39.3	41.3	40.1	40.0
All persons	%	100.0	100.0	100.0	100.0
Second and third deciles	%	10.3	9.6	9.9	10.0
Ratio of incomes at top of selected income percentiles					
P90/P10	ratio	4.11	4.68	4.63	4.42
P80/P20	ratio	2.66	2.89	2.80	2.75
P80/P50	ratio	1.54	1.62	1.59	1.59
P20/P50	ratio	0.58	0.56	0.57	0.58
Gini coefficient	no.	0.322	0.351	0.337	0.334

(a) Compiled from data collected in the Survey of Income and Housing of the year following the reference years. Income is equivalised disposable household income

(b) The 2002–03 and 2004–05 data have been recompiled to reflect new treatments of income, where data are available to support the calculation

(c) Wages and salaries measured for 2006–07 on a previous financial year basis, expressly include irregular overtime and irregular bonuses as well as non-cash wages and salaries and termination payments not collected in previous cycles

(d) In 2009–10 dollars, adjusted using changes in the Consumer Price Index

APPENDIX 2 EQUIVALISED DISPOSABLE HOUSEHOLD INCOME

EQUIVALENCE SCALES

Equivalence scales have been devised to make adjustments to the actual incomes of households in a way that enables analysis of the relative wellbeing of households of different size and composition. For example, it would be expected that a household comprising two people would normally need more income than a lone person household if the two households are to enjoy the same standard of living.

One way of adjusting for this difference in household size might be simply to divide the income of the household by the number of people within the household so that all income is presented on a per capita basis. However, such a simple adjustment assumes that all individuals have the same resource needs if they are to enjoy the same standard of living and that there are no economies of scale derived from living together.

Various calibrations, or scales, have been devised to make adjustments to the actual incomes of households in a way that recognises differences in the needs of individuals within those households and the economies that flow from sharing resources. The scales differ in their detail and complexity but commonly recognise that the extra level of resources required by larger groups of people living together is not directly proportional to the number of people in the group. They also typically recognise that children have fewer needs than adults.

When household income is adjusted according to an equivalence scale, the equivalised income can be viewed as an indicator of the economic resources available to a standardised household. For a lone person household it is equal to household income. For a household comprising more than one person, it is an indicator of the household income that would need to be received by a lone person household to enjoy the same level of economic wellbeing as the household in question.

Alternatively, equivalised household income can be viewed as an indicator of the economic resources available to each individual in a household. The latter view underpins the calculation of income distribution measures based on numbers of people, rather than numbers of households.

CHOICE OF SCALE

While there has been considerable research by statistical and other agencies trying to estimate appropriate values for equivalence scales, no single standard has emerged. In theory, there are many factors which might be taken into account when devising equivalence scales, such as recognising that people in the labour force are likely to face transport and other costs that can affect their standard of living. It might also be desirable to reflect the different needs of children at different ages, and the different cost levels faced by people living in different geographic areas. On the other hand, the tastes and preferences of people vary widely, resulting in markedly different expenditure patterns between households with similar income levels and similar composition. Furthermore, it is likely that equivalence scales that appropriately adjust incomes of low income households are not as appropriate for higher income households, and vice versa. This is because the proportion of total income spent on housing tends to fall as incomes rise, and cheaper per capita housing is a major source of economies of scale that flow from people living together.

It is therefore difficult to define, estimate and use equivalence scales which take all relevant factors into account. As a result, analysts tend to use simple equivalence scales which are chosen subjectively but are nevertheless consistent with the quantitative research that has been undertaken. A major advantage of simpler scales is that they are more transparent to the user, that is, it is easier to evaluate the assumptions being made in the equivalising process.

CHOICE OF SCALE *continued*

In this publication, the 'modified OECD' equivalence scale is used. The 'modified OECD' equivalence scale has been used in more recent research work undertaken for the Organisation for Economic Co-operation and Development (OECD), has wide acceptance among Australian analysts of income distribution, and is the stated preference of key Survey of Income and Housing (SIH) users.

DERIVATION OF EQUIVALISED INCOME

Equivalised income is derived by calculating an equivalence factor according to the chosen equivalence scale, and then dividing income by the factor.

The equivalence factor derived using the 'modified OECD' equivalence scale is built up by allocating points to each person in a household. Taking the first adult in the household as having a weight of 1 point, each additional person who is 15 years or older is allocated 0.5 points, and each child under the age of 15 is allocated 0.3 points. Equivalised household income is derived by dividing total household income by a factor equal to the sum of the equivalence points allocated to the household members. The equivalised income of a lone person household is the same as its unequivalised income. The equivalised income of a household comprising more than one person lies between the total value and the per capita value of its unequivalised income.

Equivalised household income is an indicator of the economic resources available to each member of a household. It can therefore be used for comparing the situation of individuals as well as comparing the situation of households.

When unequivalised income is negative, such as when losses incurred in a household's unincorporated business or other investments are greater than any positive income from any other sources, then equivalised income has been set to zero.

GROSS INCOME AND EQUIVALISED DISPOSABLE INCOME

The SIH collects data on households' gross income. However, disposable income, that is, gross income less the value of income tax and Medicare levy to be paid on the gross income, is a better indicator of the resources available to a household to maintain its standard of living. Therefore, for this publication, estimates of income tax payable on gross income reported in the SIH are made by means of a tax model. The tax and Medicare estimates are subtracted from gross income to give disposable income, and the equivalence factors are applied to the estimates of disposable income. Person weighted measures of income distribution are then derived from the estimates of equivalised disposable household income. (Part 1.6 'Gini coefficient and other measures of income distribution' describes the difference between person weighted and household weighted measures.)

Means and medians of both gross income and equivalised disposable income are shown in some tables in this publication to allow users to see the differences between data as collected and data as standardised to facilitate income distribution analysis. The following table shows the differences in income measures when calculated from data at different stages in the progression from gross household income to person weighted equivalised disposable household income.

A2 GROSS INCOME TO PERSON WEIGHTED, EQUIVALISED DISPOSABLE INCOME, 2011–12

		Gross household income per week	*Income tax per week*	*Disposable household income per week*	*EQUIVALISED DISPOSABLE HOUSEHOLD INCOME PER WEEK*	
					Household weighted	*Person weighted*
Percentile boundaries and percentile ratios						
P10	$	399	na	399	365	379
P20	$	618	na	614	429	473
P50	$	1 442	na	1 284	768	790
P80	$	2 745	na	2 265	1 246	1 236
P90	$	3 615	na	2 909	1 581	1 555
P90/P10	ratio	9.06	na	7.29	4.33	4.10
P80/P20	ratio	4.45	na	3.69	2.91	2.61
Means						
All households	$	1 847	297	1 550	906	918
One family households						
Couple family with dependent children	$	2 580	491	2 089	935	915
One parent family with dependent children	$	1 210	110	1 100	630	618
Couple only	$	1 837	295	1 542	1 030	1 030
Other one family households	$	2 352	326	2 025	1 007	1 022
Multiple family households	$	2 900	374	2 526	875	868
Non-family households						
Lone person	$	864	117	746	747	747
Group households	$	2 062	289	1 773	1 004	998

na not available

GROSS INCOME AND EQUIVALISED DISPOSABLE INCOME *continued*

The first column in the table above shows measures calculated from gross household income, as collected in the SIH. The next column shows estimates of income tax to be paid on gross income, with the third column giving the resultant disposable household income.

Individuals with higher incomes will normally be expected to pay higher income tax than individuals with lower incomes, but this relationship is not as strong for households. A household with relatively high income may comprise only one individual with high income or it may include a number of individuals with relatively low income. The disposable income in the first situation will be lower than that in the second situation, and will result in a reranking of the households in the formation of percentiles. Therefore a household may fall into a different percentile in an analysis of disposable income compared to an analysis of gross income.

As would be expected, the difference between disposable income and gross income increases as income levels increase. At the upper boundary of the tenth percentile (P10), there is little difference, that is, the income tax to be paid by households with the lowest levels of gross income is negligible. In contrast, there is a $706 per week difference between the P90 value for gross household income and the P90 value for disposable household income.

Disposable income relates to the household as a whole and the percentiles and means are calculated with respect to the numbers of households concerned. These are referred to as household weighted estimates. Equivalised disposable household income can also be household weighted (see the fourth column in the table), but since it can be viewed as a measure of the economic resources available to each individual in a household, income measures for equivalised estimates are generally based on numbers of people rather than numbers of households (see the fifth column in the table). This is referred to as person weighting and ensures that people in large households are given as much

GROSS INCOME AND EQUIVALISED DISPOSABLE INCOME *continued*

weight in the distribution as people in small households. While the ranking underlying the formation of percentiles is the same for the household and person weighted estimates, the boundaries between the percentiles differ because household weighted percentile boundaries create subgroups with equal numbers of households while person weighted percentile boundaries create subgroups with equal numbers of persons. The extent to which the boundaries differ reflects the extent to which the average household size differs between percentiles.

The person weighted estimate of P10 ($379) is higher than the household weighted estimate of P10 ($365). This implies that the households with the lowest rankings of equivalised disposable household income tend to comprise a lower than average number of persons. In other words, the 10% of people with the lowest income make up more than the 10% of households with the lowest income.

For lone person households, the two measures of equivalised disposable income and the disposable income are the same ($747). Equivalised disposable income for lone person households is approximately the same as disposable income, because the equivalising factor for such households is 1.0.

For all other types of household composition, equivalised disposable income is lower than disposable income, since income is adjusted to reflect household size and composition. Mean equivalised disposable income for couple only households is the same for both the household weighted and the person weighted measures since there are always two and only two persons in such households. For most other multi-person households, person weighted mean income is lower than the household weighted mean. This implies that, within each type, larger households tend to have lower equivalised household income.

APPENDIX 3 GINI COEFFICIENT AND OTHER SINGLE STATISTIC SUMMARIES OF INCOME DISTRIBUTION

INTRODUCTION

Taken together, the simple measures of income distribution such as mean, median, percentile ratios and income shares (described in Part 1.6 'Gini coefficient') can provide an indication of changes in the income distribution of a population over time, or differences in the income distributions of two separate populations. However, none of the simple measures comprise a single statistic that summarises the whole income distribution in a way that directly considers the individual incomes of all members of the population. This Appendix considers some of the issues associated with compiling a single statistic summary of inequality, and compares a number of alternative measures. The first is the Gini coefficient, which is the most commonly used summary measure. The Gini coefficient is then compared with the Theil index and a number of Atkinson indexes.

Note that the analysis in this Appendix has been carried out using data from the 2002–03 and earlier SIHs.

CONCEPT OF INCOME INEQUALITY

It is generally agreed that perfect equality in the distribution of income can be defined as the situation in which everyone in the population lives in a household with the same equivalised disposable household income (see Part 1.3 'Equivalised disposable household income'). If any person has lower or higher equivalised disposable household income than any other person, there is inequality in the income distribution. However, there is no unique, generally accepted way of summarising the degree to which a population does not have perfect equality, or, more practically, summarising the difference in inequality between two populations.

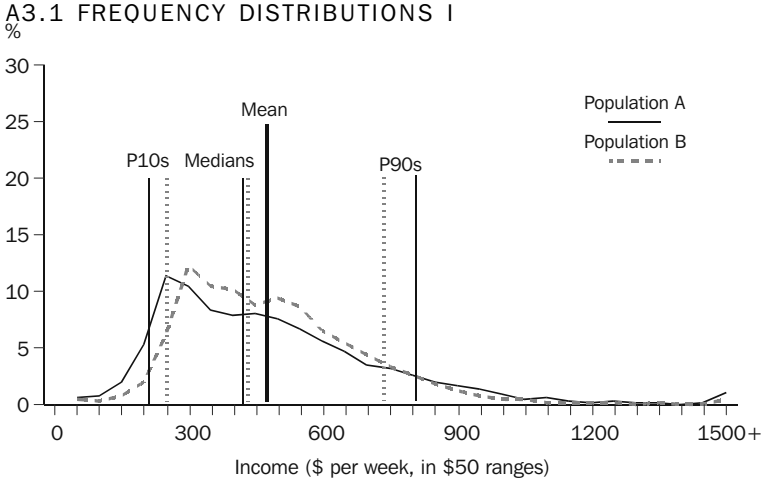
Unequal distributions of income can occur in many different ways. The majority of people may have very similar incomes with pockets of very high or very low income. Or entire populations may be heavily clustered at the top and the bottom of the income distribution with few people receiving incomes in between these extremes. To evaluate one income distribution as having greater or lesser inequality than another income distribution, it is necessary to compare the distributions in terms of which segments of the population have a greater share of income and which segments have a lower share. It is then necessary to at least implicitly judge whether the relative gain in income by some people is more than offset or less than offset by the relative loss of income by some other people. Different observers may make different judgments about the same situation, depending on factors including personal preferences. Furthermore, different summary measures of inequality embody different judgments about the relative gains and losses. As will be seen below, some measures allow the user to explicitly set a parameter to reflect the judgment of the user in this regard.

Simple examples of different patterns of inequality can be used to illustrate the issues under consideration.

For the first example, consider the equivalised disposable household income of the two populations A and B depicted in Graph A3.1, 'Frequency Distributions I'. Population A is derived from the 2000–01 SIH population after removing people in households with zero income (the reason for deleting households with zero income is explained later in this Appendix). Population B covers the same people as in population A, but everyone's income is transformed in a particular way that reduces the proportional differences in income across the population while retaining the same mean income for the population. There are therefore fewer people on very low or very high incomes and more people in between these extremes, with the median for population B closer to the mean, and less spread between P10 and P90.

CONCEPT OF INCOME INEQUALITY *continued*

A3.1 FREQUENCY DISTRIBUTIONS I

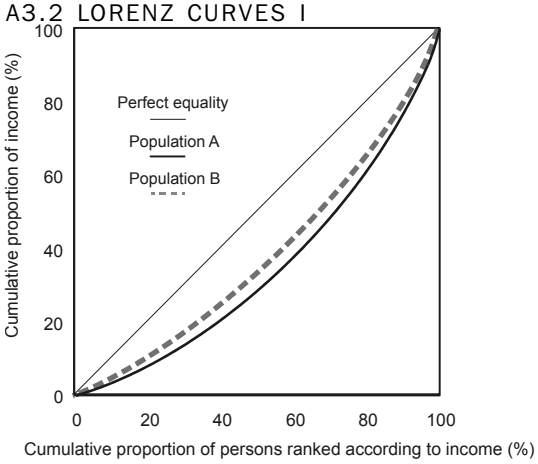


The extent to which the income distributions for populations A and B vary from equality, and from each other, can be illustrated graphically another way, using Lorenz curves.

LORENZ CURVES

The Lorenz curve is a graph with the horizontal axis showing the cumulative proportion of the persons in the population ranked according to their income and with the vertical axis showing the corresponding cumulative proportion of equivalised disposable household income. The graph then shows the income share of any selected cumulative proportion of the population. The diagonal line represents a situation of perfect equality, that is, all people have the same equivalised disposable household income. The graph A3.2, 'Lorenz Curves I' shows the Lorenz curves for the two populations described above.

A3.2 LORENZ CURVES I



Since the distribution of population B's income is uniformly less widely spread than for population A, all points of the Lorenz curve for population B are closer to the line of perfect equality than the corresponding points of the Lorenz curve for population A. In this situation, population B is said to be in a position of Lorenz dominance and can be regarded as having a more equal income distribution than population A.

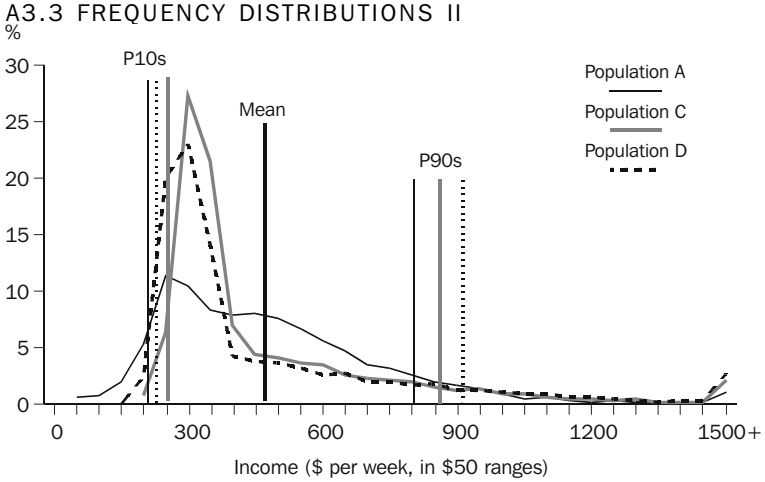
However, if the Lorenz curves of two populations cross over there is no Lorenz dominance and there is no generally accepted way of defining which of the two populations has the more equal income distribution.

Consider the income distributions of the populations in a second example, as shown in the graph A3.3 'Frequency Distributions II'. Population A is the same as in the first example above. Populations C and D also cover the same people as in population A, and all have the same mean income. But the income of populations C and D are transformed in such a way that the lower income people are relatively better off than for population A

LORENZ CURVES *continued*

and the higher income people are also relatively better off than for population A. Conversely, the incomes of the middle of the population are relatively reduced so that the mean income of the three populations remains the same. Also the ranking of the population by income has not changed the relative position of any person. For population A, the lowest income is $1, for population C it is about $180, and for population D it is about $150. The incomes of the higher income people have received a relatively greater boost for population D than for population C.

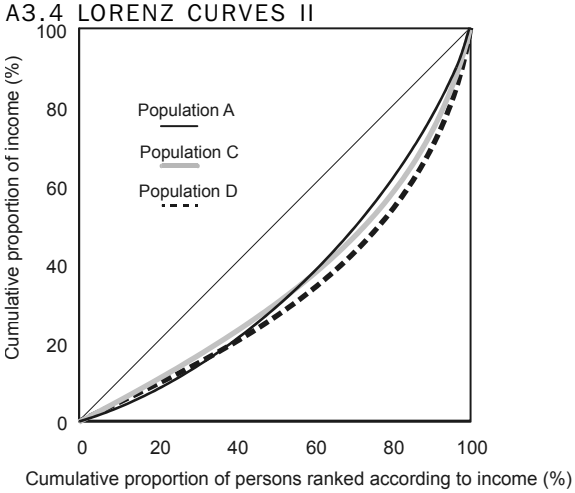
A3.3 FREQUENCY DISTRIBUTIONS II



The medians (not shown in the graph) are higher for populations C and D than for A, but all are below the mean. As for population B in the earlier graph, P10 for populations C and D is above P10 for population A. However, in contrast to population B, populations C and D also have P90 above that of population A.

The graph A3.4, 'Lorenz Curves II' shows the resultant differences in the Lorenz curves, with the curves for both populations C and D crossing that of population A. Therefore there is ambiguity about whether populations C and D have greater or less income inequality than population A. Comparing populations C and D to population A, both lower and higher income people have a greater share of total income and middle income people have less. In population C, the lower income people show a relatively greater gain than the higher income people. Conversely, in population D, the higher income people show a relatively greater gain than the lower income people. However, the curve for population C does not cross that of population D, and therefore population C has Lorenz dominance over population D, that is, income is unambiguously distributed more equally in population C than in population D.

A3.4 LORENZ CURVES II



LORENZ CURVES *continued*

Table A3.5 shows the years for which the income distribution has Lorenz dominance over the income distributions of other years. Table A3.5 also shows the years for which the lack of Lorenz dominance is due only to the crossing of the Lorenz curves in the bottom decile of the income distribution, that part of the income distribution for which income is not necessarily a good indicator of economic wellbeing.

TABLE A3.5 LORENZ DOMINANCE BETWEEN INCOME DISTRIBUTIONS, 1994–95 TO 2002–03

Full dominance relationship
1995–96 over 1994–95, 1997–98, 1999–00, 2000–01 and 2002–03
1996–97 over 1994–95, 1997–98, 1999–00, 2000–01 and 2002–03
1997–98 over 1999–00 and 2002–03

Near dominance relationship(a)
1994–95 over 1999–00, 2000–01 and 2002–03
1997–98 over 2000–01

No dominance relationship(b)
Between 1994–95 and 1997–98
Between 1995–96 and 1996–97
Between 1999–00 and 2000–01 or 2002–03
Between 2000–01 and 2002–03

(a) Lorenz curves only cross in the first decile of the income distrirbution
(b) Lorenz curves cross at least once outside the first decile of the income distrirbution

The Lorenz curves described in this appendix are depicting the relativities between income distributions and do not show whether incomes overall have been growing, contracting or remaining static. Another form of Lorenz curves, known as Generalised Lorenz curves, depict the cumulative incomes of populations after adjusting for differences in average income between the populations. They therefore can be used to analyse differences in the level of income as well as differences in distribution, but do not as clearly show differences in inequality (see, for example, Deaton (1997)).

SUMMARY INDICATORS

The three commonly used summary inequality measures mentioned earlier — the Gini coefficient, the Theil index, and the Atkinson index — can be produced for populations A, B, C and D. Table A3.6 provides the values for these measures with respect to each population, and descriptions of the measures follow. The Atkinson index is considered with a number of different settings of a user defined parameter, as described later.

A3.6 COMPARISON OF INEQUALITY SUMMARY STATISTICS

	Population A	Population B	Population C	Population D
Has Lorenz dominance over Population:	. .	A	D	. .
Gini coefficient	0.306	0.247	0.313	0.357
Theil index	0.069	0.045	0.084	0.108
Atkinson indexes				
$\varepsilon = 0.5$	0.077	0.051	0.084	0.107
$\varepsilon = 0.75$	0.116	0.077	0.117	0.149
$\varepsilon = 1.0$	0.155	0.103	0.146	0.185
$\varepsilon = 1.25$	0.199	0.133	0.171	0.216
$\varepsilon = 1.5$	0.253	0.167	0.193	0.242
$\varepsilon = 2.0$	0.452	0.274	0.230	0.285

. . not applicable

GINI COEFFICIENT

The Gini coefficient can be defined by referring to the Lorenz curve. It is the ratio of the area between the actual Lorenz curve and the diagonal (or line of equality) compared to the total area under the diagonal. The Gini coefficient equals zero when all people have the same level of income and approaches one when one person receives all the income. In other words, the smaller the Gini coefficient the more equal the distribution of income, given the assumptions underlying the Gini coefficient.

Table A3.6 shows that the Gini coefficient for population B is substantially below the coefficient for population A. The coefficient for population C is a little above that for population A, and the coefficient for population D is somewhat further above. According to the Gini coefficient, therefore, population B has a more equal income distribution than population A, but populations C and D have less equal distributions.

Mathematically, the Gini coefficient can be expressed as

$$G = \left(\frac{1}{2n^2 \mu} \right) \sum_{i,j}^{n} \left| y_i - y_j \right|$$

where

n is the number of people in the population

μ is the mean equivalised disposable household income of all people in the population

and y_i and y_j are the equivalised disposable household income of the ith and jth persons in the population.

The Gini coefficient is a summary of the differences between each person in the population and every other person in the population. The differences are the absolute arithmetic differences, and therefore a difference of $x between two relatively high income people contributes as much to the index as a difference of $x between two relatively low income people.

An increase in the income of a person with income greater than median income will always lead to an increase in the coefficient, and a decrease in the income of a person with income lower than median income will also always lead to an increase in the coefficient. The extent of the increase will depend on the proportion of people that have income in the range between median income and the income of the person with the changed income, both before and after the change in income. At the extremes, increasing the income of the person with the lowest income by $x or increasing the income of the person with the highest income by $x will respectively decrease and increase the Gini coefficient by the same amount (assuming the lowest income person remains the lowest income person after the change).

THEIL INDEX

Another commonly used summary statistic is the Theil index, which can be expressed mathematically as

$$T = \frac{1}{n} \sum_{i=1}^{n} \frac{y_i}{\mu} \log \frac{y_i}{\mu}$$

The Theil index ranges between zero when all incomes are equal and log n when one person receives all the income. It therefore has a higher value if one person in a larger population receives all income compared to if one person in a smaller population receives all income. However, it has the same value for two unequally sized populations if income is distributed with the same proportions in the two populations, that is, they have identical Lorenz curves. (The other single statistic summary indicators discussed in this appendix also have this characteristic.)

THEIL INDEX *continued*

As for the Gini coefficient, if one population has Lorenz dominance over another population, the Theil index for the first population will be lower. Table A3.6 shows, therefore, that population B has a lower Theil index than population A, and population C has a lower Theil index than population D. The Theil index for population A is also below that for populations C and D.

The construction of the Theil index is substantially different from that of the Gini coefficient. Instead of comparing the income of each person with the income of every other person, the Theil index compares the income of each person with the mean income of the population.

ATKINSON INDEX

The Atkinson index is a more complex summary statistic. As in the Theil index, it contains a ratio comparison of each person's income with the population mean. But it also requires the user to set a parameter, ε, specifying a level of 'inequality aversion'. The mathematical expression is

$$A_\varepsilon = 1 - \left[\frac{1}{n} \sum_{i=1}^{n} \left[\frac{y_i}{\mu} \right]^{1-\varepsilon} \right]^{1/1-\varepsilon}$$

for ε not equal to one, and

$$A_1 = 1 - \prod_{i=1}^{n} \left[\frac{y_i}{\mu} \right]^{1/n}$$

for ε equal to one.

An Atkinson index always has a value between zero and one, regardless of the value of ε. For any given value of ε, a lower value of the Atkinson index implies a greater degree of equality in the income distribution.

The 'inequality aversion' parameter, ε, in effect specifies how much more benefit the user thinks an extra dollar would provide to a person with lower income compared to the benefit an extra dollar would provide to a person on a higher income. At the extreme of ε set to zero, the user has no 'inequality aversion'. The benefit of an extra dollar is assumed to be the same for everyone in the population, and the Atkinson index is always equal to zero regardless of whether the incomes in the population are widely dispersed or not.

The higher the setting of ε, the greater the relative benefit derived by a lower income person receiving an extra dollar compared to a higher income person receiving an extra dollar. Consequently, the higher the setting of ε, the more sensitive is the Atkinson index to the ratios of the lowest incomes in the population to the mean income of the population. In particular, if a population has a number of people with income very close to zero, that is, only a very small proportion of mean income, their influence can dominate the Atkinson index and it has a value close to one.

Table A3.6 presents the Atkinson index with various settings of ε between 0.5 and 2.0. As expected, the Atkinson indexes for population B are always lower than those for population A, reflecting the Lorenz dominance of population B over population A. Similarly, the Atkinson indexes for population C are always lower than those for population D. However, comparing populations C and D with populations A and B gives a mixed picture.

The higher the setting of ε, the more emphasis the Atkinson index gives to the lowest values in the income distribution. Populations A and B have some values less than one hundredth of the mean, but populations C and D do not. Therefore the Atkinson index

ATKINSON INDEX *continued*

increases more quickly for populations A and B as the setting of ε is increased. For ε set to 1.0 and above, population A is measured as having greater income inequality than population C; for ε set to 1.5 and above population A has greater income inequality than population D; and for ε set to 2.0 population B also has greater income inequality than population C.

A complicating factor is that the Atkinson index cannot be calculated for a population containing zero incomes. Over one per cent of the SIH population has zero equivalised disposable household income including reported negative incomes which are set to zero when equivalised.

COMPARISON OF SUMMARY MEASURES

Table A3.7 provides the chosen summary measures for all years in which the SIH has been conducted up to 2002–03, together with the standard errors of the estimates in 2002–03. In 1995–96, 1997–98 and 1999–2000 all indicators consistently pointed to an increase or a decrease in inequality. In the other years there was a mixed picture. Over the whole period, all indicators show an increase in inequality, although none of the movements are significant at the 95% confidence level. Standard errors for years prior to 2002–03 tend to be higher than those for 2002–03 because the 2002–03 SIH had a larger sample than the earlier SIHs.

A3.7 SUMMARY STATISTICS OF INCOME INEQUALITY, 1994–95 TO 2002–03

							2002-03	
	1994-95	*1995-96*	*1996-97*	*1997-98*	*1999-2000*	*2000-01*	*Level*	*Std error*
Gini coefficient	0.302	0.296	0.292	0.303	0.310	0.311	0.309	0.0033
Theil index	0.069	0.065	0.063	0.070	0.076	0.073	0.073	0.0022
Atkinson indexes(a)								
$\varepsilon = 0.5$	0.081	0.076	0.074	0.081	0.085	0.084	0.084	0.0020
$\varepsilon = 0.75$	0.127	0.118	0.115	0.126	0.132	0.131	0.131	0.0032
$\varepsilon = 1.0$	0.186	0.170	0.166	0.184	0.191	0.191	0.192	0.0055
$\varepsilon = 1.25$	0.281	0.246	0.246	0.274	0.281	0.286	0.291	0.0114
$\varepsilon = 1.5$	0.455	0.380	0.391	0.434	0.444	0.464	0.473	0.0239
$\varepsilon = 2.0$	0.902	0.807	0.834	0.850	0.871	0.913	0.910	0.0237

(a) The Atkinson indexes have been compiled using data in which zero incomes have been set to $1

SENSITIVITY OF SUMMARY MEASURES TO LOW INCOMES

Table A3.8 compares the impact on selected inequality summary statistics for the 2000–01 SIH population if persons with zero equivalised disposable household income have their income set to 1 cent, to 10 cents or to $1, or if they are omitted from the population altogether. Note that population A used in the first part of this appendix was the 2000–01 SIH population, after removing persons with zero income.

The table shows that the Atkinson indexes, but not the Gini or Theil measures, are sensitive to small changes, in dollar terms, to the lowest incomes in the Australian data set. It also shows that if persons with zero income are omitted from the population altogether, all indicators are impacted, with the least impact being on the Gini coefficient, and with an impact of over 50% on the Atkinson index with ε set to 2.0.

SENSITIVITY OF SUMMARY MEASURES TO LOW INCOMES *continued*

A3.8 COMPARISON OF ALTERNATIVE TREATMENTS OF PERSONS WITH ZERO HOUSEHOLD INCOME, 2000–01

	Zero income retained	*Zero income set to $0.01*	*Zero income set to $0.10*	*Zero income set to $1.00*	*Persons with zero income omitted*
Population size (million persons)	18.86	18.86	18.86	18.86	18.70
Mean equivalised disposable household income per week ($)	469	469	469	469	473
Gini coefficient	0.311	0.311	0.311	0.311	0.306
Theil index	0.073	0.073	0.073	0.073	0.069
Atkinson indexes					
$\varepsilon = 0.5$	. .	0.085	0.085	0.084	0.077
$\varepsilon = 0.75$	. .	0.135	0.134	0.131	0.116
$\varepsilon = 1.0$	. .	0.219	0.205	0.191	0.155
$\varepsilon = 1.25$	. .	0.458	0.355	0.286	0.199
$\varepsilon = 1.5$	. .	0.879	0.665	0.464	0.253
$\varepsilon = 2.0$	. .	0.997	0.977	0.913	0.452

. . not applicable

Given the likelihood that most of the very low incomes do not accurately represent the economic wellbeing of the respondents reporting such values, there is some doubt about the usefulness of summary indicators that are particularly sensitive to this segment of the population.

CHOICE OF SUMMARY MEASURES

There are several implicit and explicit assumptions underlying the measures discussed above. The Atkinson index explicitly requires the user to choose an 'inequality aversion' factor, but the other measures also implicitly embody judgements about how inequality is to be quantified.

Rather than considering just one summary measure, analysts will often look at a range of measures to see whether or not they give a consistent indication about changes in inequality, especially if there is no Lorenz dominance among the distributions being compared. Comparisons can be for the same population over time, or between different populations at a point in time.

Each of the indicators has its own particular advantages. For example, the Gini coefficient can be easily understood through the graphical interpretation of the Lorenz curve, and it is probably the most widely used indicator. The Theil index is particularly useful where analysts wish to decompose the measure of income inequality in a population into the inequality that exists within subpopulations and the inequality that exists between those subpopulations. The Atkinson indexes highlight that summary measures depend on the underlying assumptions about the quantification of inequality and assist the user in varying some of those assumptions. The Gini coefficient is sometimes criticised as being too sensitive to relative changes around the middle of the income distribution. This sensitivity arises because the derivation of the Gini coefficient reflects the ranking of the population, and ranking is most likely to change at the densest part of the income distribution, which is likely to be around the middle of the distribution.

In choosing which income distribution indicators to present, whether for simple or summary measures, it is useful to recall that income alone is not a perfect measure of the economic resources available to people to maintain or enhance their wellbeing, but it is a reasonable proxy that will be suitable for most people. However, as explained in Part 1.5 'Low income households', some respondents report extremely low and even negative incomes in the Survey of Income and Housing (SIH), often reflecting their business and

CHOICE OF SUMMARY MEASURES *continued*

investment arrangements rather than any distinctly low economic wellbeing of these respondents. In other cases, incomes may be underreported either accidentally or deliberately, so again they are not a good indicator of economic inequality. It has therefore been considered inappropriate for these records to have a disproportionate influence on a summary income inequality measure being used for assessing inequality in economic wellbeing, just as the bottom decile is excluded in ABS publications from analysis of low income growth over time.

The Gini coefficient is the only single statistic summary of income distribution included in the published output from the SIH because it is not overly sensitive to the extremely low incomes that can be reported, and it is relatively simple to interpret. The other summary measures looked at in this appendix are more sensitive in the Australian context to extremely low and negative incomes that are assumed to not adequately reflect economic wellbeing.

Deaton, A. (1997). *The analysis of household surveys: A microeconomic approach to development policy*. John Hopkins University Press and The World Bank.

APPENDIX 4 SOCIAL TRANSFERS IN KIND

INTRODUCTION

This appendix presents the results of a study of the effects of selected government benefits and taxes on the distribution of income among private households in Australia in 2011–12, using data for the first time, from the Survey of Income and Housing (SIH). Household income is increased directly by the Australian government through social assistance benefits in the form of cash payments, such as the Age Pension and Family Tax Benefit, and indirectly by government expenditures such as those on health and education. On the other hand, household income is reduced by taxes on personal income (direct taxes) and by taxes on production (indirect taxes) passed on in the prices households pay for goods and services.

Benefits allocated in this study were restricted to those that are relatable to particular types of households, while taxes were restricted to taxes on personal income. When the six yearly Household Expenditure Survey (HES) is conducted, it is also possible to allocate taxes on production to households, such as the goods and services tax (GST), using information about the expenditure patterns of households. Previous studies of the effects of government benefits and taxes on household income have been conducted using HES data and were published in *Government Benefits, Taxes and Household Income, Australia* (cat. no. 6537.0) in relation to 1984, 1988–89, 1993–94, 1998–99, 2003–04 and 2009–10.

The methodologies for allocating social transfers in kind using SIH data were the same, where possible, as the methodologies used in the 2009–10 HES study. However some change to the allocation of health and education benefits were necessary due to the unavailability of some information usually collected in the HES. Further information on these changes is provided at the end of this appendix in the 'Data sources and methodologies' section.

Concepts

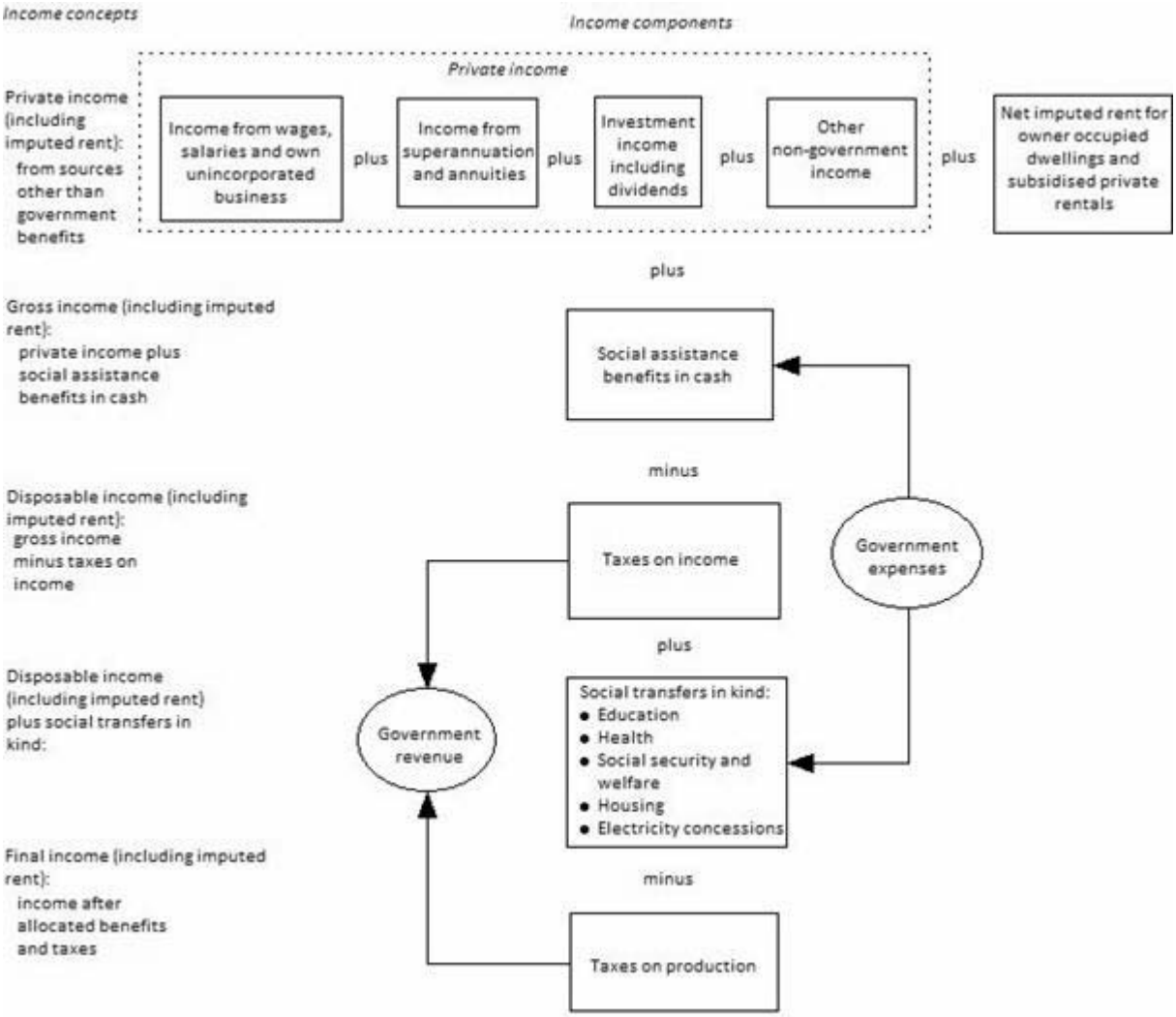
Diagram 1 illustrates the different income concepts used in this study. The most restricted concept of income is *private income (including imputed rent)*, while the most extensive concept used in this study is *disposable income plus social transfers in kind*.

Private income (including imputed rent) is all current receipts, whether monetary or in kind, received excluding social assistance benefits in cash and in kind. This includes wages and salaries, profit/loss from own unincorporated business, net investment income and private transfers. It also includes net imputed rent for owner occupied dwellings and for subsidised private rentals to allow for more meaningful comparisons of the income circumstances of people living in different tenure types.

Gross income is the sum of private income (including imputed rent) and Australian government social assistance benefits in cash (direct Australian government benefits). *Disposable income* is derived by subtracting estimates of taxes on personal income from gross income.

Social transfers in kind (STIK) consist of goods and services provided by the government free or at subsidised prices. The value of government STIK for education, health, housing, social security and welfare, and electricity concessions and rebates (indirect benefits) is added to disposable income to derive *disposable income plus STIK*.

When *taxes on production* are estimated from HES data, it is possible to also derive *final income* which is household *disposable income plus STIK less taxes on production*.



GOVERNMENT BENEFITS AND TAXES ALLOCATED

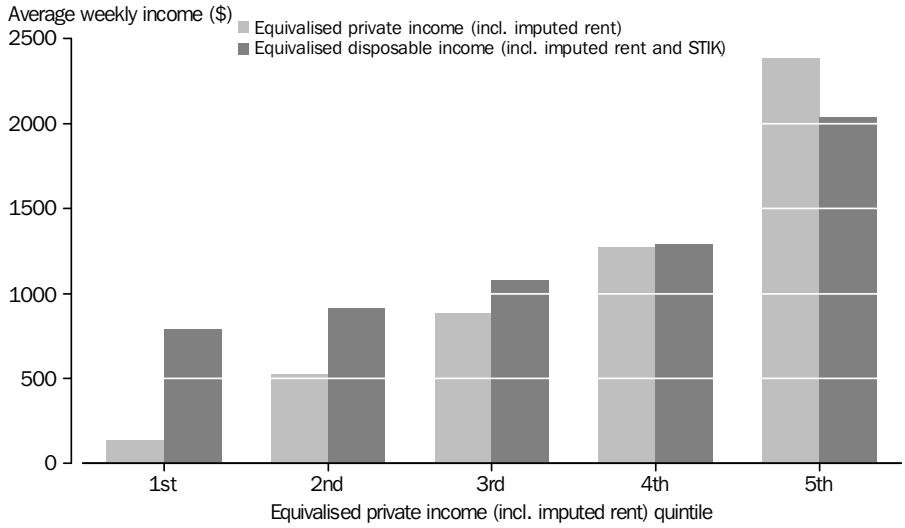
Of total Commonwealth, state and local government expenditure in 2011–12, the study allocated $271.4 billion in benefits to households ($87.4 billion in social assistance benefits in cash and $184.1 billion in social transfers in kind) or 52% of total government expenditure of $522.0 billion. The unallocated amounts mainly reflect government expenditure that are not conceptually relatable to individual households, but they also reflect the lack of suitable indicators to allocate some benefits. The study allocated $133.7 billion out of $390.0 billion or 34% of total government revenue.

INCOME REDISTRIBUTION

In 2011–12, households received, on average $603 per week in total government benefits, and paid $297 per week in income taxes. Low income households received more social benefits in cash and in kind and paid less income taxes than high income households. Total social assistance benefits also increased with household size. The net effect of government benefits and income taxes was to increase the average income of households in the lower three quintiles, while only marginally increasing average income in the fourth quintile, and decreasing the average income of households in the highest quintile (Graph 1).

Households in the lowest equivalised private income quintile had average private income of $136 per week, including imputed rent. Their average disposable income, including imputed rent and STIK rose to $788 per week. These were respectively 13 percent and 65 percent of the average for all households.

1. EQUIVALISED HOUSEHOLD INCOME, By equivalised private income quintile



INCOME REDISTRIBUTION

continued

Table 2 shows a range of income distribution measures. Percentile ratios are one measure of the spread of incomes across a population. When STIK were added to equivalised disposable household income including imputed rent, the P90/P10 ratio fell from 3.73 to 2.49.

The Gini coefficient is a single statistic indicator of the degree of inequality, with values closer to 0 representing a lesser degree of inequality, and values closer to 1 representing greater inequality. The addition of STIK decreased the Gini coefficient from 0.303 to 0.226 a decrease of 25%.

The income share of households in the lowest quintile increased from 3% of total equivalised private income including imputed rent, to 11% of total equivalised disposable household income including imputed rent and STIK, while that of households in the highest quintile decreased from 46% to 34%.

INCOME REDISTRIBUTION

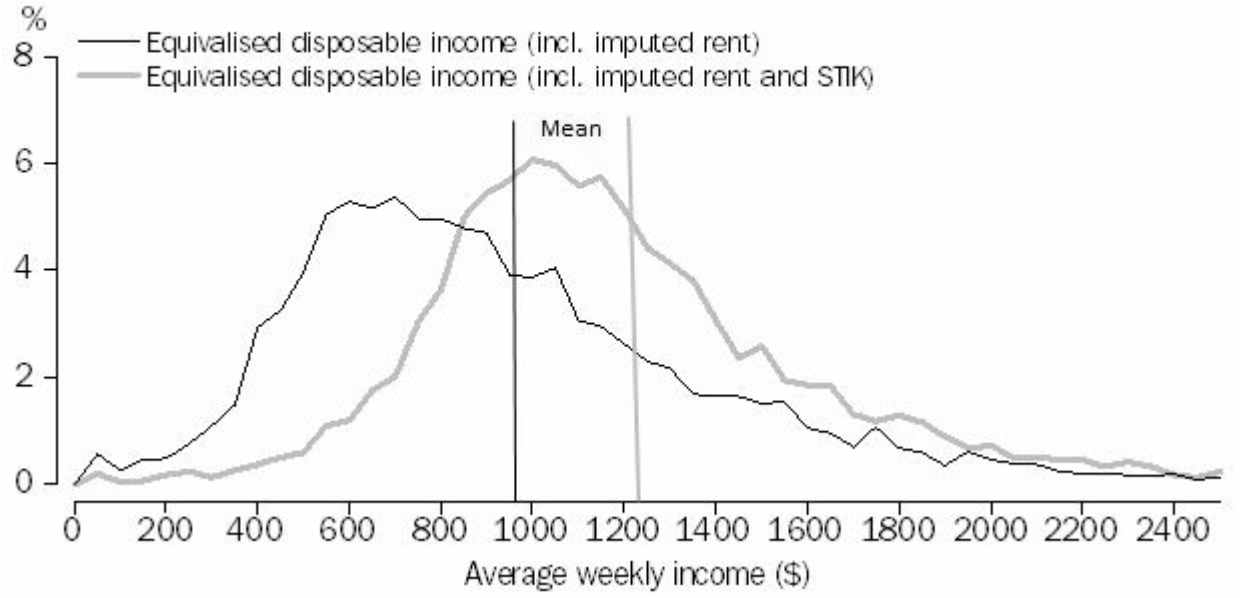
continued

2. EQUIVALISED HOUSEHOLD INCOME, 2011–12

		Equivalised private income (incl. imputed rent)	*Equivalised disposable income (incl. imputed rent)*	*Equivalised disposable income (incl. imputed rent and STIK)*
Mean income per week	$	1 038	970	1 220
Median income per week	$	882	837	1 106
Income share				
Lowest quintile	%	2.6	8.2	11.0
Second quintile	%	10.1	13.2	15.3
Third quintile	%	17.0	17.3	18.1
Fourth quintile	%	24.4	22.6	21.7
Highest quintile	%	45.9	38.7	33.9
All persons	%	100.0	100.0	100.0
Second and third deciles	%	6.3	11.2	13.8
Ratio of incomes at top of selected percentiles				
P90/P10	ratio	14.48	3.73	2.49
P80/P20	ratio	4.70	2.35	1.76
P80/P50	ratio	1.74	1.53	1.35
P20/P50	ratio	0.37	0.65	0.77
Gini coefficient	no.	0.433	0.303	0.226

This equalising effect of including STIK in income analysis is also illustrated in the frequency distribution in Graph 3. Mean weekly equivalised disposable household income including imputed rent, rose from $970 to $1,220 with the addition of STIK.

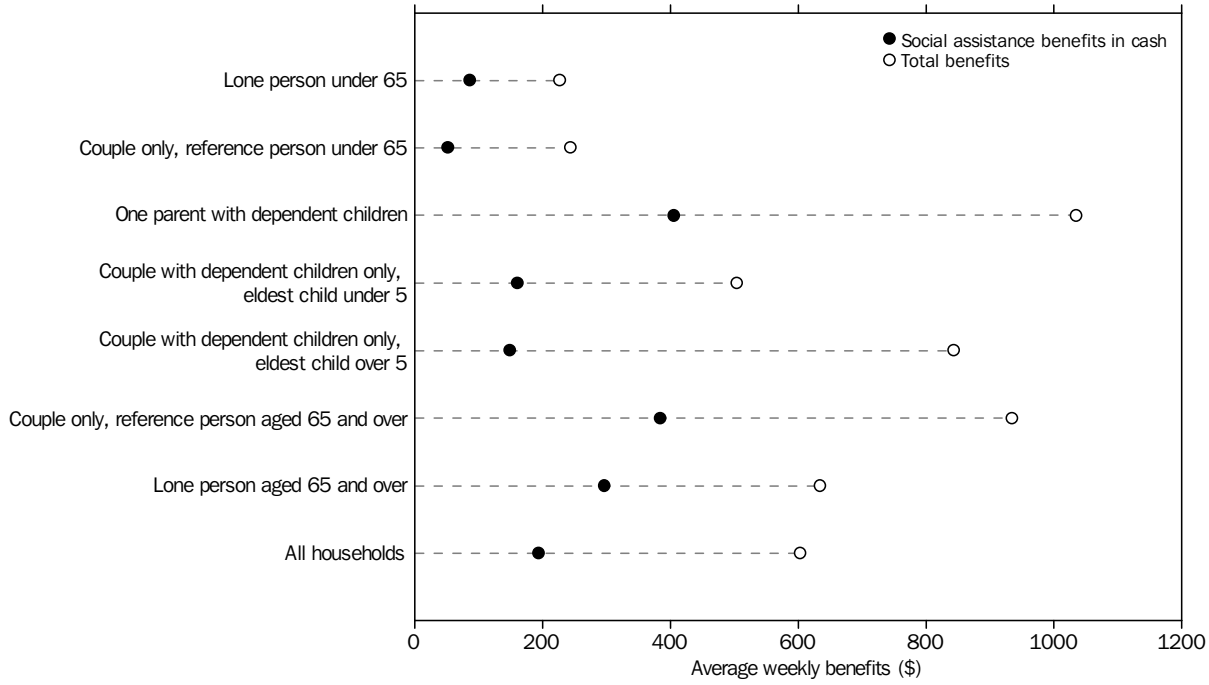
3. DISTRIBUTION OF EQUIVALISED HOUSEHOLD INCOME WITH AND WITHOUT STIK—2011–12



DIFFERENCES BETWEEN HOUSEHOLD GROUPS

The system of government benefits and taxes in Australia has been designed to assist those in the community who are most in need of financial support. The allocation of benefits and income tax differs between households, reflecting that characteristics such as household composition, life cycle stage, household size and income have an impact on these allocations. One parent families with dependent children, and couple only households where the reference person was 65 years and over received the highest average weekly levels of both social assistance benefits in cash and total benefits ($1,035 and $934, respectively). Couple only households and lone person households, with reference person under 65 years received the lowest average benefits in both cash and STIK, reflecting their relatively lower use, on average, of education, health, and social security and welfare services (Graph 4).

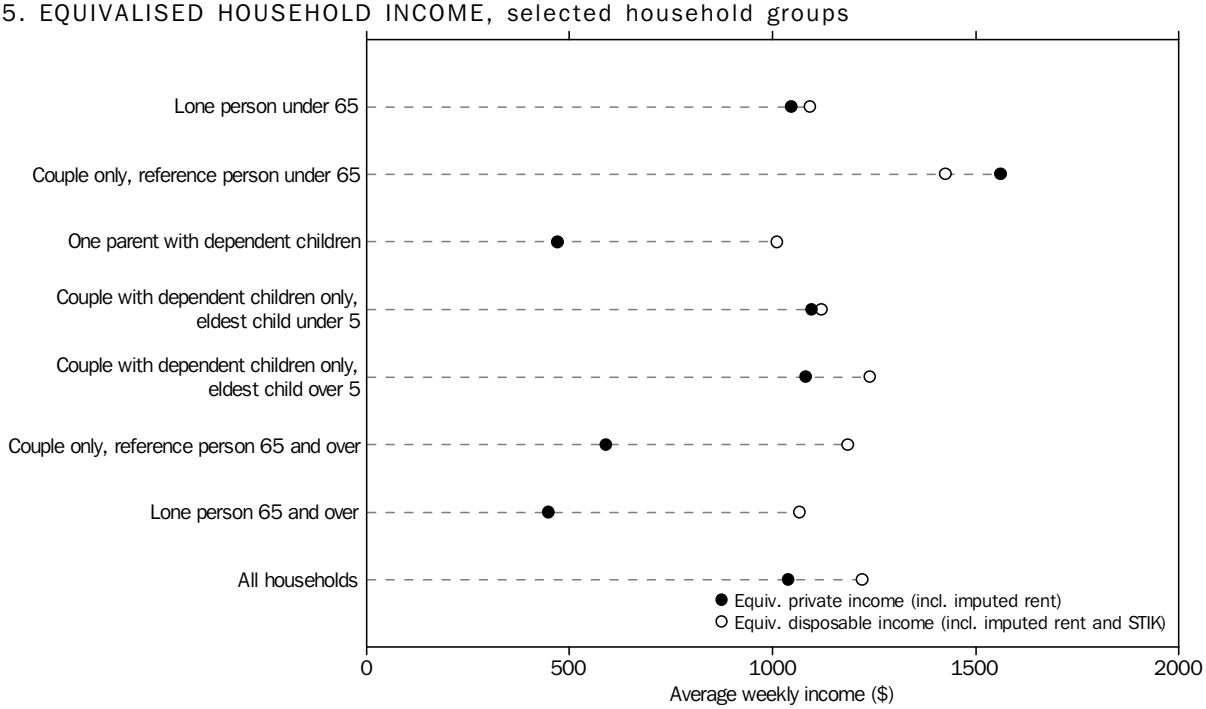
4. GOVERNMENT BENEFITS, selected household groups



DIFFERENCES BETWEEN HOUSEHOLD GROUPS continued

Graph 5 shows the impact of government benefits and income tax levels on different household types after taking account of household size and composition. One parent households with dependent children and couples and lone person households where the reference person was 65 years and over, had the lowest equivalised private income including imputed rent of all the household groups. However, the net effects of benefits and taxes increased their average equivalised incomes to $1,011, $1,185 and $1,065 per week, respectively.

5. EQUIVALISED HOUSEHOLD INCOME, selected household groups



STATES AND TERRITORIES

The allocation of government benefits and income taxes varies across states and territories (Graph 6).

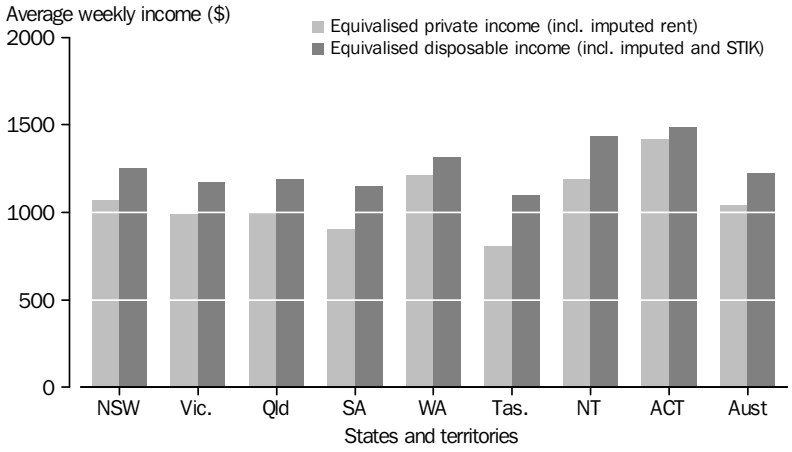
Estimates of STIK by state and territories may not be entirely accurate, since for some components the allocation does not take into account the varying expenditure by state and territory governments. In addition, there may be some inconsistencies in the classification of government expenditure by state governments in the source data, which could impact on comparability.

Average private income including imputed rent was highest in the ACT and WA in 2011–12. In Tasmania, which had the lowest average income, equivalised private income including imputed rent was 22% below the Australian average, however equivalised disposable income including imputed rent and STIK was only 10% below the Australian average, reflecting the net benefits received by Tasmanian households.

STATES AND TERRITORIES

continued

6. EQUIVALISED HOUSEHOLD INCOME, States and territories



CHANGES OVER TIME

In 2011–12, average total social assistance benefits in cash and STIK increased in real terms compared to the previous study in 2009–10 using the HES. Average government cash payments to all households increased by 3% (to $193) while STIK increased by 9% (to $409) in the two year period.

In the 2003–04 and 2009–10 HES studies, the most extensive concept of income used was final income which is equal to household disposable income plus STIK, less taxes on production. Final income is not able to be estimated in 2011–12, but has been included in tables 7 and 8 for comparative purposes.

CHANGES OVER TIME continued

7. AVERAGE WEEKLY HOUSEHOLD INCOME, Benefits and taxes

	2003–04(a)(b)	*2009–10*(a)	*2011–12*
	$	$	$
Private income (incl. imputed rent)	***1 363***	***1 701***	***1 754***
Social assistance benefits in cash(c)			
Age pensions	62	77	77
Disability and carer payments	29	34	39
Family support payments	51	49	51
Unemployment and study payments	19	18	17
Other government pensions and allowances	11	8	9
Total social assistance benefits in cash	171	187	193
Gross income (incl. imputed rent)	***1 534***	***1 889***	***1 948***
Taxes on income	***266***	***274***	***297***
Disposable income (incl. imputed rent)	***1 268***	***1 614***	***1 651***
Selected social transfers in kind			
Education benefits			
School education	78	88	86
Tertiary education	27	29	33
Other education benefits	5	7	8
Total education benefits	109	123	126
Health benefits			
Acute care institutions	57	79	79
Community health services	49	55	59
Pharmaceuticals	18	23	27
Private Health Insurance Rebate	na	11	13
Other health benefits	17	23	28
Total health benefits	141	191	205
Social security and welfare benefits			
Child care assistance	5	8	10
Other social security and welfare benefits	39	49	61
Total social security and welfare benefits	44	57	71
Housing benefits	4	5	5
Electricity concessions	na	1	1
Total selected social transfers in kind	***298***	***377***	***409***
Disposable income (incl. imputed rent and STIK)	***1 566***	***1 991***	***2 060***
Selected taxes on production(d)	***184***	***193***	na
GST component in total selected taxes on production	67	68	na
Final income	***1 382***	***1 797***	na
Total benefits allocated	***469***	***564***	***603***
Equivalised private income (incl. imputed rent)	817	1 006	1 038
Equivalised disposable income (incl. imputed rent)	756	948	970
Equivalised disposable income (incl. imputed rent and STIK)	1 079	1 180	1 220
Equivalised final income	835	1 067	na

na not available
(a) In 2011–12 dollars adjusted using changes in the Consumer Price Index, 2003–04 and 2009–10 data are from the Household Expenditure Survey
(b) Income estimates from 2003–04 are not directly comparable with estimates for 2009–10 and 2011–12 due to improvements made to measuring income
(c) Excludes overseas pensions
(d) Includes GST component

Between 2009–10 and 2011–12, the distribution of household income became more equal for all measures of household income shown in Table 8. The Gini coefficient for equivalised disposable household income including imputed rent and STIK decreased by 4% between 2009–10 and 2011–12 to 0.226.

8. GINI COEFFICIENT(a), by equivalised household income

	2003–04	*2009–10*	*2011–12*	*Change from 2009–10 to 2011–12*
	no.	no.	no.	%
Equivalised private income (incl. imputed rent)	0.432	0.442	0.433	–2.0
Equivalised disposable income (incl. imputed rent)	0.286	0.313	0.303	–3.1
Equivalised disposable income (incl. imputed rent and STIK)	0.209	0.236	0.226	–4.2
Equivalised final household income	0.224	0.245	na	na

na not available

(a) Income estimates from 2003–04 are not directly comparable with estimates from 2009–10 and 2011–12 due to improvements made to measuring income

Data sources and methodologies

Information reported in the 2011–12 SIH has been used as the basis for allocating government STIK to households based on the composition of households and the characteristics of their members. ABS Government Finance Statistics (GFS) were the main source for valuing the cost to government of the provision of STIK. The total value of STIK was defined as Commonwealth, state or territory and local government expenses, net of intra-government transfers, minus personal benefit payments paid in cash minus government revenue from the sale of goods and services.

Estimates for household private income including imputed rent, gross income and disposable income were compiled from either reported or modelled estimates routinely derived from the SIH. Estimates for STIK in this study have been modelled, where possible, using the same methodologies as used for the 2009–10 fiscal incidence study. The results of the 2009–10 study are published in *Government Benefits, Taxes and Household Income, Australia 2009–10* (cat. no. 6537.0). Appendix 4 in that publication explains the detailed methodologies used to allocate STIK to specific households. Comparable methods were used in respect of the 2011–12 SIH data for all items except the allocation of some health and education benefits as outlined in the summary below.

Social transfers in kind

Government STIK were imputed for the provision of education, health, housing, child care, electricity concessions and other social security and welfare services.

Education benefits

STIK were allocated for school education, tertiary education and other education benefits. Data on average expenditure by type of student were obtained from the Report on Government Services (ROGS) or the Department of Education, Employment and Workplace Relations. The value of education benefits received by members of individual households was allocated based on reported characteristics and summed to the household level. In the 2011–12 SIH, attendance at educational institutions was collected only for members of households aged 15 years and over. This included the type of institution attended, e.g. secondary school or university as well as whether the institution was a public or private institution such as schools run by the Catholic church or other private organisations. Unlike the HES 2009–10 study, no information was collected on the type of educational institution attended by children under 15 years. Therefore, it was only possible to allocate average benefits based on the level of school attended from the SIH (preschool, primary or secondary school), for children under 15. Data was available on whether children attended preschool. Children aged 5 to 12 years (excluding 5 year olds who were attending preschool) were assumed to attend primary school and those 13 or 14 years were assumed to attend secondary school.

Of the $58.0 billion expenditure on education available for allocation to households, $57.0 billion (98%) was allocated.

Health benefits

Health benefits were allocated for acute care institutions, community health services, pharmaceuticals, the Private Health Insurance Rebate (PHIR) and other health benefits (public health services, health research and health administration n.e.c.). Except for the PHIR, these benefits were, in general, allocated to households according to an insurance premium approach. Instead of allocating benefits according to actual use of health services over a relatively short period of time (which implies that benefits increase with short term ill health), members of the SIH population were allocated benefits according to the average utilisation rates for their age, sex and state or territory of residence groups. A higher utilisation rate was applied for people with a disability or long term health condition. This higher utilisation rate was estimated using data on the frequency of general practitioner visits collected in the ABS 2007–08 National Health Survey. In the HES 2009–10 study, all persons aged 15 years and over were asked whether they had a disability or long term health condition. In the 2011–12 study, this information was not available and only persons receiving a disability support pension were allocated the higher utilisation rate.

The PHIR is a rebate on private health insurance costs for members of a registered health fund. In the HES 2009–10 study, the PHIR was allocated to households that recorded expenditure on private health insurance. In the 2011–12 study, amount of expenditure was not available. The PHIR was therefore modelled based on the number of persons in the household that reported having private hospital cover. No information was available on whether households had 'extras only' private health cover. To account for this possibility, a small amount of PHIR was allocated in the 2011-12 study to all households that reported having no private hospital cover.

Another difference between the 2009–10 and 2011–12 studies was use of concession card information to allocate higher pharmaceutical benefits to concession card holders. In the 2009–10 HES study, data was collected on whether any household member, including children, held a concession card. In the 2011–12 study, concession cards were allocated to persons 15 years and over based on the eligibility criteria for government pensions or allowances received. Children under 15 years were allocated a concession card if a person 15 years or over in the income unit had a concession card.

Of $93.0 billion of health expenditure available for allocation to households, $92.3 billion (99%) was allocated.

Social security and welfare benefits

Government benefits were allocated for child care assistance and for all other social security and welfare cash benefits. Child care assistance was modelled at the income unit level depending on the number of children in formal care, the reported hours of care and the relevant income thresholds and tapers that are applied.

Government expenses relating to other social security and welfare programs, other than expenditure on direct cash payments, child care and residential aged care, were allocated to persons who received social security and welfare benefits. Average STIK for different types of benefit recipients (such as family and child related recipients, age related recipients and disability support recipients) were calculated by dividing the GFS expenses for each category of expenditure by the number of recipients.

Of $33.6 billion of child care and other social security and welfare expenditure available for allocation to households, $31.9 billion (95%) was allocated. Expenditure on residential aged card has been excluded from these totals.

Housing benefits

Housing benefits were allocated to households in government rental accommodation according to the estimated value of rental subsidy that they received. The value of the subsidy was calculated as the difference between the estimated market rent for their dwelling if it were to be privately rented, less the actual rent paid by households. In total, $2.3 billion was allocated.

Housing benefits continued

A substantial government expense for housing relates to the purchase of new dwellings for future subsidised rental. These expenses were not allocated amongst SIH households since the study is focussed on STIK received during the reference period.

Electricity concessions

All state and territory governments provide concessions or rebates on electricity bills to certain households, typically those receiving some government cash benefits or allowances, or holders of some concession cards. In this study, government expenses for electricity concessions were allocated to eligible households according to the value of the concession in their state or territory of residence. In total, $643 million was allocated.

APPENDIX 5 DATA ITEM LISTING

DATA ITEM LISTING

Subject to confidentiality and sampling variability constraints, special tabulations can be produced incorporating data items, populations and geographic areas selected to meet individual requirements. These are available on request, on a fee for service basis.

For details of the data items available from the 2011–12 SIH, see the Excel spreadsheet available as a data cube 'Appendix 5 SIH 2011–12 data item listing' accompanying this User Guide.

For further information on data requests, contact the National Information and Referral Service on 1300 135 070 or client.services@abs.gov.au for further information.

For data items specific to the CURFs, a data item list will be available from the SIH 2011–12 microdata page Downloads tab.

A NEW WEALTH FRAMEWORK

In 2013 the Organisation for Economic Co-operation and Development (OECD) released the first set of internationally agreed guidelines for producing micro statistics on household wealth, *Guidelines for Micro Statistics on Household Wealth* (OECD, 2013). These guidelines were produced by an ABS led OECD Expert Group on Micro Statistics on Household Income, Consumption and Wealth and fill an important gap in the existing international guidance on measuring the wealth dimension of people' economic well-being. They address the common conceptual, definitional and practical problems that countries face in producing household wealth statistics, and help improve the comparability of the currently available country data. They are also needed to facilitate the integration of micro statistics on household wealth with those relating to the other dimensions of economic well-being, i.e. income and consumption. The OECD Expert Group on Micro Statistics on Household Income, Consumption and Wealth undertook two complementary tasks at the same time. The first was the preparation of the wealth guidelines; the second was the preparation of the companion report, *Framework for Statistics on the Distribution of Household Income, Consumption and Wealth* (OECD, 2013), which presents the first internationally agreed comprehensive and integrated framework for the collection, analysis and dissemination of micro statistics on the different aspects of household economic well-being. The OECD Guidelines for Micro Statistics on Household Wealth are fully consistent with the Framework for Statistics on the Distribution of Household Income, Consumption and Wealth.

The OECD wealth guidelines complement the broad macro economy perspective articulated in the System of National Accounts (SNA). Many of the concepts in the OECD wealth guidelines and the SNA are the same, however some differences exist. The guidelines for micro data support the distributional analysis of economic well-being, and therefore include consumer durables as assets yielding services to their own households. These assets are particularly important in the analysis of the wealth of poorer households and for distributional information. On the other hand, the micro guidelines do not include some of the concepts included in the macro data that are of less relevance from a household perspective. The relationship between the OECD wealth guidelines and the SNA is described in detail in the OECD wealth guidelines, so that data prepared under the two frameworks can be analysed together in a meaningful way.

In the *Household Wealth and Wealth Distribution, Australia, 2011–12* (cat.no. 6554.0) publication a change in the asset classification has been implemented to improve alignment with the new OECD wealth guidelines. The change impacts the presentation of net unincorporated business, this asset category is now classified as a financial asset, where it was previously classified as a non-financial asset. In previous ABS household wealth publications the value of silent partnerships was included in net unincorporated businesses. With the adoption of the new standards in the 2011–12 publication, silent partnerships is now classified separately from unincorporated businesses and is included in shares and other equity as a financial asset.

Overall, net worth is not impacted by this classification change. Table A6.1 presents the mean values of assets and liabilities in 2011–12 on the classification used in previous household wealth publications. It can be seen from this table that unincorporated businesses including silent partnerships has a mean value of $24,542 in 2011–12. Under the new classification this amount is now included as a financial asset, with $20,463 shown against unincorporated business and $4,079 against silent partnerships included in the value of shares. Table A6.1 can be used to compare the mean values of assets and liabilities in 2011–12 to their value in previous wealth publications.

Table A6.2 presents the mean values of assets and liabilities on the new classification basis for 2003–04, 2005–06, 2009–10 and 2011–12. This table can be used to compare assets and liabilities over time under the new classification.

A6.1 HOUSEHOLD ASSETS AND LIABILITIES, Former wealth classification

	2011–12
	$
MEAN VALUES	
ASSETS	
Financial assets	
Value of accounts held with financial institutions	36 956
Value of shares (excl. own incorporated business)	18 160
Trusts	
Value of public unit trusts	3 072
Value of private trusts	23 851
Total trusts	26 923
Value of own incorporated business (net of liabilities)	27 595
Superannuation	
Balance of accounts with government superannuation funds	34 913
Balance of accounts with non-government superannuation funds	97 406
Total superannuation	132 318
Total financial assets(a)	***247 686***
Non-financial assets	
Property assets	
Value of owner occupied dwelling	369 875
Value of other property	129 123
Total property assets	498 998
Value of own unincorporated business (net of liabilities) (incl. silent partnerships)	24 885
Value of contents of dwelling	62 588
Value of vehicles	21 192
Value of assets nec	2 882
Total non-financial assets	***610 545***
Total assets	***858 230***
LIABILITIES	
Property loans	
Principal outstanding on loans for owner occupied dwelling	74 741
Principal outstanding on other property loans	42 122
Total property loans	116 862
Other liabilities	
Debt outstanding on study loans	2 423
Amount owing on credit cards	2 726
Principal outstanding on loans for vehicle purchases (excl. business loans)	2 734
Principal outstanding on investment loans (excl. business and rental property loans)	4 228
Principal outstanding on loans for other purposes (excl. business and investment loans)	1 118
Total liabilities	***130 092***
NET WORTH OF HOUSEHOLD	***728 139***

(a) Includes the value of other financial investments, debentures and bonds, children's assets, loans to persons not in the same household and offset accounts

A6.2 HOUSEHOLD ASSETS AND LIABILITIES(a), New wealth classification

	2003–04	*2005–06*	*2009–10*	*2011–12*
	$	$	$	$
	MEAN VALUES			
ASSETS				
Financial assets				
Value of accounts held with financial institutions(b)	21 115	24 811	32 908	36 956
Value of shares (excl. own incorporated business)	18 221	22 739	22 314	18 160
Trusts				
Value of public unit trusts	—	—	3 734	3 072
Value of private trusts	—	—	17 832	23 851
Total trusts	9 158	10 032	21 565	26 923
Value of own incorporated business (net of liabilities)	22 836	45 238	39 499	27 595
Value of own unincorporated business (net of liabilities)	15 571	14 339	21 547	20 622
Superannuation				
Balance of accounts with government superannuation funds	16 994	19 490	26 781	34 913
Balance of accounts with non-government superannuation funds	46 467	65 029	89 101	97 406
Total superannuation	63 462	84 519	115 882	132 318
Total financial assets(c)	***152 072***	***207 382***	***256 260***	***272 571***
Non-financial assets				
Property assets				
Value of owner occupied dwelling	249 032	286 056	364 895	369 875
Value of other property	70 799	90 663	136 364	129 123
Total property assets	319 830	376 719	501 260	498 998
Value of contents of dwelling	47 353	50 936	60 758	62 588
Value of vehicles	17 220	19 406	20 454	21 192
Value of assets nec	586	886	645	2 882
Total non-financial assets	***384 988***	***447 946***	***583 116***	***585 660***

A6.2 HOUSEHOLD ASSETS AND LIABILITIES(a), New wealth classification *continued*

	2003–04	*2005–06*	*2009–10*	*2011–12*
	$	$	$	$
MEAN VALUES *cont.*				
ASSETS *cont.*				
Total assets	***537 060***	***655 328***	***839 376***	***858 230***
LIABILITIES				
Property loans				
Principal outstanding on loans for owner occupied dwelling	40 013	49 932	68 354	74 741
Principal outstanding on other property loans	19 862	29 188	36 635	42 122
Total property loans	59 875	79 120	104 989	116 863
Other liabilities				
Debt outstanding on study loans	1 205	1 472	2 004	2 423
Amount owing on credit cards	1 863	2 164	2 640	2 726
Principal outstanding on loans for vehicle purchases (excl. business loans)	2 679	2 842	2 282	2 734
Principal outstanding on investment loans (excl. business and rental property loans)	2 363	5 124	6 880	4 228
Principal outstanding on loans for other purposes (excl. business and investment loans)	1 450	1 747	1 021	1 118
Total liabilities	***69 434***	***92 470***	***119 816***	***130 092***
NET WORTH OF HOUSEHOLD	***467 626***	***562 859***	***719 561***	***728 139***

(a) Wealth values are not adjusted for inflation

References

United Nations, International Monetary Fund, Organisation for Economic Co-operation and Development, World Bank and Commission of the European Communities, Brussels/Luxembourg, New York, Paris, Washington D.C., 1993 and 2008.

System of National Accounts 1993

System of National Accounts 2008

OECD (2013), OECD *Guidelines for Micro Statistics on Household Wealth*, OECD Publishing.

http://dx.doi.org/10.1787/9789264194878-en

Accounts with financial institutions — Accounts held with banks or any other financial institutions, e.g. credit unions, building societies, insurance companies, finance companies. Examples of types of accounts include: passbook, statement, cheque or term deposit accounts.

Acute care institution benefits — Includes social transfers in kind relating to all activities of acute care hospitals, free-standing hospices, alcohol and drug treatment centres, and same-day establishments except activities involving health research and formal health education. Acute care institution benefits are a component of health benefits.

Age — Person's age last birthday.

Age pensions — Includes income from age pensions or Department of Veterans' Affairs (DVA) service pension, as well as additional cash allowances such as rent assistance. Age pensions are a component of social assistance benefits in cash.

Assets — An entity of a financial or non-financial nature, owned by the household or its members, and from which economic benefits may be derived by holding or use over a period of time.

Balance of state — That part of each Australian state or territory not defined as capital city. Balance of state estimates for Northern Territory are regarded as too unreliable to publish separately since they exclude collection districts defined as very remote which account for about 23% of the NT population. All of the Australian Capital Territory is defined as capital city for this survey.

Balance of state estimates for the Northern Territory are not available on the CURF.

Before and/or after school care — A type of formal child care provided for school aged children before and/or after school during the school term. Some services also provide care on 'pupil free days'. The services usually make use of established facilities such as schools, community halls, and recreation centres.

Bond — In the context of investments, a bond is a certificate of ownership of a specified portion of a debt. May be issued by a government agency or private corporation to individuals or companies and usually bears a fixed interest rate of return on investment. In the context of rented dwellings, bond is money paid in addition to any rent by a new tenant as surety against damages to the premises rented.

Canadian National Occupancy Standard (CNOS) — Provides a measure of housing utilisation. The CNOS assesses the bedroom requirements of a household by specifying that:

- there should be no more than two persons per bedroom
- children less than 5 years of age of different sexes may reasonably share a bedroom
- children less than 18 years of age and of the same sex may reasonably share a bedroom
- single household members aged 18 years and over should have a separate bedroom, as should parents or couples
- a lone person household may reasonably occupy a bed sitter.

The CNOS variable on the file compares the number of bedrooms required with the actual number of bedrooms in the dwelling.

Capital city — Refers to Australia's six State capital city Statistical Divisions and the Darwin Statistical Division as defined in the *Australian Standard Geographical Classification (ASGC)* (cat. no. 1216.0). All of the Australian Capital Territory is defined as capital city for this survey. Capital city estimates for the Northern Territory are not available on the CURF.

Changeover buyer — A household which bought their dwelling in the three years prior to being interviewed, and either the reference person or partner had owned or been purchasing a home previously.

Child care assistance Includes social transfers in kind relating to the Child Care Benefit and Child Care Rebate and associated administrative costs. Child care assistance is a component of welfare benefits.

Child Care Benefit (CCB) Assistance in the form of a payment made by the Australian Government to help with the costs of child care for families who use either approved or registered child care. The scheme is means-tested and families can either receive Child Care Benefit (CCB) as a lump sum payment, or as reduced child care fees.

Child Care Rebate (CCR) Child Care Rebate covers 50 per cent of out-of-pocket child-care expenses, up to a maximum amount per child per year. The CCR is available for families who qualify for Child Care Benefit (CCB) and meet a work, study and training test.

Children's assets Any assets owned by children in the household that are not included in the value of the household contents. These assets can be financial (e.g. a child's bank accounts, assets held in trusts, bonds, debenture stock) or can be non-financial (e.g. jewellery or property held in trust for the children).

Clean Energy Advance The Clean Energy Advance payments were tax-exempt, one-off lump sum payments paid in May and June 2012 to pensioners, other income support recipients, families receiving Family Tax Benefit payments and Seniors Supplement recipients, provided they meet eligibility requirements.

Collection District (CD) The Census Collection District (CD) is the smallest geographic area defined in the *Australian Standard Geographical Classification (ASGC)* (cat. no. 1216.0).

Commonwealth Rent Assistance (CRA) Commonwealth Rent Assistance (CRA) is a non-taxable income supplement paid through Centrelink to individuals and families who rent in the private rental market. It is only paid to recipients of another government benefit or pension, and paid in conjunction with that other benefit.

Community health service benefits Includes social transfers in kind relating to community health services such as domiciliary nursing services, well baby clinics, dental health services, health services provided to particular community groups, family planning services, alcohol and drug rehabilitation programs not involving admission, and other health services provided in a community setting. Also includes expenditure on patient transport. Community health service benefits are a component of health benefits. In 2003–04 the Private Health Insurance Rebate (PHIR) was included in Community health services. From 2009–10 it is reported separately.

Consumer Price Index (CPI) A general measure of price inflation for the household sector in Australia. Specifically, it provides a measure of changes, over time, in the cost of a constant basket of goods and services acquired by the capital city households in Australia.

Contents of dwelling This is a non-financial asset and comprises an estimated value of household contents. Examples include: clothing, jewellery, hobby collections, furniture, paintings and other works of art, soft furnishings and electrical appliances other than fixtures such as stoves and built-in items.

Cost of child care The cost, gross of Child Care Benefit and the Child Care Rebate, to parents for a child to attend care. In most cases, where the Child Care Benefit was paid directly to the child care service provider, the cost of care was directly collected in the survey. In a small number of cases, where the Child Care Benefit was not paid directly to the provider, the Child Care Benefit was estimated.

Couple See One family households.

Couple family with dependent children See One family households.

Couple, one family household
A one family household consisting of:
- one couple only
- one couple, with their dependent and/or non-dependent children only
- one couple, with or without children, plus other relatives
- one couple, with or without children and other relatives, plus unrelated individuals.

Credit card debt
The amount owing on the respondent's latest credit card account statement (including any government, interest of financial institution charges), irrespective of whether it was paid off by the due date. Includes amounts owing on specialised retail shopping cards as well as general credit cards such as Visa, Mastercard and store credit cards but excludes Visa and Mastercard debit cards.

Debenture
A formal acknowledgement of indebtedness by a company. Interest is paid by the company at specific intervals. A loan or deposit can be called a debenture if it is secured over company assets. Unlike shareholders, debenture holders have a creditor relationship with the company. Instead of dividends, debenture holders receive interest on their debentures which is accounted for by the company as an expense.

Deciles
Groupings that result from ranking all households or persons in the population in ascending order according to some characteristic such as their household income and then dividing the population into 10 equal groups, each comprising 10% of the estimated population.

Dependent children
All persons aged under 15 years; and persons aged 15–24 years who are full-time students, have a parent in the household and do not have a partner or child of their own in the household.

Disability and carer payments
Includes income from Carer allowance, Carer payment, Disability Pension Department of Veterans' Affairs (DVA) or Disability Support Pension.

Disability support pension
Includes the Disability Support Pension, as well as additional cash allowances such as rent assistance. Disability support pension is a component of social assistance benefits in cash.

Disposable income
Gross income less income tax, the Medicare levy and the Medicare levy surcharge i.e. remaining income after taxes are deducted, which is available to support consumption and/or saving. Income tax, Medicare levy and the Medicare levy surcharge are imputed based on each person's income and other characteristics as reported in the survey. Disposable income is sometimes referred to as net income.

Dwelling
Defined as a suite of rooms contained within a building which are self-contained and intended for long-term residential use. To be self-contained the suite of rooms must possess cooking and bathing facilities as building fixtures. Examples of types of dwelling include: separate house; semi-detached, row or terrace house or townhouse; flat, unit, or apartment; and other dwelling, including caravan, cabin, houseboat, and house or flat attached to a shop.

Earners
Persons (excluding dependent children) who receive income from wages or salaries, who are engaged in their own business or partnership, or are silent partners in a business or partnership.

Education benefits
Social transfers in kind relating to the provision of school, tertiary and other education.

Education tax refund
One-off Education Tax Refund payments were paid in June 2012, as part of the transition to the new Schoolkids Bonus and, in place of the Education Tax Refund for the 2011–12 financial year. The one-off payment was made payable to families receiving Family Tax Benefit Part A, plus young people in school receiving Youth Allowance and some other income support and veterans payments, providing they met age and education requirements. The Schoolkids Bonus replaces the Education Tax Refund from January 2013.

Electricity concessions
Includes social transfers in kind relating to electricity concessions and rebates.

Employed Persons aged 15 years and over who, during the week before the interview:
- worked one hour or more for pay, profit, commission or payment in kind in a job or business, or on a farm (includes employees, employers and own account workers)
- worked one hour or more, without pay, in a family business or on a family farm
- had a job, business or farm but was not at work because of holidays, sickness or other reason.

Employee An employed person who, for most of his/her working hours:
- works for a public or private employer and receives remuneration in wages or salary, or is paid a retainer fee by his/her employer and works on a commission basis, or works for an employer for tips, piece-rates or payment in kind
- operates their own incorporated enterprise with or without employees.

Employer A person who operates his or her own unincorporated business or engages independently in a profession or trade, and hires one or more employees.

Employment income See Wages and salaries.

Equity in the dwelling A household's equity in the dwelling is the difference between the value of the dwelling and the total amount outstanding on mortgages taken out on the dwelling for any purpose, or unsecured loans taken out for housing purposes.

Equivalised disposable household income Disposable household income adjusted using an equivalence scale. For a lone person household it is equal to disposable household income. For a household comprising more than one person, it is an indicator of the disposable household income that would need to be received by a lone person household to enjoy the same level of economic wellbeing as the household in question. For further information see Appendix 2.

Equivalisation Can be applied to income (private income, disposable income, final income), net worth and expenditure to create equivalised private household income, equivalised disposable household income, equivalised final household income, equivalised household net worth, and equivalised household expenditure. Adjustments are made using an equivalence factor. Equivalised measures are used in some analyses to enable comparison of the relative economic wellbeing of households of different size and composition. For a lone person household, the equivalised value is equal to the original value. For a household comprising more than one person, it is an indicator of the level that would be needed by a lone person household to enjoy the same level of economic wellbeing as the household in question. For further information on the process of equivalisation, see Appendix 2.

Equivalising factor A factor that can be used to adjust the actual incomes of households in a way that enables analysis of the relative wellbeing of households of different size and composition. The equivalising factor included on the file has been calculated using the 'modified OECD' equivalence scale. The factor is built up by allocating points to each person in a household. Taking the first adult in the household as having a weight of 1 point, each additional person who is 15 years or older is allocated 0.5 points, and each child under the age of 15 is allocated 0.3 points. The equivalence factor is the sum of the equivalence points allocated to the household members. Equivalised household income can be derived by dividing total household income by the equivalence factor. For further information see Appendix 2.

Note that for large households, the equivalence factors included on this file are based on the household size after it has been reduced to the maximum size allowable on each CURF.

Family Two or more people, one of whom is at least 15 years of age, who are related by blood, marriage (registered or de facto), adoption, step or fostering, and who usually live in the same household. A separate family is formed for each married couple, or for each set of parent-child relationships where only one parent is present.

Family composition of household	Classifies households into three broad groupings based on the number of families present (one family, multiple family and non-family). One family households are further disaggregated according to the type of family (such as couple family or one-parent family) and according to whether or not dependent children are present. Non-family households are disaggregated into lone person households and group households.
Family day care	A type of formal child care provided by experienced caregivers in their own homes, available for a full day or part day. Schemes are administered and supported by central coordination units.
Family support payments	Includes income from Baby Bonus, Paid Parental Leave, Family Tax Benefits, Parenting Payments or Education Tax Refund.
Family Tax Benefit (FTB)	Includes Family Tax Benefit (both Part A and Part B) payments received fortnightly, as well as additional cash allowances such as rent assistance. It also includes one-off payments to families.
Final income	Disposable income plus social transfers in kind minus taxes on production.
Financial assets	An asset whose value arises not from its physical existence (as would a building, piece of land, or capital equipment) but from a contractual relationship. Financial assets are mostly financial claims (with the exception of shares and value of own unincorporated business). Financial claims entitle the owner to receive a payment, or a series of payments, from an institutional unit to which the owner has provided funds. Examples include accounts held with financial institutions (including offset accounts), ownership of an incorporated business, shares, debentures and bonds, trusts, superannuation funds, and loans to other persons.
First home buyer	A household which bought their dwelling in the three years prior to being interviewed, and neither the reference person nor their co-resident partner had owned or been purchasing a home previously.
Flat, unit or apartment	Includes all self-contained dwellings in blocks of flats, units or apartments. These dwellings do not have their own private grounds and usually share a common entrance foyer or stairwell. This category includes houses converted into flats and flats attached to houses such as granny flats. A house with a granny flat attached is regarded as a separate house.
Formal child care	Regulated child care away from the child's home. The main types of formal care are before and/or after school care, long day care, family day care, occasional care and vacation care.
Full-time employed	Employed persons who usually work 35 hours or more a week (in all jobs).
Full-time student	A person 15 years or over who is classified as a full-time student by the institution they attend, or considers himself/herself to be a full-time student. Full-time study does not preclude employment.
Gini coefficient	A summary measure of inequality of income distribution. For further information see Appendix 3.
Goods and services tax (GST)	Goods and Services Tax (GST) is a broad-based tax of 10% on most goods, services and other items sold or consumed in Australia.
Government pensions and allowances	Income support payments from government to persons under social security and related government programs. Included are pensions and allowances received by aged, disabled, unemployed and sick persons, families and children, veterans or their survivors, and study allowances for students. All overseas pensions and benefits are included here, although some may not be paid by overseas governments. Family Tax Benefit, Baby Bonus and Child Disability Assistance Payment paid to recipients of Carer Allowance are also included in government pensions and allowances.

Greater Capital City Statistical Areas (GCCSA)

The Greater Capital City Statistical Areas represent the socio-economic extent of each of the eight state and territory capital cities as defined in the *Australian Statistical Geography Standard (ASGS)* (cat. no. 1270.0.55.001). Within each state/territory, the area not defined as being part of the greater capital city is represented by a Rest of State region. The exceptions to this is the ACT, as the whole of the ACT is included in the Greater Capital City statistical area.

Gross imputed rent

The estimated market rent that a dwelling would attract if it were to be commercially rented.

Gross income

Income from all sources, whether monetary or in kind, before income tax, the Medicare levy and the Medicare levy surcharge are deducted.

Group household

See Non-family household.

Health benefits

Health benefits are social transfers in kind relating to acute care institutions, community health services, pharmaceuticals, Private Health Insurance Rebate and other health benefits.

Household

A person living alone or a group of related or unrelated people who usually live in the same private dwelling.

Household questionnaire

Used to collect information on household characteristics, housing costs and household assets and liabilities.

Household reference person

The reference person for each household is chosen by applying, to all household members aged 15 years and over, the selection criteria below, in the order listed, until a single appropriate reference person is identified:

- the person with the highest tenure when ranked as follows: owner without a mortgage, owner with a mortgage, renter, other tenure
- one of the partners in a registered or de facto marriage, with dependent children
- one of the partners in a registered or de facto marriage, without dependent children
- a lone parent with dependent children
- the person with the highest income
- the eldest person.

Housing benefits

Social transfers in kind from the provision of government housing at subsidised rental rates.

Housing costs

Housing costs for the purposes of the publication *Housing Occupancy and Costs, Australia, 2011–12* (cat. no. 4130.0), comprise the following costs for the three different tenure type categories:

- rent payments
- rates payments (general and water)
- mortgage or unsecured loan payments if the initial purpose was primarily to buy, build, add to, or alter the dwelling.

Some additional items relating to housing costs are available to enable alternative estimates of housing costs to be constructed.

Housing costs as a proportion of income

The total weekly housing costs of a group (e.g. one parent households) are divided by the total weekly income of that group expressed as a percentage.

Housing utilisation

Provides a measure of the bedroom requirements of a household according to household size and composition. See Canadian National Occupancy Standard.

Income Income consists of all current receipts, whether monetary or in kind, that are received by the household or by individual members of the household, and which are available for, or intended to support, current consumption.

Income includes receipts from:
- wages and salaries and other receipts from employment (whether from an employer or own incorporated enterprise), including income provided as part of salary sacrificed and/or salary package arrangements
- profit/loss from own unincorporated business (including partnerships)
- net investment income (interest, rent, dividends, royalties)
- government pensions and allowances
- private transfers (e.g. superannuation, workers' compensation, income from annuities, child support, and financial support received from family members not living in the same household).

Gross income is the sum of the income from all these sources before income tax, the Medicare levy and the Medicare levy surcharge are deducted. Other measures of income are Disposable income and Equivalised disposable household income.

Note that child support and other transfers from other households are not deducted from the incomes of the households making the transfers.

Income tax See Taxes on income.

Income unit One person or a group of related persons within a household, whose command over income is assumed to be shared. Income sharing is assumed to take place within married (registered or de facto) couples, and between parents and dependent children.

Income unit reference person The male partner in a couple income unit, the parent in a one parent income unit and the person in a one person income unit.

Incorporated business An incorporated business is a company that has a registered business name with the *Australian Securities and Investments Commission (ASIC)* and a legal status which is separate to that of the individual owners of the business.

Individual questionnaire Used to collect information from each person aged 15 years and over on individual details such as income, personal assets, education and labour force status.

Industry Coded for all employed people aged 15 years and over, using the *Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006 (Revision 1.0)* (cat. no. 1292.0).

Informal child care Non-regulated child care, arranged by a child's parent/guardian, either in the child's home or elsewhere. It comprises care by (step) brothers or sister, care by grandparents, care by other relatives (including a parent living elsewhere) and care by other (unrelated) people such as friends, neighbours, nannies or babysitters. It may be paid or unpaid.

Investment income Income received as a result of ownership of assets. It comprises returns from financial assets (interest, dividends), and from non-financial assets (rent and royalties).

Investment loan A loan taken out for the purpose of financing investment, excluding loans for business purposes and rental property.

Labour force status Classifies all people aged 15 years and over according to whether they were employed, unemployed or not in the labour force.

Landlord type
For renters, the type of entity to whom rent is paid or with whom the tenure contract or arrangement is made. Renters are classified to one of the following categories:
- state/territory housing authority—where the household unit pays rent to a state or territory housing authority or trust
- private landlords—where the unit pays rent to a real estate agent or to another person not in the same household
- person in the same household—where the unit pays rent to a person who resides in the same household
- other-where the unit pays rent to the owner/manager of a caravan park, an employer (including a government authority), a housing cooperative, a community or church group, or any other body not included elsewhere.

Liability
A liability is an obligation which requires one unit (the debtor) to make a payment or a series of payments to the other unit (the creditor) in certain circumstances specified in a contract between them.

Loan
A form of liability that is created when creditors lend funds directly to debtors. Examples include an overdraft from a bank, money lent by a financial institution with a mortgage over a property as collateral, and personal loans.

Loans for owner occupied dwelling
Principal outstanding on loans used to purchase, build, alter, or make additions to the selected dwelling. Includes money borrowed for a deposit on the selected dwelling, and bridging finance taken out until such time as a loan or mortgage is obtained or the dwelling is bought outright. Where only a proportion of a loan is used for the owner occupied dwelling, only that proportion of the principal outstanding is included.

Lone person household
See Non-family Household.

Long day care centre
A type of formal child care that is centre-based and is available to children between birth and school age for the full day or part day. Centres are usually open for most of the year.

Low economic resource household
People with low economic resources (i.e. low consumption possibilities) are those in households in the lowest two quintiles (i.e. 40%) of both equivalised adjusted disposable household income and equivalised household net worth.

Main English speaking countries
For the purposes of the country of birth classification used on the CURF, main English speaking countries comprise New Zealand, United Kingdom, Ireland, Canada, United States of America and South Africa.

Main source of income
That source from which the most positive income is received. If total income is nil or negative the main source is undefined. As there are several possible sources, the main source may account for less than 50% of gross income.

Mean housing costs
The total weekly housing costs paid by a group of households (e.g. couple only households) divided by the number of households in that group.

Mean income
The total income received by a group of units divided by the number of units in the group. For more detail about household weighted and person weighted means, see Part 1.6 'Gini coefficient and other measures of income distribution'.

Mean net worth
Mean (or average) net worth is the total net worth of a group of units divided by the number of units in the group.

Median housing costs
That level of weekly housing costs that divides a group of households into two equal parts, one half having housing costs above the median and the other half having housing costs below the median. Households with nil or negative total income are not included in this calculation.

Median income
That level of income which divides the units in a group into two equal parts, one half having incomes above the median and the other half having incomes below the median. For more detail about household weighted and person weighted medians, see Part 1.6 'Gini coefficient and other measures of income distribution'.

Median net worth
That level of net worth which divides the units in a group into two equal parts, one half having net worth above the median and the other half having net worth below the median.

Median ratio of housing costs to income
The ratio of weekly housing costs to gross weekly income is calculated for each household. The median is the level of that ratio that divides a group of households into two equal parts, one half having the ratio above the median and the other half having the ratio below the median.

Medicare levy
Medicare is Australia's universal health care system. The Medicare levy is a specific tax, based on individual income, intended to assist in the funding of this system.

Medicare levy surcharge
The Medicare levy surcharge is a levy, or an additional tax, on Australian taxpayers who do not have an appropriate level of private hospital insurance and who are earning more than the specified income threshold.

Mortgage
A mortgage is a loan taken out using the usual residence as security. An owner with a mortgage must still owe money from such a loan.

Multiple family household
A household containing two or more families. Unrelated individuals may also be present.

Negative income
Income may be negative when a loss accrues to a household as an owner or partner in unincorporated businesses, rental properties or other investment income. Losses occur when operating expenses and depreciation are greater than gross receipts.

Negative net worth
Net worth may be negative when household liabilities exceed household assets.

Net imputed rent
Gross imputed rent less housing costs. Net imputed rent is an estimate of the value of housing services that households receive from home ownership or by households paying subsidised rent or occupying their dwelling rent free. Housing costs for the purpose of calculating net imputed rent for owner-occupiers comprise:
- rates payments (general and water)
- body corporate fees
- the interest component of repayments of loans that were obtained for the purposes of purchasing or building
- rent payments
- house insurance costs
- repair and maintenance costs.

Net imputed rent from subsidised public rentals is included as a social transfer in kind for housing.

Net worth
Net worth is the value of a household's assets less the value of its liabilities. Net worth may be negative when household liabilities exceed household assets.

Non-dependent children
Persons aged 15 years and over who:
- do not have a spouse or offspring of their own in the household
- have a parent in the household
- are not full-time students aged 15-24 years.

Non-family household
A household that consists of unrelated persons only. Non-family households are classified to one of the following categories:
- group household—a household consisting of two or more unrelated persons where all persons are aged 15 years and over. There are no reported couple relationships, parent-child relationships or other blood relationships in these households.
- lone person household—a household consisting of a person living alone.

Non-financial assets
Non-financial assets are all assets other than financial assets. Examples include residential and non-residential property, household contents and vehicles.

Not in the labour force
Persons not in the categories employed or unemployed as defined.

Occasional care A type of formal child care provided mainly for children who have not started school. These services cater mainly for the needs of families who require short term care for their children.

Occupation Coded for all employed persons aged 15 years and over, using the *Australian and New Zealand Standard Classification of Occupation (ANZSCO), First Edition 2006* (cat. no. 1220.0).

Offset account An offset account is an account with a financial institution that is linked to a home loan. The balance in offset accounts reduces the interest charged on the loan.

One family households One family households are classified to one of the following categories:
- couple only-two persons in a registered or de facto marriage, who usually live in the same household
- couple family with dependent children- a household consisting of a couple with at least one dependent child. The household may also include non-dependent children, other relatives and unrelated individuals
- one parent family with dependent children- a household comprising a lone parent with at least one dependent child. The household may also include non-dependent children, other relatives and unrelated individuals
- other one family households- a household comprising
- one couple with their non-dependent children only
- one couple, with or without non-dependent children, plus other relatives
- one couple, with or without non-dependent children or other relatives, plus unrelated individuals
- a lone parent with his/her non-dependent children, with or without other relatives and unrelated individuals
- two or more related individuals where the relationship is not a couple relationship or a parent-child relationship (e.g. two brothers).

One parent family with dependent children See One family households.

One parent, one family household A one family household comprising a lone parent with at least one dependent or non-dependent child. The household may also include other relatives and unrelated individuals.

Other dwelling Includes caravans, houseboats, or houses or flats attached to a shop or other commercial premise.

Other education benefits Social transfers in kind relating to special education (e.g. education for children who have physical disabilities) and other education benefits which could not be assigned to school or tertiary education. Other education benefits is a component of education benefits.

Other formal child care A type of formal child care other than before and/or after school care, long day care, family day care, occasional care and vacation care.

Other health benefits Includes social transfers in kind relating to public health services such as health promotion campaigns, occupational health and safety programs, food standards regulation, immunisation programs, breast cancer screening and screening for childhood diseases, as well as expenditure on health research. Other health benefits is a component of health benefits.

Other income Income other than wages and salaries, own unincorporated business income and government pensions and allowances. This includes income received as a result of ownership of financial assets (interest, dividends), and of non-financial assets (rent, royalties) and other current receipts from sources such as superannuation, child support, workers' compensation and scholarships. Income from rent is net of operating expenses and depreciation and may be negative when these are greater than gross receipts.

Other landlord type Where the unit (i.e. household, income unit or person, where applicable) pays rent to the owner/manager of a caravan park, an employer (including a government authority), a housing cooperative, a community or church group, or any other body not included elsewhere.

Other one family households See One family households.

Other payments Households that receive income from other government pensions and allowances. These include overseas pensions and benefits, partner allowance, sickness allowance, special benefit, war widow pension (DVA), widow allowance, wife pensions, seniors supplement, and other government pensions and allowances.

Other private income Private income other than employee income, government pensions and allowance and income from own business. It includes superannuation, workers' compensation, child support and any other allowances regularly received as well as interest and property rent.

Other property loans Principal outstanding on loans used to purchase, build, alter, or make additions to property rented out, loans taken out by people in rental properties who are buying or building a home somewhere else, and loans taken for alterations and additions to other property. Where only a proportion of a loan is used for the property, only that proportion of the principal outstanding is included.

Other social security and welfare benefits Includes social transfers in kind relating to the provision of goods and services to specific population groups with special needs. It includes services for the aged, services for people with a disability, etc. The category excludes expenditure on child care assistance and expenditure on monetary transfers to Australian residents (see Social assistance benefits in cash). Other social security and welfare benefits is a component of social security and welfare benefits.

Other tenure type A unit (i.e. household, income unit or person, where applicable) which is not an owner (with or without a mortgage), or a renter. Includes rent free.

Own account worker A person who operates his or her own unincorporated business or engages independently in a profession or trade and hires no employees.

Own unincorporated business income The profit/loss that accrues to persons as owners of, or partners in, unincorporated businesses. Profit/loss consists of the value of gross output of the business after the deduction of operating expenses (including depreciation). Losses occur when operating expenses are greater than gross receipts and are treated as negative income.

Owner (of dwelling) A unit (i.e. household, income unit or person, where applicable) in which at least one member owns the dwelling in which the unit members usually reside. Owners are divided into two categories—owner without a mortgage and owner with a mortgage. If there is any outstanding mortgage or loan secured against the dwelling the unit is an owner with a mortgage. If there is no mortgage or loan secured against the dwelling the unit is an owner without a mortgage.

Part-time employed An employed person who usually works less than 35 hours per week.

Percentiles When all households or persons in the population are ranked from the lowest to the highest on the basis of some characteristic such as their household income, they can then be divided into equal sized groups. Division into 100 groups gives percentiles. The highest value of the characteristic in the tenth percentile is denoted P10. The median or the top of the 50th percentile is denoted P50. P20, P80 and P90 denote the highest values in the 20th, 80th and 90th percentiles. Ratios of values at the top of selected percentiles, such as P90/P10, are often called percentile ratios.

Percentile ratios	Percentile ratios summarise the relative distance between two points in a distribution. To illustrate the full spread of the income distribution, the percentile ratio needs to refer to points near the extremes of the distribution, for example, the P90/P10 ratio. The P80/P20 ratio better illustrates the magnitude of the range within which the income of the majority of households falls. The P80/P50 and P50/P20 ratios focus on comparing the ends of the income distribution with the midpoint.
Perturbation	Adjustment of estimates to disguise individual values without affecting the statistical validity of aggregate data.
Pharmaceutical benefits	Includes social transfers in kind relating to pharmaceuticals provided outside of hospitals, aids and appliances used for health purposes and supplied in an ambulatory setting, glasses, hearing aids, wheel chairs, etc. Pharmaceutical benefits is a component of health benefits.
Preschool	Educational and developmental programs for children in the year (or in some jurisdictions, two years) before they begin full-time primary education.
Previous financial year exclusion flag	This item is available on the file to indicate records that could be regarded as out of scope when analysing previous year income data.
Previous financial year income	Income earned in the period July 2010 to June 2011.
Private dwelling	Houses, flats, home units, caravans, garages, tents and other structures that are used as places of residence. These are distinct from special dwellings which include hotels, boarding houses and institutions.
Private Health Insurance Rebate	Includes social transfers in kind relating to a rebate on private health insurance costs for members of a registered health fund. Private Health Insurance Rebate is a component of health benefits.
Private income	Current receipts from private organisations and other households, including wages and salaries, income from own business, superannuation, workers' compensation, income from annuities, interest, dividends, royalties, income from rental properties, scholarships and child support.
Private renter	A unit (i.e. household, income unit or person, where applicable) paying rent to a landlord who is a real estate agent, a parent or other relative not in the same unit or another person not in the same unit.
Property	All residential and non-residential properties owned by persons in the household, excluding properties owned by the respondent's business.
Public renter	A unit (i.e. household, income unit or person, where applicable) paying rent to a state or territory housing authority/trust.
Public unit trusts	A trust which issues units to the general public within Australia for the purpose of investing the pooled monies. A public unit trust must have registered a prospectus with the Australian Securities and Investments Commission and be governed by a trust deed between its management company and a trustee company. The units may or may not be listed on the Australian Stock Exchange. Includes property trusts, equity trusts, mortgage trusts, cash management trusts and public trading trusts.
Quintiles	Groupings that result from ranking all households or people in the population in ascending order according to some characteristic such as their household income and then dividing the population into five equal groups, each comprising 20% of the estimated population.
Ratio of household incomes at top of selected income percentiles	See Percentiles.
Recent home buyer	A household which bought their dwelling in the three years prior to the survey.

Reference person — See Household reference person and Income unit reference person.

Relative standard error (RSE) — The standard error expressed as a percentage of the estimate for which it was calculated. It is a measure which is independent of both the size of the sample, and the unit of measurement and as a result, can be used to compare the reliability of different estimates. The smaller an estimate's RSE, the more likely it is that the estimate is a good proxy for that which would have been obtained if the whole population had been surveyed. For further information see Part 2.8 'Reliability of estimates'.

Renter — A unit that pays rent to reside in the dwelling. See 'Landlord type' for further classification.

Rest of state — That part of each Australian state or territory not defined as Greater Capital City Statistical Area. All of the Australian Capital Territory is defined as Greater Capital City Statistical Area.

Salary packaging — An arrangement for the employer to remunerate the employee with a combination of cash wages and salaries and one or more non-cash benefits, to the value of the employee's total remuneration.

Salary sacrifice — An arrangement under which an employee agrees contractually to forgo part of the remuneration, which the employee would otherwise receive as wages and salaries, in return for the employer or someone associated with the employer providing benefits of a similar value.

School education benefits — Social transfers in kind relating to administration, inspection, support and operation of educational programs for preschool, primary and secondary school students. Government expenditure on the administration, inspection, support and operation of transportation services to students were included. Government expenditure on school medical and dental programs (which are included in other health benefits) and monetary transfers to households were excluded. School education is a component of education benefits.

Selected dwelling — The private dwelling selected in the sample for the survey.

Semi-detached, row or terrace house or townhouse — A dwelling with its own private grounds and no dwelling above or below. A key feature of this dwelling is that it is either attached in some structural way to one or more dwellings or is separated from neighbouring dwellings (usually by less than one-half metre). Examples include semi-detached, row or terrace houses, townhouses or villa units. Multi-storey townhouses or units are separately identified from those which are single storey.

Separate house — A dwelling which is self-contained and separated from other houses (or other buildings or structures) by a space to allow access on all sides (usually at least one-half metre). This category also includes houses that have an attached flat (e.g. a granny flat). The attached flat will be included in the flat, unit or apartment category.

Shares — A share is a contract between the issuing company and the owner of the share which gives the latter an interest in the management of the corporation and the right to participate in profits. On the file the "value of shares" excludes the value of shares held by individuals in their own incorporated business. Such shares are included in "value of own incorporated business".

Significant person — Significant persons are defined as follows:

- all members of lone person or couple only households
- all parents in a couple with children household or a single parent household
- the person aged 15 years or over in a group household where one person is aged 15 years or over and the other members of the household are less than 15 years old
- 50% of the persons aged 15 years and over in all other households.

Social assistance benefits in cash
Cash payments to persons from general government without any requirement to provide goods and services in return. Included are pensions and allowances received by aged, disabled, unemployed and sick persons, families and children, veterans or their survivors, and study allowances for students. Family Tax Benefit, Baby Bonus and Child Disability Assistance Payment paid to recipients of Carer Allowance are also included in social assistance benefits in cash. Household social assistance benefits in cash are the sum of all household members' cash payments. The only difference between 'government pensions and allowances' and 'social assistance benefits in cash' is that overseas pensions are included in government pensions and allowances and private income and excluded from social assistance benefits in cash.

Social transfers in kind
Non-cash benefits and services provided by the government to households for education, health, housing, social security and welfare, and electricity concessions and rebates. It includes reimbursements of approved expenditures such as the Medicare rebate, the Private Health Insurance Rebate, the Child Care Benefit and the Child Care Rebate. The cost of administering the provision of social assistance benefits in cash is included. For further information see Appendix 4.

Standard error (SE)
A measure of the likely difference between estimates obtained in a sample survey and estimates which would have been obtained if the whole population had been surveyed. The magnitude of the standard error associated with any survey is a function of sample design, sample size and population variability. For further information see Part 2.8 'Reliability of estimates'.

Statistical Area Level 1 (SA1)
A Statistical Area Level (SA1) is the smallest geographic area defined for release in the *Australian Statistical Geography Standard (ASGS)* (cat. no. 1270.0.55.001).

Statistical Area Level 4 (SA4)
A Statistical Area Level 4 (SA4) is the largest spatial unit within each state or territory in the main structure of the *Australian Statistical Geography Standard (ASGS)* (cat. no. 1270.0.55.001).

Statistical Division (SD)
The largest spatial units within each state/territory in the main structure of the *Australian Standard Geographical Classification (ASGC)* (cat. no.1216.0).

Study Loans
Study loans are debts incurred under Higher Education Loans Program (HELP), the government education payment scheme, and other government higher education schemes. They also include loans incurred prior to 2005 under the Higher Education Contribution Scheme (HECS) and the Student Financial Supplement Scheme (SFSS). A feature of these loans is that the obligation to repay them only exists when the student's income exceeds a threshold. The debt is also extinguished upon death. The HELP scheme includes several education payment schemes, including HECS-HELP and FEE-HELP.

Superannuation
A long-term savings arrangement which operates primarily to provide income for retirement.

Superannuation/annuity income
Income from superannuation, annuities and private pensions such as allocated pensions.

Taxes on income
Taxes on income is the sum of personal income tax plus the Medicare levy and Medicare levy surcharge for all members of the household. Taxes on income were imputed according to the 2011–12 tax rules which were applied to the gross income of family members according to their characteristics as reported in the 2011–12 Survey of Income and Housing.

Taxes on production
Taxes on production and imports consist of taxes payable on goods and services when they are produced, delivered, sold, transferred or otherwise disposed of by their producers plus taxes and duties on imports that become payable when goods enter the economic territory by crossing the frontier or when services are delivered to resident units by non-resident units; they also include other taxes on production, which consist

Taxes on production *continued*	mainly of taxes on the ownership or use of land, buildings or other assets used in production or on the labour employed, or compensation of employees paid.
Tenure type	The nature of a unit's (i.e. household's, income unit's or person's, where applicable) legal right to occupy the dwelling in which the unit members usually reside. Tenure is determined according to whether the household owns the dwelling outright, owns the dwelling but has a mortgage or loan secured against it, is paying rent to live in the dwelling or has some other arrangement to occupy the dwelling.
Tertiary education benefits	Social transfers in kind relating to the administration, inspection, operation and support of education programs at higher education institutions and colleges of technical and further education. Tertiary education is a component of education benefits.
Topcoding	Reduction of all high values to a specified maximum value.
Trusts	Any type of managed fund which involves the pooling of investors' money in order for a trustee or professional manager to administer that fund. Examples include listed and unlisted public unit trusts, cash management trusts, property trusts and family trusts used only for investment purposes.
Unemployed	Persons aged 15 years and over who were not employed during the week before the interview and had actively looked for full-time or part-time work at any time in the four weeks before the interview and: ■ were available for work in the week before the interview, ■ were waiting to start a new job within four weeks from the interview and would have started in the week before the interview if the job had been available then.
Unemployment and study payments	Includes income from Austudy/ABSTUDY, Newstart allowance or Youth allowance.
Unincorporated business	A business in which the owner(s) and the business are the same legal entity, so that, for example, the owner(s) are personally liable for any business debts that are incurred.
Unsecured loan	A loan not requiring any security or collateral.
Vacation care	A formal child care service provided to school children during the school holidays.
Value of dwelling	The estimated value of the dwelling and its land, as estimated and reported by the respondent. The data are only collected for owners.
Vehicles	Vehicles include registered and unregistered vehicles used for private purposes including cars, trucks, buses, motorcycles, caravans, aircraft, boats and bicycles.
Vehicle loans	Principal outstanding on loans used to purchase motor vehicles. Where only a proportion of a loan is used to purchase a vehicle, only that proportion of the principal outstanding is included.
Wages and salaries	An employee's total remuneration, whether monetary or in kind, received as a return to labour from an employer or from a person's own incorporated business. It comprises wages and salaries, bonuses, amounts salary sacrificed, non-cash benefits such as the use of motor vehicles and subsidised housing, and termination payments.
Wealth	See Net worth.
Year of arrival in Australia	The year a person (born outside Australia) first arrived in Australia from another country, with the intention of staying in Australia for one year or more.

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