Australian Bureau of Statistics

Household Expenditure Survey and Survey of Income and Housing, User Guide, Australia

2009–10

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INTRODUCTION

INTRODUCTORY NOTE

This User Guide contains details about the Survey of Income and Housing (SIH) and the Household Expenditure Survey (HES) conducted in 2009–10. Prior to 2003–04, the SIH and HES were conducted independently. The SIH was conducted annually from 1994–95 to 1997–98, and then in 1999–2000, 2000–01 and 2002–03. The HES was conducted in 1984, 1988–89, 1993–94 and 1998–99.

The HES was integrated with the SIH for the first time in 2003–04. The SIH is now conducted every two years and is integrated with HES every six years. SIH was collected in 2005–06 and 2007–08, and the HES was integrated with the SIH for the second time in 2009–10.

The 2009–10 SIH collected information from a sample of 18,071 households over the period July 2009 to June 2010. Of the 18,071 households, 9,774 were also included in the HES and were asked to supply detailed information on household expenditure, and financial stress. The integration of these two surveys in 2003–04 and again in 2009–10 has lowered respondent burden, because considerably fewer households need to be surveyed. The resulting dataset is also richer because SIH and HES results are more comparable than data obtained prior to 2003–04.

This User Guide includes information about the purpose of the surveys, 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 2009–10 surveys and earlier SIH and HES surveys. Its purpose is to help users of the data understand the nature of the surveys, and their potential to meet user needs. It also contains information for users of the SIH and HES confidentialised unit record files (CURFs), previously published in separate Technical Manuals.

The next SIH is being conducted in 2011–12. The content will be similar to the 2009–10 SIH, with wealth data again collected.

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 2009–10 Survey of Income and Housing (SIH) and Household Expenditure Survey (HES) including:

- the data items of income, loans, housing, childcare, wealth, expenditure, financial stress and imputed rent
- summary statistics such as the Gini coefficient
- the units of analysis supported by the surveys, that is, households, income units, persons and loans.

Changes to concepts and definitions that were introduced in the 2009–10 SIH and HES are described in Part 4 'Changes from previous surveys'.

Terms and definitions used in describing these surveys and their 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 but deducted in deriving disposable income. 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 2009–10 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. Further details will be available in *Government Benefits, Taxes and Household Income, Australia, 2009–10* (cat. no. 6537.0), expected to be released in mid 2012.

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 2009–10 SIH income estimates with ASNA estimates is provided in Appendix 5 of *Household Income and Income Distribution, Australia, 2009–10* (cat. no. 6523.0). Comparison of income data from 1994–95 to 2009–10 with ASNA data indicated that the relationship between the two estimates had not significantly changed over that period.

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 non-employment, 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 and HES 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 particularly likely to be the case for children other than dependants 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 1.11 'Household, income unit, person and loan data'.

Published SIH and HES 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 and HES 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 and HES 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 2.5 '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. The 2007–08 and 2009–10 income estimates 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 new 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 and HES 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 and HES 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 and HES 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

Own unincorporated business income continued

there is some likelihood that responses will tend to be too optimistic or too pessimistic, 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. The new methodology results 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 such as bank accounts and shares, 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 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 and Child Care Rebate (CCR), 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 one-off stimulus payments paid in 2008–09 and 2009–10 based on 2007–08 taxable income are also included as income. These stimulus payments include the one-off payments from the Family Assistance Office of the single income family bonus, back to school bonus and the additional FTB Part A payment of $1,000 per child. These also include the stimulus payments from the Australian Taxation Office (ATO) which were

Government pensions and allowances continued

one-off income-based payments of $250, $600 or $900 and the Centrelink assistance payments to health care card holders, carers, farmer hardship payments and the training and learning bonuses.

Most income from the one-off stimulus payments to families and pensioners was received in 2008–09, and is therefore included in income from government pensions or allowances in the previous financial year. The intention was for these monies to be spent, or "available", in the 2008–09 financial year, therefore income from this stimulus package payment has been assigned to income from the previous financial year.

A significant change to certain government allowances payments was the introduction of the Pension Supplement and Seniors Supplement on 20 September 2009. These supplements replaced utilities, telephone and pharmaceutical allowances for a variety of government pension and payments recipients. This change occurred while the 2009–10 SIH and HES were in the field.

The Baby Bonus (formerly known as the Maternity Payment) introduced in July 2004, is also 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.

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 2009–10 SIH and HES, refer to Part 2.7 '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 2009–10 SIH. These were treated in the same manner as the reported large amounts in the 2007–08 SIH, that is, an adjustment was applied on the basis of the current weekly income that would have been earned over a three-week 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 available from the 2009–10 HES only, but are not included in the aggregate estimates of income from the SIH or the HES. Children's income was also collected in the 2003–04 HES. A child's income is collected only from the first parent or guardian interviewed.

Income tax and Medicare levy

In the 2009–10 SIH and HES, 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 SIH and HES data to analyse the relationship between the income, expenditures and wealth of these households. The following table includes estimates that have been adjusted for differences in household size and composition, that is, they are produced on an equivalised basis. The purpose is to maximise the comparability of the three aggregates.

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

	Mean weekly equivalised disposable household income	*Mean weekly equivalised expenditure on goods and services*	*Mean equivalised net worth*
Decile	$	$	$'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**

LOW INCOME HOUSEHOLDS *continued*

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 will be published in a feature article in *Household Wealth and Wealth Distribution, Australia, 2009–10* (cat. no. 6554.0). This publication is expected to be released in October 2011.

1.6 GINI COEFFICIENT AND OTHER MEASURES OF INCOME DISTRIBUTION

INTRODUCTION

There are many ways to illustrate aspects of the distribution of income and to measure the extent of income inequality. In the SIH and HES, 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 and HES 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 2.9 'Calculation of population counts, means, medians and other estimates'.

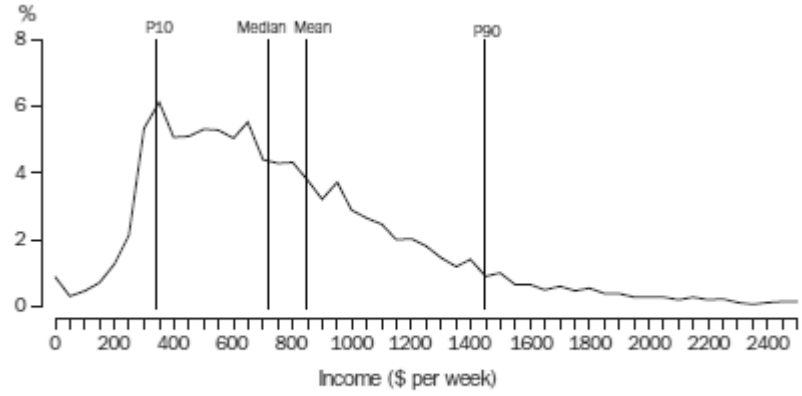
In some tables describing households, the mean and median of gross household income are also shown. These measures are calculated with respect to the relevant number of households, not persons. They are sometimes known as household weighted measures.

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.

FREQUENCY DISTRIBUTION *continued*

GRAPH 1.6.1 DISTRIBUTION OF EQUIVALISED DISPOSABLE HOUSEHOLD INCOME, 2009–10



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, 2009–10 (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 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 and HES 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 and HES 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.

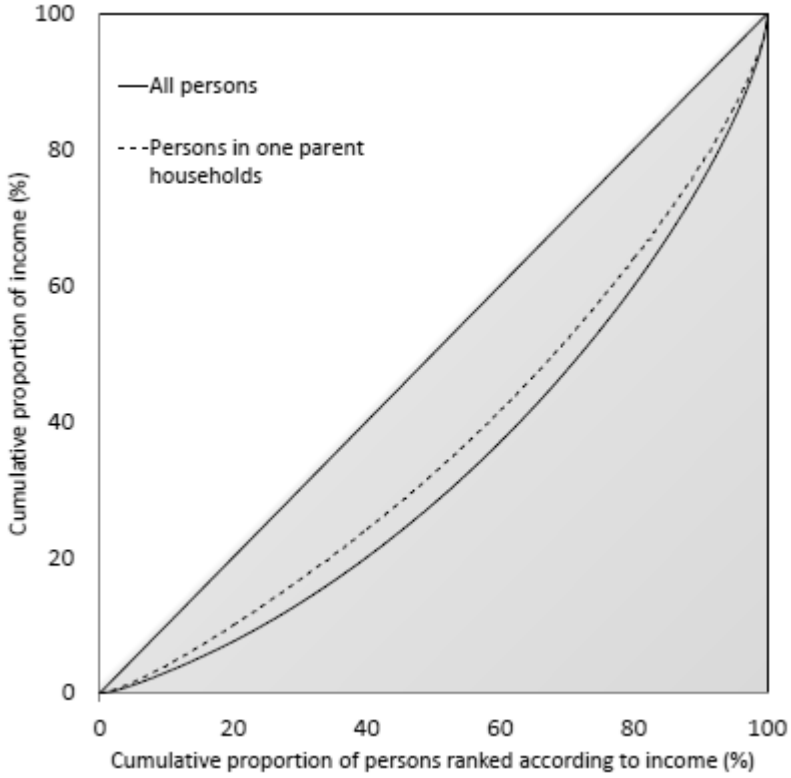
GINI COEFFICIENT

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

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.

GINI COEFFICIENT *continued*

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 2009–10 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 0.328 while the coefficient for the persons in the one parent households included here was 0.262.

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 2008 (Reissue)* (cat. no. 4402.0).

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.

Cost of Care

The cost, gross of Child Care Benefit (CCB), to parents for a child to attend care, was collected in the 2009–10 SIH. In most cases, where the CCB was paid directly to the child care service provider, the cost of care was collected directly in the survey. In a small number of cases, where the CCB was not paid directly to the provider, the CCB was estimated. Information on the Child Care Rebate was also collected as part of the survey.

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. It was introduced on 1 July 2000, when it replaced the Child Care Rebate and Childcare Assistance.

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.

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 in Part 5.1 'Using the CURF data'.

1.8 EXPENDITURE

EXPENDITURE ESTIMATES

The HES produces estimates of average household expenditure on goods and services and selected other payments.

Acquisitions, payments and consumption approaches

Expenditure can be measured according to the following approaches.

- In the acquisitions approach, the full cost payable by the household of acquiring a good or service within a given period is collected. The full cost is collected regardless of whether the household actually paid for or consumed the good or service within the period.
- In the payments approach, the payments made by the household within a given period are collected. Payments include those made on outright purchases, deposits and loans for goods and services regardless of whether the goods and services were acquired or consumed during the period.
- In the consumption approach, an indicator of consumption is collected and a dollar value is derived. Consumption values are collected according to the use of a good or service during the given period regardless of whether the good or service was acquired or paid for during the period.

The HES has primarily adopted an acquisitions approach.

For many items, such as perishable foods (which are usually acquired, paid for and completely used within a relatively short period of time) the three approaches will provide nearly identical results. For other items such as durable items and items purchased on credit that are not fully consumed or paid for during the recall or reporting period, the situation is different. Estimates for individual households will vary according to the approach adopted. For groups of households, however, the estimates will 'average out' to a large extent, so that the estimates for groups of households can be said to be indicative of payments and consumption as well as acquisitions.

The HES collects expenditure on the acquisitions of washing machines over the three months period prior to the HES interview. For example, in a group of 1,000 households, on average, 96% of them had washing machines and on average, these washing machines were replaced after 10 years with a new one that was purchased for $700 and paid for with five equal instalments of $140.

Using the acquisitions approach, the number of households expected to report expenditure on washing machines, over a three month period is equal to 96% of 1,000 (i.e. 960) households divided by the number of three month periods in 10 years (i.e. 40) which equals 24 households. Each of these households would have spent $700 and so aggregate expenditure would be equal to 24 multiplied by $700 which equals $16,800 every three months. This is divided by the number of weeks in three months (13) and by the number of households in the sample (1,000), to give an average household expenditure of $1.29 per week.

Using the payments approach, the number of households expected to report expenditure over a three month period is equal to five times 96% of 1,000 households (because payments are made five times by each household) divided by the number of three month periods in 10 years which equals 120 households. The payment of each of these households is equal to the total cost of the machine ($700) divided by the number of payments (five) which equals $140. Aggregate expenditure is equal to 120 households multiplied by $140 which equals $16,800 every three months. This is divided by the

Acquisitions, payments and consumption approaches continued

number of weeks in three months (13) and by the number of households in the sample (1,000), to again give average household expenditure of $1.29 per week.

Using the consumption approach, 96% of 1,000 households would report their ownership in the three month period. The value of consumption is assumed to be equal to the cost of using the washing machine over three months (which is equal to $700 divided by the number of three month periods in 10 years, which equals $17.50). Aggregate expenditure is equal to 960 households multiplied by $17.50 which equals $16,800 every three months. This is divided by the number of weeks in three months (13) and by the number of households in the sample (1,000) to again give average household expenditure of $1.29 per week.

Recall periods and timing of expenditure

The total period covered by expenditure estimates is a function of the recall or reporting period at the time of interview and the timing of interviewing. For the HES, interviewing is usually conducted through the 12 months of the reference year, that is, the financial year to which the survey nominally relates (for example, 2009–10). For most types of expenditure, data are taken from diaries in which survey respondents record their expenditure over a two week period, beginning the day of initial contact. Diary-derived estimates therefore refer to expenditure during the reference year.

Estimates for infrequently purchased or more expensive items are derived from the household questionnaire, (see Part 2.5 'Data collection and data item description') which collects expenditure information for goods and services on a recall basis. These less frequently occurring items are collected over periods longer than the two week diary reporting period so that sufficient numbers of households report expenditure to enable the calculation of reliable expenditure estimates. For example, in 2009–10, HES survey respondents were asked to recall how much they spent on furniture and appliances over the last three months, on motor vehicle registration over the last 12 months, and on house purchases over the last three years. For other items, such as insurance, rent and utilities bills, survey respondents were asked for the value of their last payment and the period of time to which it related.

The Household Expenditure Classification (HEC) referred to in Part 2.5 'Data collection and data item description' lists the items collected in the household questionnaire and their associated recall periods. In general, longer periods are used for items that are expensive, are acquired infrequently or are acquired at irregular intervals. Shorter periods are used for items which are purchased more frequently or are less significant and therefore not well remembered.

The use of different recall periods means that estimates for different expenditure items, in some cases, refer to different periods. The estimates of average expenditure on motor vehicle registration, for example, cover the 12 months prior to the beginning of interviewing to the end of interviewing (July 2008 to June 2010 for the 2009–10 HES). For house purchases, the period is three years prior to the beginning of interviewing to the end of interviewing (July 2006 to June 2010 for the 2009–10 HES). Household questionnaire derived estimates therefore refer to varying periods prior to the reference year as well as during the reference year.

Recall periods and timing of expenditure continued

Studies that use HES data tend to assume that all expenditure estimates refer only to the reference year itself. This is generally true for diary derived estimates but is a valid assumption for estimates derived from the household questionnaire only if expenditure prior to the reference year was the same as during the reference year.

For household questionnaire estimates, if the volumes or prices of purchases were lower during the period prior to the reference year, then average expenditure over the preceding period plus the reference year will be less than average expenditure over the reference year only. Similarly, if prices or volumes were higher during the preceding period, the HES estimate will over estimate average expenditure in the reference year. The longer the preceding period (which is equal to the length of the recall period), the greater the likelihood of discrepancy. In cases where expenditure is expected to have changed, researchers may wish to acknowledge or adjust for these differences.

Weekly household expenditure

Estimates of weekly expenditure do not refer to any given week but are weekly equivalents. They are derived by dividing reported expenditure for all members of the household by the number of weeks in the relevant recall or reporting period, as discussed above. For household questionnaire items, recall periods vary from the last three years to the last three months, and for some items the last payment is reported. For diary items, the reporting period is two weeks.

Expenditure for private purposes

The HES provides estimates of expenditure on goods and services used for private purposes. It therefore excludes expenditure for business and other investment purposes. Operating expenses of unincorporated businesses are either not collected or are deducted from reported expenditure. If survey respondents report business expenditure, it is picked up in questions in the household questionnaire or space provided in the diary, in which there is an opportunity to report amounts which 'have been or will be charged to a business'. If amounts have been or are going to be charged to a business, then these are deducted from expenditure during processing.

Deductions of refunds and trade-ins

The HES measures net or 'out of pocket' private expenditure on durable goods, non-durable goods and services for private purposes. Estimates therefore do not refer to the full costs of goods and services used but only the costs payable by the household for goods and services used.

In the case of a refund which is received or expected, the amount of the refund is deducted from expenditure to produce a net figure. For expenditure on visits to general practitioners, for example, Medicare and private health insurance refunds are deducted.

In the case of trade-ins, these amounts are also deducted from expenditure to produce a net figure. For example, if the cost of a motor vehicle is partially financed by the trade-in of another, the amount of the trade-in is deducted from the cost of the acquired vehicle.

In the case of the sale of land, houses and motor vehicles, the sale price net of outstanding loans is deducted from expenditure and in the case of houses and motor vehicles, amounts of successful insurance claims are deducted from expenditure. Deductions are made even if there is no expenditure on that item by the household. Sales and claims made in the recall period for items that are not replaced during that

Deductions of refunds and trade-ins continued

period are included. This compensates for sales and claims made outside the recall period for items replaced during the recall period.

Where trade-ins, sales and insurance claims exceed the costs of acquisitions of the same expenditure item, expenditure is recorded as negative. For example, if someone sells a luxury motor vehicle and buys a less costly model, the amount of expenditure recorded in the HES would be negative.

Expenditure in-kind

Expenditure in-kind refers to items provided free or at reduced costs by employers to employees for their own private use, or withdrawn from their own business for household consumption. It may also refer to items consumed by the household that have been produced by the household itself (e.g. vegetables), or provided by another household. Non-cash benefits captured in the questionnaire such as rent, telephone, computers and vehicles are included in estimates of expenditure for the first time in 2009–10. The non-cash benefit expenditure averages $35 per week per household.

Salary sacrifice

Salary sacrifice is an arrangement under which an employee agrees to forego part of the remuneration, which they would otherwise receive as wages and salaries, in return for the employer or someone associated with the employer, providing benefits of a similar value. It is a particular type of salary packaging where the amount sacrificed can vary at the employee's discretion within guidelines set by the employer. The usual purpose of salary sacrifice is to reduce the amount of income tax paid by the employee.

More detailed information was collected for salary sacrifice on motor vehicles in the 2009–10 HES to improve the estimates for this type of expenditure. The additional information captured within the questionnaire was used to model the value of expenditure on motor vehicles and associated running costs such as fuel, insurance, registration, servicing and tyres.

Classification of expenditure

Expenditure is classified according to the HEC – for more detail, see Appendix 6 'Household Expenditure Classification'.

Most of the approximately 600 items included in the classification relate to expenditure on goods and services, which is the primary focus of the HES. The classification also includes 'selected other payments' which comprise income tax, repayments on mortgage principal for the household's place of residence, other housing costs of a capital nature such as internal renovations, superannuation and life insurance.

In 2009–10, expenditure estimates have also been classified according to the Classification of Individual Consumption According to Purpose (COICOP). Total expenditure estimates differ between the two classifications due to differences in scope, as the COICOP only includes consumption expenditures. Housing costs are also treated differently between the HEC and COICOP. Estimates of housing costs in the COICOP include imputed rent for owner-occupied dwellings and subsidised rentals. The HEC only includes direct expenditures by households on housing. For more detail, see Appendix 8 'HEC and COICOP concordance'.

COMPARISON WITH AUSTRALIAN SYSTEM OF NATIONAL ACCOUNT

The concept of expenditure used in the HES has many similarities to the household sector expenditure concepts used in the Australian System of National Accounts (ASNA), but also differs in some respects.

A comparison between the 2009–10 HES expenditure estimates and the ASNA is included as Appendix 3 in *Household Expenditure Survey, Australia, Summary of Results, 2009–10* (cat. no. 6530.0).

1.9 RELATIONSHIP BETWEEN RECORDED EXPENDITURE AND INCOME

RELATIONSHIP BETWEEN RECORDED EXPENDITURE AND INCOME

The HES provides information about both the income and the expenditure of households, but it would be misleading to regard the difference between average weekly income and the sum of the items of average weekly expenditure as a measure of saving.

First, to be properly understood, the concept of household saving needs to be articulated along with the concept of household wealth (assets and liabilities), and all forms of income and expenditure need to be measured and classified consistently with these concepts. The HES does not attempt to do this. It focuses on usual income being received at the time the data was collected; estimates of personal income tax; expenditure on current consumption of goods and services and three major items of expenditure which can be regarded as investment ('mortgage repayments - principal (selected dwelling)' and 'other capital housing costs' and 'superannuation and life insurance'). The three items of investment expenditure are included in the HES because they are a significant regular commitment of many households which have to be financed from income.

Second, there are significant timing differences between the different components of income and expenditure collected:

- expenditure does not cover all current payments because expenditure was collected on an acquisitions basis
- expenditure does not cover a common reference period since expenditure estimates for different items refer to different periods
- income does not cover a common reference period since income estimates for different sources of income refer to different periods; for example, income from wages and salaries relates to usual pay in period while income from investment and own unincorporated business relates to income in a whole financial year.

SIH and HES income and HES expenditure estimates therefore do not balance for individual households or for groups of households and the difference between income and expenditure cannot be considered to be a measure of saving.

1.10 WEALTH OR NET WORTH

WEALTH OR NET WORTH

Household wealth is represented by the household's net worth. In the SIH and HES, the term 'net worth' is used in preference to 'wealth' because it more precisely reflects the nature of information captured in the SIH and HES. 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
- 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 2009–10 SIH and HES, 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, 2009–10* (cat. no. 6554.0) expected to be released in October 2011.

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

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

While the concepts of net worth used in the SIH and HES 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 and HES 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 HES 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 and 2009–10 SIH and ASNA net worth estimates will be published in *Household Wealth and Wealth Distribution, Australia, 2009–10* (cat. no. 6554.0), which is expected to be released in October 2011.

1.11 HOUSEHOLD, INCOME UNIT, PERSON AND LOAN DATA

HOUSEHOLD, INCOME UNIT, PERSON AND LOAN DATA

The SIH and HES collect information about households and all the people comprising those households. It is therefore possible to produce aggregate data from the surveys about 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 2.5 'Data collection and data item description' shows which data items are available for each unit type supported by the SIH and the HES.

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 and HES 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 and HES, 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 and HES. 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 AND HES 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

UNITS USED IN SIH AND HES PUBLISHED OUTPUT
continued

distribution of each person in a household comprising four persons is the same as that 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 and HES 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 2.9 'Calculation of population counts, means, medians and other estimates'.

In published HES output, the household is adopted as the basic unit of analysis of expenditure data because it is assumed that sharing of the use of goods and services occurs at this level. If smaller units, say persons, are adopted, then it is difficult to know how to attribute to individual household members, the use of items purchased and often consumed collectively, such as food, accommodation and household goods.

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

1.12 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.

1.13 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 of housing utilisation. However, the Canadian National Occupancy Standard (CNOS) is applied in the SIH and is widely used internationally.

The CNOS 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 regular 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, i.e. mortgage repayments, rent, property and water rates as well as body corporate fees.

Only payments that relate to the dwelling occupied by the household at time of interview, i.e. a respondent's usual place of residence, are included. Housing costs only include mortgage/loan repayment 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, i.e. 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.

- Some households are reimbursed some or all of their housing costs. Commonwealth Rent Assistance (CRA), paid by the Australian Government to qualifying recipients of income support payments and family tax benefit, is the most important type of reimbursement of relevance to these statistics. If CRA receipts were subtracted from gross housing costs, it has been estimated that the housing costs of households receiving CRA would be about 30% lower on average, and the housing costs of all households renting from landlords other than the state/territory authorities would be about 10% 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 2009–10 SIH indicates that about 33% of the housing costs of owners with a mortgage comprised repayments of the principal on loans. The equivalent proportions in 2007–08 and 2005–06 were 32% and 36% respectively.
- A fuller measure of housing costs would include a range of outlays not collected in the SIH but which are 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. HES data shows that if these costs were added to SIH housing costs estimates, the estimates of average housing costs for owners without a mortgage would more than double, 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. In earlier research CRA has been estimated, on average, to represent about 8% of the reported income of households receiving CRA and about 2% of the reported income of all households renting from landlords other than the state/territory authorities.

To illustrate the difficulties discussed above, consider two households 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. 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%. 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. This anomaly is of particular concern 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 and Household Income continued

housing costs/income ratios are more of a concern with respect to larger households 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 land 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 to other consumption or investment choices. 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.

1.14 DEPRIVATION AND FINANCIAL STRESS INDICATORS

INTRODUCTION

While income and wealth statistics can describe the economic resources available to people to provide command over goods and services in aggregate, and expenditure statistics can describe people's associated consumption patterns, there are other issues that are relevant to understanding living standards. For example, a person's poor state of health or limited access to education facilities may lead to greater expenditure addressing their particular situation, and relatively less expenditure on other basic necessities of life, than is achieved by other people who earn similar incomes or who are spending, in aggregate, about the same amount. In attempting to identify which households have the lowest economic wellbeing, it is therefore useful to also consider indicators that more directly identify households with poor economic outcomes. The HES collects data relating to deprivation and financial stress for this purpose.

DEPRIVATION INDICATORS

The specific indicators of deprivation i.e. the items of expenditure considered to be some of the 'basics of life' that deprived households may not be able to afford are:

- a holiday for at least one week a year
- a night out once a fortnight
- to invite friends or family over for a meal once a month
- a special meal once a week
- leisure or hobby activities
- new clothes most of the time.

These items were the six deprivation indicators, out of 37 collected for the *Deprivation Standards Project* (Travers and Robertson, 1995), that were most highly correlated with an alternative, factor-based index of deprivation compiled in that project report. This index was derived from a wide range of indicators including the 37 'basics of life', shortage of money (cash flow, access to finance, budget management), dissatisfaction with home and life, access to important places and perceptions of changes in standard of living.

It is important to note that the indicators included in the ABS survey are not the most fundamental 'basics of life' that were included in the full list of 37. When the social security clients surveyed for the *Deprivation Standards Project* were asked to rate the 37 'basics of life', only one of the six indicators used in the ABS survey – affording leisure or hobby activities – rated above the mean score of importance for that target group. Four of the six indicators selected by the ABS were ranked 30th or lower in order of importance in the Travers/Robertson report. However, the most highly ranked indicators in this report included such things as medical treatment and a bath or shower, where most clients had access to such goods and services. The six indicators included in the HES were highly correlated with the factor based index and therefore act collectively as a point of differentiation between the deprived and the more fortunate in society.

Given the nature of the indicators chosen, care needs to be exercised in interpreting individual responses in isolation from other responses provided. All individuals have their own priorities and consumption preferences and may choose quite different patterns of expenditure from a socially accepted norm of the 'basics of life'. For example, a household may observe that it 'cannot afford' items specified in one or more of the chosen indicators (e.g. meals out or hobbies) because it devotes a considerable proportion of its budget to saving for an overseas holiday. If the household can afford an

DEPRIVATION INDICATORS
continued

overseas holiday, however, it is difficult to envisage the household as deprived, even if it chooses to forego expenditure that other households might consider basic.

The relevance of the selected indicators as a measure of deprivation to selected population groups can also be tested by observing the take-up rate of the indicators by households with higher incomes. In establishing whether households could afford each of the selected basics of life activities, the survey first asks whether or not households usually had the basic item and, if not, whether it was because they could not afford it or because they did not want it. Those households where age and disability support pensions are the main source of income can be used as an example of where significant changes in income levels did not significantly increase the take up of some of these 'basics of life'.

In the 1998–99 HES, the proportion of these pension recipients stating that they could not afford to have friends or family over for a meal once per month drops from 13% in the lowest income quintile (i.e. the bottom 20% of households in terms of income) to 9% in the third quintile (i.e. the middle 20% of households in terms of income). At the same time, the proportion of these welfare recipient households engaging in this activity only rose from 52% in the lowest quintile to 54% in the third quintile. Largely offsetting the decrease in 'deprivation' as incomes rise was an increase in the number of households stating that they did not want this activity.

A similar pattern was observed in the 1998–99 HES for the criterion of having a special meal once a week, where an increase in take up of the activity, from 35% to 40% in moving from the lowest to the third quintile, was accompanied by a fall in the incidence of deprivation (from 22% to 14%) and an increase in those that identify as not wanting the activity (up from 22% to 30%). For the criterion of having a night out, the large fall in observed deprivation (from 33% to 15%) in moving from the lowest to the third quintile is accounted for by some increase in take up (from 29% to 36%) and a larger increase in those not wanting it (up from 19% to 28%). However, if only 36% of these income recipients in the third quintile engaged in the activity, nearly as many did not want it and only 15% said they can't afford it, there is a question of how 'basic' it is.

It is possible that the answer of 'can't afford it' may be a default answer for lower income groups which do not need to consider preferences across a wide range of activities that cannot be afforded, but such a default response becomes less relevant as incomes rise. Therefore the deprivation indicators chosen may not be an independent test in themselves to benchmark against income, and the nature of the answers given may be very highly correlated to income levels.

It would be possible to apply preference weights to a wider group of expenditure items for each household to identify 'basic' items, based on each household's perceptions of importance, or develop weights for particular income and population groups, or overall population weights as was done in the *Deprivation Standards Project*. However, the costs of collecting this additional information and the respondent burden in doing so was not considered warranted by the ABS. Instead, the ABS has focussed on compiling unweighted deprivation indicators most highly correlated with the Travers/Robertson factor–based index, together with unweighted financial stress indicators, so that wider perspectives on deprivation and financial stress can be considered.

FINANCIAL STRESS INDICATORS

The financial stress questions asked in the HES relate to cash flow problems and financial resources. The nine specific financial stress indicators are:

- household spends more money than it gets (over the past 12 months)
- unable to raise $2,000 in a week for something important
- could not pay electricity, gas or telephone bills on time
- could not pay car registration or insurance on time
- pawned or sold something
- went without meals
- could not afford to heat their home
- sought assistance from welfare/community organisations
- sought financial help from friends or family.

As with the six 'deprivation' indicators, the nine financial stress indicators must also be used with caution. For example, the indicator 'could not pay electricity, gas or telephone bills on time' was reported by a relatively large proportion of households in the higher income quintiles, which suggests that the item does not necessarily reflect absolute incapacity to pay so much as a short deferral of payment. For many people it might be chosen as a short-term cash flow management technique if there is no immediate penalty when payment is made a little late. Similarly, the indicator that households have spent more than they received over the past 12 months is clouded by prospects for adjusting expenditure over time by saving/borrowing and on its own is not a good indicator. However, the higher incidence of such indicators for some groups of people would suggest that those groups have greater cash flow and financial resource problems than groups of people with a lower incidence of these indicators.

It should also be noted that the choice households make between some of the indicators are likely to be affected by the composition of the household. For example, households with children are probably less likely to choose to go without meals when short of money than are single person households.

SOME FINDINGS FROM 2009–10 HES

In 2009–10, 43% of all HES households in the lowest household income quintile, 'could not afford a holiday for at least one week a year', compared with 5% in the highest quintile. This was the most common deprivation indicator experienced by HES households. The second most common deprivation indicator, reported by 34% of households in the lowest income quintile, was not being able to 'afford a night out once a fortnight', compared with 4% for the highest income quintile.

A similar pattern was observed for the financial stress indicators, with 27% of HES households in the lowest household income quintiles being 'unable to raise $2,000 in a week for something important'. This compares with 3% of households in the highest income quintile. This was the most common financial stress indicator experienced by HES households. The second most common financial stress indicator, experienced by 22% of households in the lowest income quintile was 'spending more money than received'. This compares with 8% for households in the highest income quintile group.

SOME FINDINGS FROM 2009–10 HES *continued*

While the reported rates of financial stress consistently decreased with increasing income, it was interesting to observe that 8% of households in the highest income quintile reported they 'spend more money than received', and this was the largest percentage seen in the highest income quintile of all the financial stress indicators.

These results are based on financial stress information available in *Household Expenditure Survey: Summary of Results, Australia, 2009–10,* (cat. no. 6530.0).

Travers, P. and F. Robertson, November 1995, *Deprivation Standards Project*, Flinders University of South Australia, Report prepared for the Department of Social Security.

1.15 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.

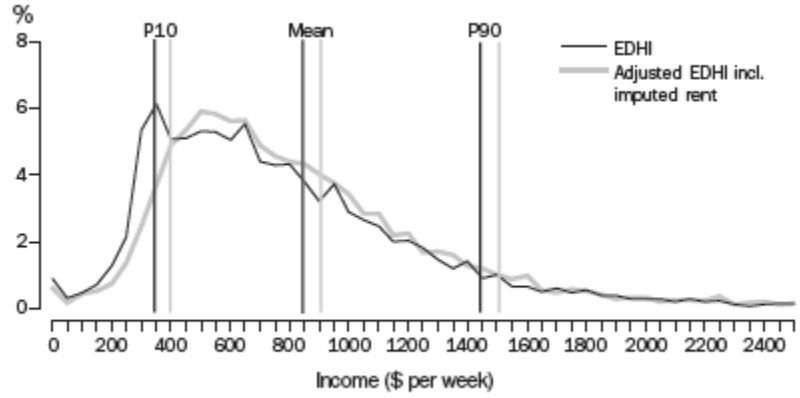
Hedonic regression is used to estimate the market value of the rental equivalent of an owner-occupied dwelling. Data from the SIH on reported rents paid by private market renters is regressed on the characteristics of their rented dwellings (e.g. location and dwelling structure). The estimated coefficients 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. (Note: Persons with an income between $50 and $2,500 are shown in $50 ranges on Graph 1.15.1).

Impact on Income Distribution continued

GRAPH 1.15.1 DISTRIBUTION OF EQUIVALISED DISPOSABLE HOUSEHOLD INCOME (EDHI), WITH AND WITHOUT IMPUTED RENT, 2009–10



Source: Household Income and Income Distribution, Australia, 2009–10 (6523.0)

PART 2 SURVEY METHODOLOGY

SURVEY METHODOLOGY

Part 2 of this User Guide describes the methodology used for the 2009–10 SIH and HES, 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 2009–10 are described in Part 4 'Changes from previous surveys'.

2.1 SCOPE AND COVERAGE

SCOPE

The SIH and HES 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 AND HES SAMPLE DESIGN AND SELECTIONS

SAMPLE DESIGN

The combined SIH and HES samples were designed to produce reliable estimates for broad aggregates of total income and total expenditure 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 2.10 'Reliability of estimates').

The SIH sample was designed in conjunction with the HES. In the combined sample, some dwellings were selected to complete both the SIH questionnaire and the HES questionnaire, while other dwellings were selected to complete the SIH questionnaire only. 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 and expenditure 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.

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. These households were enumerated using a separate sample design (see Part 2.3 'Additional pensioner and beneficiary sample' for details of the methodology). The following information focuses on the sample design and response rates of the SIH and HES samples (the figures presented below exclude the additional pensioner sample). The final combined sample numbers are shown in Part 2.4 'Final SIH and HES samples'.

SELECTED DWELLINGS, SAMPLE LOSS AND SELECTED HOUSEHOLDS

In 2009–10, 21,789 dwellings were initially selected for the combined SIH and HES sample. This combined dwelling sample excluded the additional pensioner sample. When fieldwork commenced some dwellings selected for inclusion in the SIH and HES samples 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 2009–10, sample loss was 3,569 dwellings, 16.4% of the selected combined 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

SELECTED DWELLINGS, SAMPLE LOSS AND SELECTED HOUSEHOLDS *continued*

residents. In 2009–10, 51 selected dwellings were split into two households, four were split into three households, and two were split into four households.

The net result was that 18,285 households were approached to complete the HES and/or 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 and HES, some information missing from partially responding households is imputed, as described in Part 2.6 '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.

Of the 9,499 households initially selected for inclusion in the SIH-only sample, 8,228 (87%) responded with sufficient information to be included in the final SIH sample. Of the 8,786 households initially selected for inclusion in the HES sample 6,567 (75%) responded with sufficient information to be included in the final SIH and HES sample and an additional 69 responded with sufficient information to be included in the SIH sample but not the HES sample (see Table 2.2.1). In aggregate, 14,864 households were included in the final SIH sample, representing an overall response rate of 81%.

Table 2.2.1 shows the differences between the number of households selected for inclusion in the surveys and the number of responding households included in the final samples (excluding the additional pensioner and beneficiary sample).

TABLE 2.2.1 SELECTED AND RESPONDING HOUSEHOLDS, SIH AND HES 2009–10

	Households approached	*Non-response*	*Final sample*
HES sample			
included in SIH and HES	8 786	2 219	6 567
SIH sample			
included in SIH and HES	8 786	2 150	6 636
included in SIH only	9 499	1 271	8 228
Total	**18 285**	**3 421**	**14 864**

2.3 ADDITIONAL PENSIONER AND BENEFICIARY SAMPLE

ADDITIONAL PENSIONER AND BENEFICIARY SAMPLE

The 2009–10 SIH and HES contained an additional sample of metropolitan households whose main source of income was a government pension, benefit and/or allowance. These pensioner households were enumerated using a separate sample design, but the fully responding in scope households from this sample were included in the final SIH and HES samples. The main purpose of the inclusion of this additional sample was for the development of a Pensioner and Beneficiary Living Cost Index (PBLCI), which is part of the revised process for indexing age and other pensions. The pensioner sample supports improved commodity weighting for the PBLCI to better reflect the different expenditure patterns of pensioner households compared with the general population. This part of the publication describes the sample design, methodology and results used to obtain the additional pensioner sample.

SCOPE AND COVERAGE

The additional pensioner sample collected information by personal interview from usual residents of private dwellings in metropolitan areas of Australia, whose main source of household income was a government pension, benefit and/or allowance. The same scope and coverage exclusions discussed in detail in Part 2.1 'Scope and coverage' for the SIH and HES, also apply to the pensioner sample.

In addition to the SIH and HES scope exclusions, the pensioner sample also excluded:

- households in collection districts defined as outside metropolitan areas
- households whose main source of income was not a government pension, benefit and/or allowance.

SAMPLE DESIGN

The pensioner sample was designed to be combined with the HES sample to improve the reliability of living cost index expenditure class estimates for households resident in private dwellings in Australian capital cities, whose main source of household income was a government pension, benefit and/or allowance.

In the pensioner sample, dwellings were selected via two phase sampling to complete the HES questionnaire. To target the pensioner households, the 2006 Census information was used to identify areas where the number of households that were more likely to belong to the target population were higher. This frame prediction was then updated for known deficiencies and changes to the Australian population since 2006. Selections of small geographic areas (meshblock) first stage units were made to avoid overlap with the population master sample and distributed across a ten month enumeration period from September 2009 to July 2010.

COLLECTION METHODOLOGY

The collection methodology for the pensioner sample was a two phase sampling approach. In the first phase, a large number of households were required to answer a number of short screening questions to identify whether they were a pensioner household. In the second phase, the identified screened pensioner households were approached for interview using the same collection methodology as for the HES.

Three screening questions were designed to eliminate households who were not in the populations of interest.

The screening questions were as follows:

1. Does anyone in this household receive any income from an Australian Government pension, benefit or allowance?

COLLECTION METHODOLOGY *continued*

If no-one received any income from a government pension, benefit and/or allowance in the household, the household was not in scope of the survey.

If at least one person received income from an Australian Government pension, benefit and/or allowance then the second screening question was asked.

2. Are Australian Government pensions, benefits or allowances, the main source of income for this household?

If the respondent indicated that they were not, then the household was not in scope of the survey.

If the respondent indicated that pensions, benefits and/or allowances were the main source of income of the household, then the household was in scope of the survey and the respondent was asked the final screening question.

3. Is this main source of income from an Age Pension, or a Department of Veterans' Affairs Service Pension?

This question determined which population group the household was in. The household was in scope of the survey, regardless of their answer to the final question.

SELECTED DWELLINGS, SAMPLE LOSS AND SELECTED HOUSEHOLDS

In 2009–10, 45,580 dwellings were initially selected to be screened for the pensioner sample. When field work commenced some dwellings selected for screening in the pensioner sample were found to have no possibility of delivering a survey response. Collectively these are referred to as dwelling 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 2009–10 the dwelling sample loss for the pensioner sample was 2,667 dwellings, 6% of the selected sample. As a result, 42,913 dwellings were then approached to screen for inclusion in the pensioner sample.

Of these 42,913 dwellings, 5,522 dwellings (13%) were non-contacts and 918 (2%) refused to answer the screening questions. This resulted in 36,473 dwellings screened for potential interview.

Of these 36,473 dwellings, 31,439 were screened as out of scope for the pensioner sample (i.e. the respondent identified the household's main source of income as a source other than government pensions or benefits). This resulted in 5,034 dwellings identified for interview. This number of identified pensioner households was well below sample design expectations indicating significant undercoverage with respect to the frame and/or screening procedures.

Of these 5,034 dwellings, 230 (5%) were identified as sample loss at the point of interview (e.g. all usual residents were out of scope), leaving 4,804 dwellings identified as being in scope and selected for interview.

SELECTED DWELLINGS, SAMPLE LOSS AND SELECTED HOUSEHOLDS *continued*

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 created for each such group of residents. In the 2009–10 pensioner sample, eight selected dwellings were split into two households, and two were split into three households.

The net result was that 4,816 households were approached to complete the pensioner questionnaire.

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 pensioner sample, some information missing from partially responding households is imputed, as described in Part 2.6 '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.

Of the 4,804 households initially selected for inclusion in the pensioner sample, 3,434 (71%) responded with sufficient information to be considered for inclusion in the final pensioner sample. During processing, 227 households who had identified their main source of income as government pensions or benefits when screened, were actually out of scope for the pensioner population once all their income data was processed, and were excluded from the final file. The sample included on the final files consisted of 3,207 households to add to the existing population collected in the SIH and HES. The final second phase response rate was 67% of those identified as being in scope of pensioner sample at the time of screening with an overall coverage rate about 47% with respect to the design frame.

2.4 FINAL SIH AND HES SAMPLES

FINAL SIH AND HES SAMPLES

The final samples on which estimates are based, combines the additional pensioner sample with the SIH and HES samples.

Table 2.4.1 shows the distribution of the final sample between states and territories, and between capital cities and the balance of state, for the SIH final sample (including the pensioner sample).

TABLE 2.4.1 SIH FINAL SAMPLE, 2009–10

	CAPITAL CITY		BALANCE OF STATE		TOTAL	
	Households	*Persons*(a)	*Households*	*Persons*(a)	*Households*	*Persons*(a)
	no.	no.	no.	no.	no.	no.
NSW	2 245	4 294	1 069	2 071	3 314	6 365
Vic.	2 027	3 834	1 079	2 018	3 106	5 852
Qld	1 588	2 991	1 115	2 155	2 703	5 146
SA	1 686	3 043	1 114	2 079	2 800	5 122
WA	1 532	2 800	1 212	2 321	2 744	5 121
Tas.	779	1 399	1 085	2 049	1 864	3 448
NT	505	927	73	127	578	1 054
ACT	962	1 891	—	—	962	1 891
Aust.	**11 324**	**21 179**	**6 747**	**12 820**	**18 071**	**33 999**

— nil or rounded to zero (including null cells)

(a) Number of persons aged 15 years and over

Table 2.4.2 shows the distribution of the final sample between states and territories, and between capital cities and the balance of state, for the HES final sample (including the pensioner sample).

TABLE 2.4.2 HES FINAL SAMPLE, 2009–10

	CAPITAL CITY		BALANCE OF STATE		TOTAL	
	Households	*Persons*(a)	*Households*	*Persons*(a)	*Households*	*Persons*(a)
	no.	no.	no.	no.	no.	no.
NSW	1 826	3 418	592	1 151	2 418	4 569
Vic.	1 540	2 843	314	595	1 854	3 438
Qld	1 116	2 044	349	693	1 465	2 737
SA	1 062	1 837	213	389	1 275	2 226
WA	1 038	1 812	205	410	1 243	2 222
Tas.	629	1 118	128	244	757	1 362
NT	297	539	67	115	364	654
ACT	398	747	—	—	398	747
Aust.	**7 906**	**14 358**	**1 868**	**3 597**	**9 774**	**17 955**

— nil or rounded to zero (including null cells)

(a) Number of persons aged 15 years and over

2.5 DATA COLLECTION AND DATA ITEM DESCRIPTION

INTERVIEW PROCEDURES

Experienced ABS interviewers were used to collect SIH and HES 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
  - expenditure common to all household members (e.g. utilities bills) and irregular or infrequent expenditure (e.g. household appliances and overseas holidays) for households selected for the HES
- 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
  - children's income and financial stress data from certain adults in households selected for the HES
- a personal diary in which usual residents aged 15 years and over in households selected for the HES recorded their expenditure over a two-week period.

Interviewers maintained contact with households over a series of visits as follows:

In the initial contact interview, the interviewer:

- obtained information on the number and characteristics of people usually resident in the dwelling. If a responsible adult was not available, the interviewer called back at another time
- distributed the first week's diaries to each usual resident aged 15 years and over, in households selected for the HES
- arranged a suitable appointment time for the Diary Assistance Visit.

In the Diary Assistance Visit, which was conducted within two and four days of the household receiving the diary, the interviewer:

- checked that the diary was being maintained correctly and provided the respondent with any assistance they may need
- arranged the Diary Exchange Visit.

In the Diary Exchange Visit, the interviewer:

- collected and checked the Week 1 Diary
- placed the Week 2 Diary
- completed one household questionnaire for each household
- completed an individual questionnaire for each usual resident aged 15 years and over
- arranged the Diary Collection Visit.

The diary placement and collection procedures changed in 2009–10. In 2003–04, HES diaries were placed after the individual questionnaires were completed. In the 2009–10 HES, the Week 1 Diary was placed earlier, (at the time of initial contact), and collected prior to interview. This change was designed to improve the quality of responses, providing both interview and diary data.

INTERVIEW PROCEDURES *continued*

In the Diary Collection Visit, the interviewer:

- checked and collected the Week 2 Diary
- completed any remaining interviews.

DATA COLLECTION INSTRUMENTS

A representation of the computer-assisted interview questionnaires used in the SIH and HES, and a copy of the diaries placed with respondents to the HES 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 and HES is presented in Appendix 5. The Household Expenditure Classification (HEC) used to classify the HES expenditure data is available in Appendix 6 and the HEC coding list is presented in Appendix 7. There is also a concordance between the 2003–04 and 2009–10 HEC included in Appendix 6. For more details about the data items, see Part 3 'Data availability'.

2.6 DATA PROCESSING

DATA PROCESSING METHODS

Computer based systems were used to collect and process the data from the 2009–10 SIH and HES 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, individual and diary 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.

Data capture and coding of individual HES diaries

For HES households, Week 1 diaries were collected from respondents after completion of the household interview. Week 2 diaries were collected after the individual interviews were carried out. The diaries were then dispatched to the ABS office in the appropriate state or territory. All reported expenditures in the diaries were entered into the BLAISE Diary Processing System. The BLAISE system helped operators to code diary items into Household Expenditure Code (HEC) codes. A trigram coder enabled operators to select the appropriate goods or services from an alphabetically ordered pick list of options. The system also deleted expenditure recorded in the diaries on items covered by the household questionnaire. For example, the household questionnaire collected information on mains gas payments so any payments coded to HEC code 0201010201 (Mains gas - (selected dwelling)) were automatically deleted to prevent double counting.

The HEC coding list is a complete list of items classified to each expenditure code and is available for researchers who require a detailed knowledge of the content of each expenditure code (see the HEC coding list in Appendix 7). For example, a researcher may need to know the contents of HEC code 0309030101 (Potato crisps and other savoury confectionery) which the HEC coding list shows to contain Burger rings, Cheezels, chips (crisps), corn chips, Le Snak, pretzels, Twisties and many other products. During coding of data, there was a level of manual involvement in adding codes to the coding list for goods not already listed and for variant wording of reported expenditures.

Additional editing

A range of processes were applied to the diary information to check that specific values were correctly coded if they were unusually high or low; that errors had not occurred in coding; and that relationships between household and diary information were consistent. A Query Resolution System ensured that:

- an accurate record was kept of decisions made in resolving queries from diary coders
- coding of products was consistent
- the HEC coding list was updated for unusual or unknown products
- coders could continue to process diaries if they could not resolve an issue within a short time.

A range of edits was also applied to the household and individual questionnaire and diary 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 expenditure, income, wealth and housing values (termed statistical outliers) were investigated to determine whether there had been errors in entering the data and action was taken where necessary. Such values were also examined for their effect on aggregate income and expenditure estimates for Australia, but no action was deemed 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
- diaries are not all fully completed, but sufficient principal information is provided (for HES households only).

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).

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). For HES households, non-significant respondents who did not sufficiently complete either week one or two diaries, had their diary data imputed from a fully responding donor. If all significant persons within the household failed to supply either diaries, or if the questions relating to household's level of financial stress were not responded to, then the household was converted to a SIH household for sample retention.

Imputation for missing records and values continued

For the fourth type of partial response, the diary information provided is used to represent the missing information. For example, if the first week of diary entries is provided but not the second week, then the first week of expenditure is used to represent expenditure for the second week.

Donor records are randomly selected by finding fully responding persons with matching information on multiple characteristics (such as state, sex, age, labour force status, income and expenditure) 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 5,419 households which had at least one imputed value in income, assets and liabilities, or child care expenses. For 53.7% of these households only a single value was missing, and most of these were for income from interest and investments or information relating to household loans. The final HES sample includes 3,353 households which had at least one imputed value in either income, assets and liabilities or expenditure reported in the household questionnaire. For 49.9% of these households, only a single value was missing and most of these were for superannuation assets or a minor source of income for the household.

2.7 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 and HES provide 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 2007–08 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 2009–10 SIH and HES. The 2009–10 SIH and HES collected information on Baby Bonus payments received in the previous financial year, but 'current' estimates of Baby Bonus payments could not be collected in the same way as other pensions and allowances. Baby Bonus payments should occur in the first year of the child's birth, but not all recipients entitled to the Baby Bonus would have received the payment by the time of interview so the estimates of current income from Baby Bonus payments were modelled. They were treated as though they were paid evenly through the year, so the payment allocated to eligible recipients was the amount of the payment divided by 52.14. The payment was assigned to each family with a child aged under 1 year old at the time of interview. The family was assigned a payment for each eligible child.

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 2009–10 SIH.

2.8 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, income units 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 one 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 account for changes in the sample across the four quarters of the sample enumeration; the sum of the weights after this initial adjustment of households in each quarter is equal. In this survey cycle, as in the 2007–08 SIH, the four quarters of survey enumeration have been aligned across the financial year with pension indexation dates rather than calendar quarters to better control sample allocation.

The quarterly adjusted initial weights for SIH 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.

In the 2009–10 SIH, all persons in each household were assigned a quarterly adjusted initial income weight. The 2009–10 SIH was benchmarked to the in scope estimated resident population (ERP) and the estimated number of households in the population. The 2009–10 SIH used population and household benchmarks based on the 2006 Census.

The benchmarks used in the calibration of the final weights for the 2009–10 SIH were:

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

The benchmark for the value of government benefit cash transfers, was used for 2009–10 because, without it, the survey estimates of the number of people receiving income from government benefit cash transfers was lower (81% coverage) than the expected 85% coverage of payments reported by the Department of Families, Housing, Community Services and Indigenous Affairs; the Department of Veteran's Affairs; and the Department of Education, Employment and Workplace Relations. This benchmark was last used in

BENCHMARKS AND WEIGHTING *continued*

compiling results from the 2000–01 SIH. The benchmark is intended to address likely differences between the characteristics of those who did not respond. The economic circumstances between 2007–08 and 2009–10 SIH collections saw strong growth in the number of recipients for the Age Pension and Disability Support Pensions. Introducing an additional benchmark is a means of addressing this. The benchmark ensured 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.

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 HES survey was benchmarked to the in scope ERP and to a number of estimates produced from the SIH.

The population benchmarks used in the calibration of the final weights for the 2009–10 HES were:

- number of persons —
  - by state or territory by age by sex
    - five year age groups up to 80+ years for all states and territories (excluding Tas. and the NT)
    - five year age groups up to 75+ years for Tas.
    - five year age groups up to 70+ years for the NT
  - by state or the ACT by labour force status ('Employed', 'Unemployed' and 'Not in the labour force')
  - by state by capital city/balance of state (excluding the NT and the ACT which use only state)
- number of households —
  - by household composition (number of adults (1, 2 or 3+) and whether or not the household contains children; excluding the NT which uses only number of adults of 1+).

In addition to the population benchmarks presented above, the following SIH estimates were used as benchmarks at the state level in weighting the HES sample:

- total weekly household income from all sources
- total current weekly household income from own unincorporated business
- total current weekly household employee income
- total current weekly household income from government pensions and allowances
- total number of households in each tenure type.

In weighting the pensioner sample, independent initial probability weights were assigned to the pensioner sample as it was selected separately from the SIH and HES samples. The initial probability weights were then adjusted by the results of the first phase screening results with respect to the observed proportion of identified screened pensioner households. This pensioner sample was only able to be collected in three of the four quarters of survey enumeration and the initial probability weights were further adjusted accordingly.

BENCHMARKS AND WEIGHTING *continued*

The pensioner weighted estimates for persons, households and income were aligned to those obtained from the SIH sample for the combined quarters 2, 3 and 4 of survey enumeration. This calibration of pensioner person, household and income estimates to (pensioner household only) SIH estimates reduces the impact of potential non-sampling errors (arising from the pensioner sample undercoverage) in the pensioner expenditure estimates which are the key outputs of the collected data from the expanded pensioner household sample.

The SIH sample pseudo-benchmarks used in the calibration of the final weights for the 2009–10 additional pensioner sample were:

- number of persons
- number of households
- total weekly household income from all sources

as estimated by the SIH sample for persons living in age pensioner or other pension recipient households respectively for the combined period of quarters 2, 3 and 4 of enumeration.

Composite estimation

In order to derive the most accurate combined estimates from the SIH, HES and additional pensioner samples, composite estimation was used. This process calculates the optimal proportions for combining the pensioner sample and main SIH and HES samples for age pensioner households and other pension beneficiary households at a state by quarter of enumeration level.

The composite estimates are given by:

$$\hat{Y}_{Composite} = \alpha\hat{Y}_{HIES} + (1-\alpha)\hat{Y}_{PHES}$$

Where $\hat{Y}_{composite}$ is the final composite estimate of some population parameter, $\hat{Y}_{HIES}$ is the SIH and /or HES sample estimate, $\hat{Y}_{PHES}$ is the pensioner estimate of that same population parameter. The composite estimation coefficients $(\alpha, 1-\alpha)$ of the optimal proportions are the values that minimise the Root Mean Square Error of the composite estimate, assuming that $\hat{Y}_{HIES}$ is an unbiased estimate while $\hat{Y}_{PHES}$ has potential non-sampling error.

The income and expenditure weights are then multiplied by α (for SIH and HES sample) and $1-\alpha$ (for the additional pensioner sample) to achieve the optimised composite weights.

Consistency of SIH and HES estimates

After the main HES sample and the pensioner sample were combined through composite estimation, the SIH estimates were included again as final benchmarks to increase the comparability between the surveys and improve the reliability of income estimates produced from the HES. The following SIH estimates were used as benchmarks:

- number of persons —
  - by state or territory by age by sex
    - five year age groups up to 80+ years for all states and territories (excluding Tas. and the NT)
    - five year age groups up to 75+ years for Tas.
    - five year age groups up to 70+ years for the NT

Consistency of SIH and HES estimates continued

  - by state or the ACT by labour force status ('Employed', 'Unemployed' and 'Not in the labour force')
  - by state by capital city/balance of state (excluding the NT and the ACT which use only state)
- number of households —
  - by household composition (number of adults (1, 2 or 3+) and whether or not the household contains children; excluding the NT which uses only number of adults of 1+)
- total weekly household income from all sources by state
- current weekly household income from own unincorporated business by state
- current weekly household income from wages and salaries by state
- current weekly household income from government pensions and allowances by state
- household tenure type by state.

This means that estimates produced using the HES sample for the aggregates used as benchmarks will be the same as the estimates produced using the SIH sample.

Although the SIH and HES are integrated, the estimates for common items published in *Household Income and Income Distribution, Australia, 2009–10* (cat. no. 6523.0) and *Household Expenditure Survey, Australia: Summary of Results, 2009–10* (cat. no. 6530.0) are unlikely to have exactly the same values, unless calibrated to do so. The estimates taken only from the HES subsample are subject to greater sampling variability than the full SIH estimates.

ESTIMATION

Estimates produced from the SIH and HES 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.

ESTIMATION *continued*

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.

Averages for expenditure are obtained by adding the weighted household values, and then dividing by the estimated number of households. For example, average weekly expenditure on clothing and footwear by Victorian households is the weighted sum of the average weekly expenditure of each selected household in Victoria who reported such expenditure, divided by the estimated number of households in Victoria. Note that the denominator is the total number of households and not just the number of households which reported expenditure on a particular item.

2.9 CALCULATION OF POPULATION 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 and HES 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'.

2.10 RELIABILITY OF ESTIMATES

RELIABILITY OF ESTIMATES

The estimates provided from the SIH and the HES 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 2009–10 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 extensive editing and quality control procedures at all stages of 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 and HES 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
- ensuring that the HES weighted data is consistent with the larger SIH sample by aligning the key HES income estimates with the key SIH estimates.

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 and the HES 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 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 with RSEs of 25% or more are not considered reliable for most 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 50% or less.

RSEs for the SIH and the HES 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 subgroup of the denominator group, the formula for an approximate RSE is given by:

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

The RSE estimates for proportions listed in SIH and HES published output fully calculate the effect of correlations between the numerator and the denominator.

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 be lower than that derived from this approximation.

Significance testing

For comparing estimates between surveys or between populations within a survey, it is useful to determine whether apparent differences are 'real' differences between the corresponding population characteristics or simply the result of sampling variability between the survey samples. 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 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 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 2009–10 SIH and HES 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 2009–10 SIH and HES are listed below. All can be downloaded free of charge from the ABS website: <www.abs.gov.au>.

User Guide

This publication, *Household Expenditure Survey and Survey of Income and Housing User Guide, Australia, 2009–10* (cat. no. 6503.0) describes the definitions, concepts, methodology and estimation procedures used in the 2009–10 SIH and HES. Additional material available as part of this publication include the questionnaires, diaries, interviewer prompt cards, a list of SIH and HES output data items and the HEC. For further information see Part 3.3 'Supporting material'.

This publication also incorporates information about the 2009–10 SIH and HES CURFs, previously published separately in *Technical Manual: Survey of Income and Housing – Confidentialised Unit Record Files, Australia, 2007–08* (cat. no. 6541.0). And in *Technical Manual: Household Expenditure Survey and Survey of Income and Housing – Confidentialised Unit Record Files, Australia, 2003–04* (cat. no. 6540.0.00.001).

Income

Household Income and Income Distribution, Australia, 2009–10 (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 2009–10 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.

Expenditure

Household Expenditure Survey: Summary of Results, Australia, 2009–10 (cat. no. 6530.0) presents a summary of the results from the 2009–10 HES. It contains information on expenditure, income, net worth and other characteristics of households. Emphasis is given to highlighting the different weekly expenditure patterns of households with various characteristics (e.g. income levels and sources, geographic location and family composition of the household). Detailed tables also show expenditure estimates at the finest level of detail – cross classified by income quintile and state/territory of usual residence and other household characteristics. Previously the detailed expenditure tables were published in a separate publication, *Household Expenditure Survey, Australia, Detailed Expenditure Items, 2003–04* (cat. no. 6535.0.55.001).

Wealth

Household Wealth and Wealth Distribution, Australia, 2009–10 (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. This publication is expected to be released in October 2011.

Housing

Housing Occupancy and Costs, Australia, 2009–10 (cat. no. 4130.0) presents data from the 2009–10 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

Housing continued

the value of dwelling estimates and information on recent home buyers. This publication is expected to be released in November 2011.

Other

Government Benefits, Taxes and Household Income, Australia, 2009–10 (cat. no. 6537.0) presents the results from the 2009–10 HES, together with data from government finance and other sources, that were used to model selected indirect taxes paid – and indirect benefits received – for households by selected characteristics, such as source and level of income and family composition. This publication is expected to be released in mid 2012.

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.

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.

This material includes:

- a representation of the computer assisted interview questionnaire used in the SIH and HES, which is available on the ABS website: <www.abs.gov.au>. It can be accessed from the 'Downloads' tab of the website entry for this publication
- the expenditure diary, which was placed with all persons aged 15 years and over in HES households
- the SIH and HES prompt cards
- the Household Expenditure Classification (HEC), used to classify the HES expenditure data, which is described in Appendix 6, can also be accessed from the 'Downloads' tab. It includes an indication of how the expenditure for each HEC item was collected a concordance detailing those expenditure items which have changed since 2003–04 and their corresponding 2009–10 classification
- the HEC coding list, which lists the goods and services included in the detailed HEC codes, and is presented in Appendix 7. The list is in both numeric and alphabetical order
- a Classification of Individual Consumption According to Purpose (COICOP) and HEC concordance, in data cube format, is provided in Appendix 8, which is also available from the 'Downloads' tab.

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 the survey respondents can be supplied. 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.

Two microdata files are available from this survey:

- a Basic SIH and HES CURF is available on CD-ROM or through the Remote Access Data Laboratory (RADL)
- an Expanded SIH and HES CURF is accessible only through the RADL.

For more information see Part 5. 'Confidentialised Unit Record Files'.

CHANGES FROM PREVIOUS SURVEYS

A number of changes have been made to the SIH since it was first conducted in 1994–95. Similarly, many changes have also been made to the HES since it was first conducted in 1974–75. 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 and HES 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 AND HES SAMPLE SIZES

	CAPITAL CITY	*BALANCE OF STATE*	*TOTAL*
	no.	no.	no.
SIH			
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
HES			
1984	6 896	2 675	9 571
1988–89	5 263	2 142	7 405
1993–94	6 107	2 282	8 389
1998–99	4 795	2 098	6 893
2003–04	4 907	2 050	6 957
2009–10	7 906	1 868	9 774

4.1 CHANGES IN THE 2009–10 SIH AND HES

CHANGES IN THE 2009–10 SIH

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:

- 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 IN THE 2009–10 HES

The 2009–10 HES content was largely similar to the 2003–04 HES with some changes in questions, definitions and methodology. Key changes to the collection include:

- an increase in the sample size from 6,957 households in 2003–04 to 9,774 households in 2009–10 due to the inclusion of an additional sample of metropolitan households whose main source of income was a government pension, benefit and/or allowance
- improvements, aligning with international statistical standards to the collection of income statistics
- the incorporation of non-cash benefits used by employees to improve the coverage of consumption expenditure and to ensure consistency with the conceptual treatment of income
- a small number of changes to some Household Expenditure Classification (HEC) categories, particularly to address emerging technologies between the survey cycles. For details see Appendix 7 of this User Guide
- disability questions for persons aged 15 and over were asked in the 2009–10 HES (last collected in HES in 1998–99)
- the inclusion of expenditure classified by the Classification of Individual Consumption According to Purpose (COICOP).

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 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 and HES samples. The main purpose of the inclusion of this

CHANGES TO THE SURVEY SAMPLE FOR THE SIH AND HES *continued*

additional sample was for the development of a Pensioner and Beneficiary Living Costs Index (PBLCI), which is part of the revised process for indexing age and other pensions. The pensioner sample also supported improved commodity weighting for the PBLCI to better reflect the different expenditure patterns of pensioner households compared with the general population.

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.

- 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. In 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.

A number of previous basis income items from earlier SIH and HES cycles are now no longer available, but the '2005–06 basis' income items have been included to support analysis on the basis used prior to the introduction of the new income standards.

Expenditure measures

To ensure consistency with the conceptual treatment of income introduced by the revision of household income standards, the 2009–10 HES includes some improvements to the treatment of non-cash benefits and salary sacrifice in household expenditure estimates. Non-cash benefits used by employees incorporated to improve the coverage of consumption expenditure, and improvements to inclusion of expenditures via salary sacrifice for vehicles have been implemented.

NON-CASH BENEFITS

Most employee remuneration is in a monetary form. However a substantial number of employees receive other benefits in the form of goods and services i.e. non-cash benefits. Examples include the use of motor vehicles, provision of a computer, subsidised child care, housing rent free or at less than normal market rent, car parking, superannuation (employer contributions above the minimum compulsory contributions) and low interest loans. Information on non-cash benefits provided by employers has been collected from wage and salary earners and owners of incorporated businesses, commencing in 2003–04 and were included for the first time in the estimates of income in 2007–08. Items provided free or at a reduced cost by employers to employees for their

Expenditure measures continued

NON-CASH BENEFITS *continued*

own private use are regarded as expenditure in-kind. These estimates of expenditure in-kind have been included in the expenditure estimates for the first time in 2009–10.

SALARY SACRIFICE

More detailed information was collected for salary sacrifice on motor vehicles in the 2009–10 HES to improve the expenditure estimates for this type of expenditure. The additional information captured within the questionnaire was used to model the value of expenditure on motor vehicles and associated running costs such as fuel, insurance, registration, servicing and tyres.

The following table shows the estimated impact of these changes on the HES 2009–10 expenditure estimates.

TABLE 4.1.1 WEEKLY EXPENDITURE, NEW AND FORMER BASIS

	New basis	*Former basis*	*Difference*	
	$	$	$	%
Broad expenditure group				
Goods and services				
Current housing costs (selected dwelling)	223	221	2	1.0
Domestic fuel and power	33	33	—	—
Food and non-alcoholic beverages	204	204	—	—
Alcoholic beverages	32	32	—	—
Tobacco products	13	13	—	—
Clothing and footwear	44	44	—	—
Household furnishings and equipment	59	59	—	—
Household services and operation	68	66	2	2.8
Medical care and health expenses	66	66	—	—
Transport	193	163	30	18.6
Recreation	161	160	2	1.1
Personal care	24	24	—	—
Miscellaneous goods and services	117	114	2	2.2
Total goods and services expenditure	***1 236***	***1 198***	***38***	***3.2***
Selected other payments				
Income tax	260	260	—	—
Mortgage repayments - principal (selected dwelling)	49	49	—	—
Superannuation and life insurance	74	68	6	8.6
Total	***1 620***	***1 575***	***44***	***2.8***

— nil or rounded to zero (including null cells)

CLASSIFICATION OF EXPENDITURE

The commodity codes for the HEC are largely the same as in 2003–04 with a small number of changes, particularly to address emerging technologies between the survey cycles. For the list of commodity codes for 2009–10 HES see Appendix 7. The expenditure estimates have also been derived for the COICOP for the first time in 2009–10. The total expenditure estimates differ between the two classifications due to scope differences, in particular the COICOP includes estimates of imputed rent but this is out of scope for the HEC. For details of the concordance between HEC and COICOP see Appendix 8.

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 and HES, 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 and HES were 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.

4.2 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 that could impact on all data items were:

- the final sample size of the SIH, which decreased from 9,961 in 2005–06 to 9,345 in 2007–08
- benchmarks based on the 2006 Census were 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
- the 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 related to specific data items.

Improvements to income measures

The ABS undertook a major review of its income standards, to ensure that its standards and practices 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 were the first to apply the changes.

The income measures used in the 2007–08 SIH included changes to employment income, investment income, lump sum payments and financial support. Specific changes in the income measures used in the 2007–08 survey were:

- Employment income included 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 included non-cash benefits, bonuses, termination payments and payments for irregular overtime.
- Interest paid on money borrowed to purchase shares or units in trusts was 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 was classified to investment income rather than unincorporated business income. This change did not affect trust income resulting from the recipient working in their own business, which continued to be classified as unincorporated business income. The questions developed to effect this change also improved the reporting of income from these sources.
- Lump sum workers' compensation receipts were included.
- A wider range of data on financial support received from family members resident outside the household was included. In addition to regular payments previously collected, financial support was 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.

Improvements to income measures continued

Some limits were 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 and workers' compensation payments.

Refer to Appendix 4 'Improvements to income statistics' in *Information Paper: Survey of Income and Housing, User Guide, Australia, 2007–08* (cat. no. 6553.0) for more information on the changes to income measures.

Inclusion of child care data

There were additional questions on the use of child care, including preschool for a selected child, covering: type; time used; costs; and Child Care Benefit (CCB) 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 2007–08 SIH 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 the 2007–08 SIH, housing topics included 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, 2007–08' in *Information Paper: Survey of Income and Housing, User Guide, Australia, 2007–08* (cat. no. 6553.0).

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 the 2007–08 SIH, 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 were included at the person level relating to tenure, landlord type and weekly rent payments. New data items were also included at the income unit level relating to tenure and landlord type. The information was previously available from the 2002–03 SIH.

Improvement in selection of household reference person

Improvements were made in the way the household reference person was identified in the 2007–08 SIH. In the 2005–06 SIH, 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, particularly for 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 relationship income and age). In the 2007–08 SIH, tenure was added as a criterion in determining the household

Improvement in selection of household reference person continued

reference person. See the Glossary for detailed information about the selection criteria used to identify the household reference person.

Commonwealth Rent Assistance (CRA)

New data items were included at the income unit and person levels relating to the receipt of CRA and the amount received. 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 is paid in conjunction with that other payment. Reported amounts of CRA 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 contained those data items, but also included a new loans level that contained data items relating to each reported loan belonging to a household.

Other changes

Some changes were implemented within the derivation process to correct errors detected when calculating the disposable income for some households in receipt of tax offsets. Estimates for the 2005–06 SIH were updated and reflected in the 2007–08 publication.

4.3 CHANGES IN THE 2005–06 SIH

CHANGES IN THE 2005–06 SIH

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

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

- the 2003–04 SIH was integrated with the HES whereas the 2005–06 survey was run as a stand-alone survey
- the final sample size decreased from 11,361 household in 2003–04 to 9,961 in 2005–06
- the scope of the survey was changed slightly. In the 2003–04 SIH, all people living in Indigenous communities were out of scope; in the 2005–06 SIH they were out of scope only if they were living in very remote areas
- the benchmarks used were based on the 2001 Census, and these benchmarks were consistent with the scope of the survey in that people living in very remote areas in all states and territories were excluded. In the 2003–04 SIH, the benchmarks used 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 the 2005–06 SIH estimates
- imputation procedures were changed - all households where one or more people did not respond were treated as non-responding; in the 2003–04 SIH 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 related to specific data items.

Inclusion of all salary sacrificed income

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

Improvements to Family Tax Benefit (FTB) estimates

Improvements were made to estimates relating to current income from the FTB. Prior to the 2005–06 SIH, 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 the 2005–06 SIH 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 the 2005–06 SIH were modelled using information on income and household demographics reported in the survey. All income aggregates included the new item. It should be noted

Improvements to Family Tax Benefit (FTB) estimates continued

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 was defined as the sum of rent payments; rates payments; and mortgage or unsecured loan payments if the initial purpose was primarily to buy, add to, 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 payments 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 were included in the gross income estimates in 2005–06.

4.4 CHANGES IN THE 2003–04 SIH AND HES

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 were:

- respondent burden is lower
- the data collection costs are lower
- the resultant dataset is a richer suite of data because HES and SIH results are more comparable than data obtained prior to 2003–04.

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 was 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

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 SIH and HES.

Changes to survey methodology

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)

Changes to survey methodology continued

- interviewer use of a laptop computer (this may have improved data capture)
- editing and imputation procedures were changed — in particular because the SIH sample was no longer drawn from households who had participated in the MPS, responses given in the MPS were 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 (i.e. for purposes other than building, buying, altering or adding to the selected dwelling) excludes mortgages that were used for business or investment purposes.

4.5 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 were incorporated
- the introduction of new standards, (e.g. the introduction of the *Australian Standard Classification of Occupations, Second Edition (ASCO)* (cat. no. 1220.0) in the 1996–97 SIH).

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 were 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.

PART 5 CONFIDENTIALISED UNIT RECORD FILES

INTRODUCTION

This part provides information about the Basic and Expanded Confidentialised Unit Record Files (CURFs) from the 2009–10 SIH and HES. Four microdata files are available from these surveys:

- a Basic SIH CURF available on CD–ROM or through the Remote Access Data Laboratory (RADL)
- a Basic HES CURF available on CD–ROM or through the RADL
- an Expanded SIH CURF accessible only through the RADL, and
- an Expanded HES CURF accessible only through the RADL.

The Expanded CURFs contain more detailed data for some variables than the Basic CURFs, as well as some additional variables.

The RADL is a secure on–line data query service that clients can access via the ABS website. Because the CURFs are kept within the ABS environment, the ABS is able to release more detailed data via the RADL than can be made available on CD–ROM. Further information about this facility is available on the ABS website: <www.abs.gov.au> (see Services, ABS Microdata).

A second version of the HES CURFs will be released in mid 2012 incorporating the estimates produced in the study of the effects of government benefits and taxes on household income.

Data users interested in finding out more about the CURFs should contact the Microdata Access Strategies Section of the ABS by email at <microdata.access@abs.gov.au> or by telephone on (02) 6252 7714.

ABOUT THE CURFS

The 2009–10 CURFs contain unit records relating to almost all of the survey respondents. The data are released under the *Census and Statistics Act 1905*, which has provision for the release of data in the form of unit records where the information is not likely to enable the identification of a particular person or organisation. Accordingly, there are no names or addresses of survey respondents on the CURFs and other steps, including the following list of actions, have been taken to protect the confidentiality of respondents:

- For the Basic CURF, persons were removed from all households with seven or more persons to reduce them to a maximum household size of six. This was done across a variety of ages rather than targeting specific age groups to minimise the number of young children deleted from the file and also to minimise the impact on family and relationship coding of other people in the household. This also resulted in the deletion of several whole income units, mainly comprising a single person record only. A total of 122 persons aged under 15 years were dropped and 53 persons aged 15 years or over were dropped.
- For the Expanded CURFs, a similar approach was taken where households with nine or more persons were reduced to a maximum household size of eight. A total of 13 persons aged under 15 years were dropped and five persons aged 15 years or over were dropped.
- The level of detail for many data items has been reduced (e.g. state of usual residence of the ACT and the NT have been combined as ACT/NT for the Basic CURFs, but shown individually for the Expanded CURFs; area of usual residence for the ACT and NT has not been made available on the CURFs).
- All income items, and some wealth, expenditure and loan data have been perturbed.

ABOUT THE CURFS *continued*

- Some variables have had values ranged, collapsed or topcoded.
- Changes have been made to some records to protect against identification. Amendments have been made to household level variables and/or person level variables such as state, area, remoteness, age, educational qualifications, industry and/or occupation.

As a consequence, aggregated data obtained from the CURFs are slightly different to that published in *Household Income and Income Distribution, Australia, 2009–10* (cat. no. 6523.0), *Household Expenditure Survey, Australia: Summary of Results, 2009–10* (cat. no. 6530.0), *Household Wealth and Wealth Distribution, Australia, 2009–10* (cat. no. 6554.0) and *Housing Occupancy and Costs, Australia, 2009–10* (cat. no. 4130.0.55.001). See Part 5.3 of this User Guide for more information.

Steps to confidentialise the datasets made available on the CURFs are undertaken in such a way as to ensure the integrity of the datasets and optimise the content, while maintaining the confidentiality of respondents. Intending purchasers should ensure that the data they require at the level of detail they require are available on the CURFs; data obtained in the survey but not contained on the CURFs may be available in tabulated form on request. Appendix 5 contains information about the complete list of data items and categories on the Basic and Expanded CURFs which is available as a datacube: 'Appendix 5 'CURF Data items and record structure' accompanying this User Guide.

5.1 USING THE CURF DATA

CONTENTS OF THE CURFS

Separate files have been produced for the SIH and HES samples. However, most data items on the SIH CURF are also on the HES CURF, and for those households in the HES subsample, the information on the SIH CURF and the HES CURF for common items is identical. The weights for these households are different on the SIH and HES CURFs, reflecting the differing chance of selection in the two surveys. The SIH CURF includes additional households, while the HES CURF includes additional data items, largely relating to expenditure and financial stress. This chapter provides details of the files included on each CURF.

SIH BASIC CURF FILE CONTENTS

The SIH Basic CURF distributed on CD–ROM or via the RADL contains the following files:

Raw data:

These files contain the raw confidentialised survey data in hierarchical comma delimited ASCII text format.

SIH10B.CSV contains all levels data

SIH10BH.CSV contains the Household level data

SIH10BI.CSV contains the Income unit level data

SIH10BP.CSV contains the Person level data

SIH10BL.CSV contains the Loans level data

SAS files:

These files contain the data for the CURF in SAS for Windows format.

SIH10BH.sas7bdat contains the Household level data

SIH10BI.sas7bdat contains the Income unit level data

SIH10BP.sas7bdat contains the Person level data

SIH10BL.sas7bdat contains the Loans level data

SPSS files:

These files contain the data for the CURF in SPSS for Windows format.

SIH10BH.SAV contains the Household level data

SIH10BI.SAV contains the Income unit level data

SIH10BP.SAV contains the Person level data

SIH10BL.SAV contains the Loans level data

STATA files:

These files contain the data for the CURF in STATA format.

SIH10BH.DTA contains the Household level data

SIH10BI.DTA contains the Income unit level data

SIH10BP.DTA contains the Person level data

SIH10BL.DTA contains the Loans level data

Information files:

FORMATS.sas7bcat

Information files: continued

This file is a SAS library containing formats.

SIH10B.SAS

This file contains a SAS program to run the SAS formats.

README.TXT

This is a text file describing the file contents of the CURF.

COPYRITE1.BAT

This file describes Copyright obligations for CURF users.

HES AND SIH USER GUIDE.PDF

This file contains information about using the Household Expenditure Survey and the Survey of Income and Housing confidentialised unit record files (CURFs).

Frequency files:

FREQUENCIES_SIH10BH.TXT

This file contains documentation of the Household level data. Data item code values and category labels are provided with weighted and unweighted household frequencies of each value. This file is in plain text format.

FREQUENCIES_SIH10BI.TXT

This file contains documentation of the Income Unit level data. Data item code values and category labels are provided with weighted and unweighted income unit frequencies of each value. This file is in plain text format.

FREQUENCIES_SIH10BP.TXT

This file contains documentation of the Person level data. Data item code values and category labels are provided with weighted and unweighted person frequencies of each value. This file is in plain text format.

FREQUENCIES_SIH10BL.TXT

This file contains documentation of the Loans level data. Data item code values and category labels are provided with weighted and unweighted loans frequencies of each value. This file is in plain text format.

SIH EXPANDED CURF FILE CONTENTS

The SIH Expanded CURF can only be accessed via the RADL and contains the following files:

Test files:

The test files mirror the actual data files, but have random data and random identifiers. These files are on the RADL website and can be downloaded so users can use these to trouble shoot their code prior to submitting RADL jobs.

SIH10EH.sas7bdat contains the test file of Household level data in SAS for Windows format

SIH10EI.sas7bdat contains the test file of Income unit level data in SAS for Windows format

Test files: continued

SIH10EP.sas7bdat contains the test file of Person level data in SAS for Windows format

SIH10EL.sas7bdat contains the test file of Loans level data in SAS for Windows format

SIH10EH.SAV contains the test file of Household level data in SPSS format

SIH10EI.SAV contains the test file of Income unit level data in SPSS format

SIH10EP.SAV contains the test file of Person level data in SPSS format

SIH10EL.SAV contains the test file of Loans level data in SPSS format

SIH10EH.DTA contains the test file of Household level data in STATA format

SIH10EI.DTA contains the test file of Income unit level data in STATA format

SIH10EP.DTA contains the test file of Person level data in STATA format

SIH10EL.DTA contains the test file of Loans level data in STATA format

Main files:

SIH10EH.sas7bdat contains the file of Household level data in SAS for Windows format

SIH10EI.sas7bdat contains the file of Income unit level data in SAS for Windows format

SIH10EP.sas7bdat contains the file of Person level data in SAS for Windows format

SIH10EP.sas7bdat contains the file of Loans level data in SAS for Windows format

SIH10EH.SAV contains the file of Household level data in SPSS format

SIH10EI.SAV contains the file of Income unit level data in SPSS format

SIH10EP.SAV contains the file of Person level data in SPSS format

SIH10EL.SAV contains the file of Loans level data in SPSS format

SIH10EH.DTA contains the file of Household level data in STATA format

SIH10EI.DTA contains the file of Income unit level data in STATA format

SIH10EP.DTA contains the file of Person level data in STATA format

SIH10EL.DTA contains the file of Loans level data in STATA format

Information files:

FORMATS.sas7bcat

This file is a SAS library containing formats.

Frequency files:

FREQUENCIES_SIH10EH.TXT

This file contains documentation of the Household level data. Data item code values and category labels are provided with weighted and unweighted household frequencies of each value. This file is in plain text format.

FREQUENCIES_SIH10EI.TXT

This file contains documentation of the Income Unit level data. Data item code values and category labels are provided with weighted and unweighted income unit frequencies of each value. This file is in plain text format.

Frequency files: continued

FREQUENCIES_SIH10EP.TXT

This file contains documentation of the Person level data. Data item code values and category labels are provided with weighted and unweighted person frequencies of each value. This file is in plain text format.

FREQUENCIES_SIH10EL.TXT

This file contains documentation of the Loans level data. Data item code values and category labels are provided with weighted and unweighted loan frequencies of each value. This file is in plain text format.

HES BASIC CURF FILE CONTENTS

The HES Basic CURF distributed on CD–ROM or via the RADL contains the following files:

Raw data:

These files contain the raw confidentialised survey data in hierarchical comma delimited ASCII text format.

HES10B.CSV contains all levels data

HES10BH.CSV contains the Household level data

HES10BI.CSV contains the Income unit level data

HES10BP.CSV contains the Person level data

HES10BL.CSV contains the Loans level data

HES10BX.CSV contains the Expenditure level data

HES10BXC.CSV contains the COICOP level data

SAS files:

These files contain the data for the CURF in SAS for Windows format.

HES10BH.sas7bdat contains the Household level data

HES10BI.sas7bdat contains the Income unit level data

HES10BP.sas7bdat contains the Person level data

HES10BL.sas7bdat contains the Loans level data

HES10BX.sas7bdat contains the Expenditure (HEC) level data

HES10BXC.sas7bdat contains the Expenditure (COICOP) level data

SPSS files:

These files contain the data for the CURF in SPSS for Windows format.

HES10BH.SAV contains the Household level data

HES10BI.SAV contains the Income unit level data

HES10BP.SAV contains the Person level data

HES10BL.SAV contains the Loans level data

HES10BX.SAV contains the Expenditure (HEC) level data

SPSS files: continued

HES10BXC.SAV contains the Expenditure (COICOP) level data

STATA files:

These files contain the data for the CURF in STATA format.

HES10BH.DTA contains the Household level data

HES10BI.DTA contains the Income unit level data

HES10BP.DTA contains the Person level data

HES10BL.DTA contains the Loans level data

HES10BX.DTA contains the Expenditure (HEC) level data

HES10BXC.DTA contains the Expenditure (COICOP) level data

Information files:

FORMATS.sas7bcat

This file is a SAS library containing formats.

HES10B.SAS

This file contains a SAS program to run the SAS formats.

README.TXT

This is a text file describing the file contents of the CURF.

COPYRITE1.BAT

This file describes Copyright obligations for CURF users.

HES AND SIH USER GUIDE.PDF

This file contains information about using the Household Expenditure Survey and the Survey of Income and Housing confidentilaised unit record files (CURFs).

Frequency files:

FREQUENCIES_HES10BH.TXT

This file contains documentation of the Household level data. Data item code values and category labels are provided with weighted and unweighted household frequencies of each value. This file is in plain text format.

FREQUENCIES_HES10BI.TXT

This file contains documentation of the Income Unit level data. Data item code values and category labels are provided with weighted and unweighted income unit frequencies of each value. This file is in plain text format.

FREQUENCIES_HES10BP.TXT

This file contains documentation of the Person level data. Data item code values and category labels are provided with weighted and unweighted person frequencies of each value. This file is in plain text format.

FREQUENCIES_HES10BL.TXT

Frequency files: continued

This file contains documentation of the Loans level data. Data item code values and category labels are provided with weighted and unweighted loans frequencies of each value. This file is in plain text format.

FREQUENCIES_HES10BX.TXT

This file contains documentation of the Expenditure (HEC) level data. Data item code values and category labels are provided with unweighted expenditure frequencies of each value. This file is in plain text format.

FREQUENCIES HES10BXC.TXT

This file contains documentation of the Expenditure (COICOP) level data. Data item code values and category labels are provided with unweighted expenditure frequencies of each value. This file is in plain text format.

HES EXPANDED CURF FILE CONTENTS

The HES Expanded CURF can only be accessed via the RADL and contains the following files:

Test files:

The test files mirror the actual data files, but have random data and random identifiers. These files are on the RADL website and can be downloaded so users can use these to trouble shoot their code prior to submitting RADL jobs.

HES10EH.sas7bdat contains the test file of Household level data in SAS for Windows format

HES10EI.sas7bdat contains the test file of Income unit level data in SAS for Windows format

HES10EP.sas7bdat contains the test file of Person level data in SAS for Windows format

HES10EL.sas7bdat contains the test file of Loans level data in SAS for Windows format

HES10EX.sas7bdat contains the test file of Expenditure (HEC) level data in SAS for Windows format

HES10EXC.sas7bdat contains the test file of Expenditure (COICOP) level data in SAS for Windows format

HES10EH.SAV contains the test file of Household level data in SPSS format

HES10EI.SAV contains the test file of Income unit level data in SPSS format

HES10EP.SAV contains the test file of Person level data in SPSS format

HES10EL.SAV contains the test file of Loans level data in SPSS format

HES10EX.SAV contains the test file of Expenditure (HEC) level data in SPSS format

HES10EXC.SAV contains the test file of Expenditure (COICOP) level data in SPSS format

HES10EH.DTA contains the test file of Household level data in STATA format

HES10EI.DTA contains the test file of Income unit level data in STATA format

HES10EP.DTA contains the test file of Person level data in STATA format

Test files: continued

HES10EL.DTA contains the test file of Loans level data in STATA format

HES10EX.DTA contains the test file of Expenditure (HEC) level data in STATA format

HES10EXC.DTA contains the test file of Expenditure (COICOP) level data in STATA format

Main files:

HES10EH.sas7bdat contains the file of Household level data in SAS for Windows format

HES10EI.sas7bdat contains the file of Income unit level data in SAS for Windows format

HES10EP.sas7bdat contains the file of Person level data in SAS for Windows format

HES10EP.sas7bdat contains the file of Loans level data in SAS for Windows format

HES10EX.sas7bdat contains the file of Expenditure (HEC) level data in SAS for Windows format

HES10EXC.sas7bdat contains the file of Expenditure (COICOP) level data in SAS for Windows format

HES10EH.SAV contains the file of Household level data in SPSS format

HES10EI.SAV contains the file of Income unit level data in SPSS format

HES10EP.SAV contains the file of Person level data in SPSS format

HES10EL.SAV contains the file of Loans level data in SPSS format

HES10EX.SAV contains the file of Expenditure (HEC) level data in SPSS format

HES10EXC.SAV contains the file of Expenditure (COICOP) level data in SPSS format

HES10EH.DTA contains the file of Household level data in STATA format

HES10EI.DTA contains the file of Income unit level data in STATA format

HES10EP.DTA contains the file of Person level data in STATA format

HES10EL.DTA contains the file of Loans level data in STATA format

HES10EX.DTA contains the file of Expenditure (HEC) level data in STATA format

HES10EXC.DTA contains the file of Expenditure (COICOP) level data in STATA format

Information files:

FORMATS.sas7bcat

This file is a SAS library containing formats.

Frequency files:

FREQUENCIES_HES10EH.TXT

This file contains documentation of the Household level data. Data item code values and category labels are provided with weighted and unweighted household frequencies of each value. This file is in plain text format.

FREQUENCIES_HES10EI.TXT

Frequency files: continued

This file contains documentation of the Income Unit level data. Data item code values and category labels are provided with weighted and unweighted income unit frequencies of each value. This file is in plain text format.

FREQUENCIES_HES10EP.TXT

This file contains documentation of the Person level data. Data item code values and category labels are provided with weighted and unweighted person frequencies of each value. This file is in plain text format.

FREQUENCIES_HES10EL.TXT

This file contains documentation of the Loans level data. Data item code values and category labels are provided with weighted and unweighted loan frequencies of each value. This file is in plain text format.

FREQUENCIES_HES10EX.TXT

This file contains documentation of the Expenditure (HEC) level data. Data item code values and category labels are provided with unweighted expenditure frequencies of each value. This file is in plain text format.

FREQUENCIES HES10EXC.TXT

This file contains documentation of the Expenditure (COICOP) level data. Data item code values and category labels are provided with unweighted expenditure frequencies of each value. This file is in plain text format.

DATA ITEMS

Data items included on the SIH and HES CURFs are listed in Appendix 5 'CURF data items and record structure'.

The data items included on the CURFs, and the categories within the data items, differ between the Basic and Expanded CURFs. The Expanded CURFs contain more variables than the Basic CURFs as well as more detailed data for selected variables. Appendix 5 'CURF Data items and record structure' datacube shows the differences between the 2009–10 Basic and Expanded CURFs (both SIH and HES). Many of the differences result from the difference in the maximum household size permitted on the Basic and Expanded CURFs. On the Basic CURFs, households with seven or more members have been reduced to a maximum of six, while on the Expanded CURFs households with nine or more people have been reduced to a maximum of eight.

RECORD TYPES

Each of the CURFs contain the following record levels:

- Household level – contains information such as state or territory and area (capital city/balance of state) of residence, housing characteristics (including tenure and housing costs), dwelling characteristics, household type and composition, household income by broad level source of income, imputed rent, demographic information, and some information relating to the household reference person; and on the HES CURF only, broad level expenditure and financial stress information.
- Income unit level – contains information such as income by broad level source of income, weekly rent payments, income unit type, selected housing characteristics (including tenure type and landlord type), child care use and costs, and demographic information.

RECORD TYPES continued

- Person level – contains information about age, sex, marital status, relationship in household, country of birth, year of arrival in Australia, family type, income unit type, labour force details, occupation and industry, education status, education qualifications and education institution attending, income by detailed source of income, barriers to labour force participation due to child care related reasons, and some information on personal assets. Person records exist only for persons aged 15 and over.
- Loans level – contains information about the characteristics of each loan, such as the main purpose, security, amount borrowed, principal outstanding and weekly repayment.

The HES CURFs contain the following additional record levels:

- Expenditure HEC level – contains information on expenditure classified by the Household Expenditure Classification (HEC) (including more than 600 categories).
- Expenditure COICOP level – contains information on expenditure classified by the Classification of Individual Consumption According to Purpose (COICOP) (including more than 40 categories).

Table 5.1.1 shows the number of records on each level.

TABLE 5.1.1 RECORD COUNTS, SIH AND HES, 2009–10

	SIH Basic	*SIH Expanded*	*HES Basic*	*HES Expanded*
Household	18 071	18 071	9 774	9 774
Income Unit	21 640	21 663	11 634	11 650
Person	33 946	33 994	17 919	17 952
Loans	10 007	10 007	4 713	4 713
Expenditure HEC	. .	. .	627 620	627 773
Expenditure COICOP	. .	. .	181 796	181 820

. . not applicable

IDENTIFIERS

There are several identifiers on records at each level of the file.

Each household has a unique random identifier. This identifier appears on the household level (ABSHID), and is repeated on the income unit, person, expenditure and loans level records relating to that household.

Each family within the household is numbered sequentially. Non family members, single person households and persons in group households have a sequential "family number" commencing at 50. Family number (ABSFID) appears on the income unit level and the person level. The combination of household and family number uniquely identifies a family.

A family has one or more income units and each income unit within the family is numbered sequentially. Income unit number (ABSIID) appears on the income unit level and the person level. The combination of household, family and income unit number uniquely identifies an income unit.

IDENTIFIERS continued

An income unit has one or more persons and each person within the income unit is numbered sequentially. Person number (ABSPID) appears on the person level. The combination of household, family, income unit and person number uniquely identifies a person.

A household may have one or more loans and each loan within the household is numbered sequentially. Loan number (ABSLID) appears on the loans level. The combination of a household and loan number uniquely identifies a loan.

All HES households have multiple expenditure records and each expenditure record within the household is numbered sequentially. Expenditure identifier (ABSEID) appears on the expenditure (HEC) level and expenditure identifier (ABSOID) appears on the expenditure (COICOP) level. The combination of a household identifier and expenditure identifier uniquely identifies an expenditure record.

Households in the HES subsample have the same identifiers on both the SIH and HES CURFs.

CHILDREN UNDER 15

Children under 15 do not have their own person level record on the file. Information on the number and ages of such children was collected and is included on the household and income unit level files. Extra information on children was collected in the HES and is included on the household level of the HES files – this includes details of the type of school attended and income.

USE OF WEIGHTS

As the survey was conducted on a sample of private households in Australia, it is important to take account of the method of sample selection when deriving estimates from the CURF. This is particularly important as a person's chance of selection in the survey varied depending on the state or territory in which the person lived. If these chances of selection are not accounted for, by use of appropriate weights, the results will be biased.

Each household, income unit, person and loan record contains a weight. This weight indicates how many population units are represented by the sample unit. The weights for households included in both the SIH and HES files are different, since these households represent more population units in the HES than in the SIH. Households on the HES CURF have higher weights on average than those on the SIH CURF because of the smaller number of selections in the HES.

Weights for each member of the household are the same as the weight for the household itself. Information for sampled households can be multiplied by the weights to produce estimates for the whole population. While weights do not exist on the file at the expenditure level, the weight from the household level should be used when calculating expenditure estimates. See Part 2.8 'Benchmarks and weighting of survey results' for more information on the weighting process.

In addition, the household, income unit, person and loan records each include 60 replicate weights which can be used to derive estimates of standard error. Information on the use of these replicate weights is provided in the Part 2.10 'Reliability of estimates'.

USE OF WEIGHTS *continued*

If estimates of population sub groups are to be derived from the CURF, it is essential that they are calculated by adding the weights of persons/households in each category and not just by counting the number in each category. If each person's/household's weight were to be ignored when analysing the data to draw inferences about the population, then no account would be taken of a person's/household's chance of selection or of different response rates across population groups, with the result that the estimates produced could be seriously biased. The application of weights ensures that estimates will conform to an independently estimated distribution of the population by age, by sex, etc. rather than to the distributions within the sample itself.

It should be noted that as a result of some of the changes made to protect confidentiality on the CURF, estimates of benchmarked items produced from the CURF may not equal the benchmarked values. See Part 5.3 'Reconciliation of the CURF data' for more information.

NOTES ON SPECIFIC DATA ITEMS

Many of the data items included on the CURFs are self-explanatory. The Glossary provides definitions for most of the remaining data items. However, some items require further explanation.

Geographic items

To enable CURF users greater flexibility in their analyses, the ABS has included two Socio-economic Indexes For Area (SEIFA) and several sub-state geography items on the Expanded 2009–10 CURFs. Conditions are placed on the use of these items. Tables showing multiple data items, cross-tabulated by more than one sub-state geography at a time, are not permitted due to the detailed information about small geographic regions that could be presented. However, simple cross-tabulations of population counts by sub-state geographic data items may be useful for clients in order to determine which geography item to include in their primary analysis, and such output is permitted.

Income items

INTRODUCTION

The person level records contain detailed information on income by source. The income unit and household level records contain information at a broader level. If detailed information is required for income analyses at the income unit or household level, this can be calculated by aggregating the person level information for each income unit or household. Income is recorded on both a 'current' and a 'previous financial year' basis. For more information about current and previous financial year income, see Part 1.2 'Current, annual and weekly income'.

Where possible, supplementary items have been included on the file which replicate the content of the items that have been included on previous issues of the SIH CURFs. The SIH files include two income aggregates, "Total current weekly income from all sources" and "Total current weekly income from all sources (2005–06 basis)".

TOTAL CURRENT WEEKLY INCOME FROM ALL SOURCES

The publications relating to the 2009–10 survey use this measure of income. It is consistent with the measure of income used in 2007–08.

The component items of "Total current weekly income from all sources" are:

- Total current weekly employee income (incl. overtime, salary sacrifice, bonuses, and severance, termination and redundancy payments (STRP))

Income items continued

TOTAL CURRENT WEEKLY INCOME FROM ALL SOURCES *continued*

- Current weekly cash employee income from main job (incl. salary sacrifice and bonuses)
  - Current weekly cash employee income from main job (incl. salary sacrifice)
  - Total current weekly non cash benefits from employer (non-salary sacrifice)
  - Current weekly employee cash income from regular bonuses
  - Expected current weekly paid overtime this financial year
- Current weekly employee income from second job
- Current weekly income from paid-out unused leave
- Current weekly income from redundancy pay
- Other wage and salary income – reported as other sources

- Current weekly cash income from own unincorporated business (reported)
- Total current weekly income from government pensions and allowances
  - Current weekly income from Austudy/Abstudy
  - Current weekly income from age pension
  - Current weekly income from carer allowance
  - Current weekly income from carer payment
  - Current weekly income from disability pension, (DVA)
  - Current weekly income from disability support pension
  - Current weekly income from family tax benefits (modelled)
  - Current weekly income from maternity payment
  - Current weekly income from Newstart allowance
  - Current weekly income from other government pensions and allowances
  - Current weekly income from overseas pensions and benefits
  - Current weekly income from parenting payment
  - Current weekly income from partner allowance
  - Current weekly income from service pension (DVA)
  - Current weekly income from sickness allowance
  - Current weekly income from special benefit
  - Current weekly income from utilities allowance
  - Current weekly income from war widow's pension (DVA)
  - Current weekly income from widow allowance
  - Current weekly income from wife pension
  - Current weekly income from youth allowance
  - Current weekly income from pension supplement
  - Current weekly income from seniors supplement
- Total current weekly income from investments (incl. silent partner income, shares/trusts net of expenses)
  - Current weekly income from financial institution account interest (reported)
  - Current weekly income from interest on debentures and bonds (reported)
  - Current weekly income from interest on loans to persons not in this household (reported)
  - Current weekly income from non-residential property (reported)
  - Current weekly income from residential property (reported)
  - Current weekly income from royalties (reported)
  - Current weekly income as beneficiary of a trust (excl. public unit trusts and employment income)

Income items continued

TOTAL CURRENT WEEKLY INCOME FROM ALL SOURCES *continued*

- Current weekly income as silent partner
- Current weekly income from other financial investments (reported)
- Current weekly income from dividends from own incorporated businesses and trusts (reported)
- Current weekly net income from public unit trusts
- Current weekly net income from dividends from shares

- Total current weekly income from other sources (incl. workers' compensation lump sums)
  - Total current weekly income from other regular sources
    - Current weekly income from accident compensation and sickness insurance
    - Current weekly income from child support/maintenance
    - Current weekly income from family members not living in the household
    - Current weekly income from regular workers' compensation
    - Current weekly income from scholarships
    - Current weekly income from superannuation/annuity/private pension
    - Current weekly income from regular sources n.e.c
  - Current weekly income from workers' compensation lump sum.

TOTAL CURRENT WEEKLY INCOME FROM ALL SOURCES (2005–06 BASIS)

This measure of income is comparable to that used in the publications relating to the 2005–06 survey however, there are some differences related to changes and improvements in the collection of information about sources of income that were introduced in 2007–08. The differences are the use of improved reported income from trusts and the inclusion of a broader measure of income from family members outside the household instead of restriction to regular, cash income from persons outside the household.

The component items of "Total current weekly income from all sources (2005–06 basis)" in 2009–10 are:

- Total current weekly employee cash income (incl. salary sacrifice)
  - Current weekly cash employee income from main job (incl. salary sacrifice)
  - Current weekly employee income from second job
  - Other wage and salary income – reported as other sources
- Current weekly cash income from own unincorporated business (reported)
- Total current weekly income from government pensions and allowances (2005–06 basis)
  - Current weekly income from Austudy/Abstudy
  - Current weekly income from age pension
  - Current weekly income from carer allowance
  - Current weekly income from carer payment
  - Current weekly income from disability pension (DVA)
  - Current weekly income from disability support pension
  - Current weekly income from family tax benefits (modelled) – (2005–06 basis)
  - Current weekly income from maternity payment
  - Current weekly income from Newstart allowance

Income items continued

TOTAL CURRENT WEEKLY INCOME FROM ALL SOURCES (2005–06 BASIS) *continued*

- Current weekly income from other government pensions and allowances
- Current weekly income from overseas pensions and benefits
- Current weekly income from parenting payment
- Current weekly income from partner allowance
- Current weekly income from service pension (DVA)
- Current weekly income from sickness allowance
- Current weekly income from special benefit
- Current weekly income from utilities allowance
- Current weekly income from war widow's pension
- Current weekly income from widow allowance
- Current weekly income from wife pension
- Current weekly income from youth allowance
- Current weekly income from pension supplement
- Current weekly income from seniors supplement

- Total current weekly income from investments (reported)
  - Current weekly income from dividends (reported)
  - Current weekly income from financial institution account interest (reported)
  - Current weekly income from interest on debentures and bonds (reported)
  - Current weekly income from interest on loans to persons not in this household (reported)
  - Current weekly income from non-residential property (reported)
  - Current weekly income from residential property (reported)
  - Current weekly income from royalties (reported)
  - Current weekly income from public unit trusts
  - Current weekly income as beneficiary of a trust (excl. public unit trusts and employment income)
  - Current weekly income as silent partner
  - Current weekly income from other financial investments (reported)
- Total current weekly income from other regular sources
  - Current weekly income from accident compensation and sickness insurance
  - Current weekly income from child support/maintenance
  - Current weekly income from family members not living in the household
  - Current weekly income from regular workers' compensation
  - Current weekly income from scholarships
  - Current weekly income from superannuation/annuity/private pension
  - Current weekly income from regular sources n.e.c.

Previous financial year exclusion flag

The previous financial year exclusion flag at the person level (FINSCOPE) has a value of 1 for females whose family situation changed since 1 July 2008 (by moving in with a new partner, separating from a partner or becoming widowed) and for persons who arrived in Australia during 2009–10. At the income unit level a value of 1 in the previous financial year exclusion flag (FINSCOPU) indicates income units where the reference person or spouse has FINSCOPE=1. At the household level the previous financial year exclusion flag (FINSCOPH) indicates households where the reference person or spouse of one of the income units in the household has FINSCOPE=1. Users wishing to analyse previous

Previous financial year exclusion flag continued

financial year income data may wish to exclude such persons from their analysis (by limiting their analysis to records where FINSCOPE=2).

Assets and liabilities

The 2009–10 survey collected information on a comprehensive range of household assets and liabilities to enable analysis of net worth and its components across households. Similar data was collected for 2003–04 and 2005–06.

Housing costs

Weekly housing costs included on previous SIH CURFs and used in the publication *Housing Occupancy and Costs, Australia, 2005–06* (cat. no. 4130.0) is labelled on the 2009–10 CURFs as "Weekly housing costs (SIHC basis)" and has the field name HCOSTSH. The component items are:

- Weekly rent payments (WKRENTCH), where Tenure type = renter
- Weekly general and water rates payments (RATESCH), where Tenure type = owner
  - Weekly general rates payments (RATESGCH)
  - Weekly water rates payments (RATESWCH)
  - Weekly combined rates payments (RATESCCH)
- Weekly mortgage repayments to purchase/build (TRPAY1CH), where Tenure type = owner with mortgage
- Weekly mortgage repayments for alterations/additions (TRPAY2CH), where Tenure type = owner with mortgage
- Weekly repayments on unsecured loans for housing purposes (TRPAY4CH), where Tenure type = owner with mortgage.

Note that the mortgage and loan repayments in the items listed above are allocated according to the main purpose of the loan. For example, if a loan was taken out primarily to buy a dwelling, but part of it was used to purchase a car, the entire repayment amount is included in housing costs.

In the 2009–10 publications, housing costs have continued to be measured using HCOSTSH, in order to provide comparability with earlier issues.

However, in SIH surveys since 2003–04, extra information on housing costs has been collected.

- Where a payment has been refunded by a business or someone outside the household, the amount of the refund was collected.
- Where a loan had multiple purposes, details of all purposes were collected, so repayments can be allocated to each purpose in accordance with the percentage split of the original loan amount by purpose
- Loan repayments were able to be split into an interest component and a component representing repayment of principal. It could be argued that housing costs should only include the interest component – the portion of loan repayments that represents repayment of principal is a form of saving and possibly should not be regarded as part of housing costs.
- Information on body corporate payments was collected.
- Information on housing costs was collected from all tenure types. For example payments for water were collected from renters as well as owners.

Housing costs continued

An alternative series of housing cost items has been included on the CURFs in addition to the housing cost items traditionally included on SIH CURFs. The new item "Weekly housing costs (after refunds, interest only, incl. body corp, loans prorated by purpose, no tenure adjustment)" has the field name HCOSTS2H and has the following components:

- Weekly rent payments with refunds deducted (WKRENTRF)
- Weekly body corporate payments (BCORPCH)
- Weekly body corporate payments with refunds deducted (BCORPRCH)
- Weekly general and water rates payments with refunds deducted (RATESRCH)
  - Weekly general rates payments with refunds deducted (RATERGCH)
  - Weekly water rates payments with refunds deducted (RATERWCH)
  - Weekly combined rates payments with refunds deducted (RATERCCH)
- Weekly mortgage repayments to purchase/build (interest component with refunds deducted) (TINT1CH)
- Weekly mortgage repayments for alterations/additions (interest component with refunds deducted) (TINT2CH)
- Weekly repayments on unsecured loans for housing purposes (interest component with refunds deducted) (TINT4CH).

Note that the items TINT1CH, TINT2CH and TINT4CH all only include the proportion of the loan used for that purpose.

The HES CURF contains a third possible derivation of housing costs. The expenditure item "current housing costs" is similar to the item HCOSTS2H, but also includes the cost of house and contents insurance, and repairs and maintenance on the dwelling.

A number of other related items are included on the CURF:

- TOWE1CH, TOWE2CH, TOWE3ACH and TOWE4CH record the amount owing on mortgages/loans, allocated according to their main purpose
- TOWE1C2, TOWE2C2, TOWE3AC2 and TOWE4C2 record the amount owing on mortgages/loans, allocated according to the proportion of loan used for each purpose
- TRPAY1RF, TRPAY2RF, TRPAY3ARF and TRPAY4RF record loan/mortgage repayments, allocated according to the proportion of loan used for each purpose.

Imputed rent

The SIH and HES CURFs include estimates of imputed rent for owner-occupied dwellings. The imputation has also been applied to other housing tenures in order to value the in-kind benefit conferred to households paying subsidised rent or households occupying their dwelling rent free. 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. Inclusion of imputed rent estimates in income measures is in accord with international standards for household income statistics, and provides a broader picture of the economic well-being of owner-occupier households and their social and economic circumstances relative to other households.

The imputed rent estimates have been included on both the SIH and HES CURFs. Two household level variables are included, 'Weekly gross imputed rent' and 'Weekly HH income from net imputed rent'. Gross imputed rent is the market value of the rental equivalent, and has been estimated using hedonic regression. Net imputed rent for

Imputed rent continued

owner occupiers has been derived by subtracting the housing costs normally paid by landlords (i.e. rates, mortgage interest, insurance, repairs and maintenance) from gross imputed rent. Income totals incorporating the imputed rent estimates have not been included. Users wishing to analyse the effect of imputed rent on income should add net imputed rent to household income. When analysing household expenditure, gross imputed rent should be added and any housing costs normally paid by a landlord should be deducted. For further information refer to Part 1.15 'Imputed rent estimates'.

Imputation flags

Imputation flags exist for each module in the questionnaire, rather than for specific data items. A value of 1 (partially imputed) indicates that at least one question in that module was imputed. Referring to the contents of the questionnaire module can provide an indication of whether particular data items may have included imputed data. The number of flags with a value of 1 for a particular record provides an indication of the extent of imputation in that record. A value of 2 (fully imputed) indicates that a person record has been fully imputed. In households where one or more people did not respond, person records were imputed if the non-responding persons was not a 'significant person'.

Payments to non household members

The financial resources available to certain persons can be affected by regular payments that they may make to provide support for persons outside the household. Information on payments for child support, alimony to former spouse, and payments to family members not in the household have been included on the CURFs.

Multiple response data items

The inclusion of child care and disability topics has resulted in the inclusion of a number of multiple response data items on the 2009–10 CURFs. In these instances respondents were able to select one or more response categories, and the output data items are multi-response in nature. This section describes these items and provides some information on how to use them.

On the Basic and Expanded CURFs, the income unit level data items are:

- 'Types of formal child care income unit used in the last 4 weeks'
- (TYPFCIUA--TYPFCIUF)
- 'Types of informal child care income unit used in the last 4 weeks'
- (TYPICIUA--TYPICIUI).

On the Basic and Expanded CURFs, the person level data items are:

- 'All reasons lack of child care prevents parent from working'
- (UNMET07A--UNMET07J)
- 'Disability type'
- (DISTYPEA--DISTYPEF).

These items capture multiple responses where a person provides more than one type of child care. The first response is captured in the first, or 'A', position (e.g. TYPFCIUA), and additional responses are in the second and then third and higher, or 'B' and 'C' and higher, positions (e.g. TYPFCIUB, TYPFCIUC). If only one response is possible, for example 'none of the above' then this response may also appear in the 'A' position. If a data item does not apply (e.g. an income unit does not use child care) then a value of 9 or 99 for 'Not applicable' will appear in the first position (e.g. TYPFCIUA). The 'Null response' (value of 0 or 00) is a default code and should be ignored. All of these

Multiple response data items continued

categories should be used in analysis. Please refer to the data item list in Appendix 5 'CURF data items and record structure' for specific information on the number of item repeats and the category labels and values.

RELIABILITY OF THE ESTIMATES

Two types of error are possible in an estimate based on a sample survey: non sampling error and sampling error. See Part 2.10 'Reliability of estimates' for more information on non-sampling and sampling error.

Relative sampling error

Each record on the CURF contains 60 'replicate weights' in addition to the 'main weight'. The purpose of these replicate weights is to enable calculation of the RSE on each estimate produced.

The basic idea behind the replication approach is to select subsamples repeatedly (60 times) from the whole sample. For each of these subsamples the statistic of interest is calculated. The variance of the full sample statistic is then estimated using the variability among the replicate statistics calculated from the subsamples. As well as enabling variances of estimates to be calculated relatively simply, replicate weights also enable unit record analyses such as chi–square tests and logistic regression to be conducted which take into account the complex sample design.

There are various ways of creating replicate subsamples from the full sample. The replicate weights produced for the 2009–10 SIH and HES have been created using a group jack knife method of replication. The formulae for calculating the SE and RSE of an estimate using this method are:

$$SE(y) = \sqrt{(59/60)\sum_{g}(y_{(g)} - y)^2}$$

where

g = 1,..,60 (the no. of replicate groups)

y(g) = weighted estimate, having applied the weights for replicate group g

y = weighted estimate from the full sample.

RSE(y) = SE(y)/y * 100%.

It is not clear that the jack knife method will provide good estimates for the variance of quantile boundaries such as the median, (see Rao, J.N.K., Wu, C.F.J., and Yue, K., (1992) for some recent work on resampling methods for complex surveys: *Survey Methodology*, vol. 18, pp. 209–217). An indirect approach (known as the Woodruff method) is available for estimating the variance of a quantile based on replicate weights (see Sarndal, Swenson and Wretman: *Model Assisted Survey Sampling*, Springer–Verlag, 1992).

To enable CURF users to check that they are using the replicate weights correctly, RSEs for estimates other than medians for SIH CURF data in Table 5.3.2 and HES CURF data in Table 5.3.6, have been calculated using the group jack knife method, and are included as Tables 5.3.4 and 5.3.8 respectively. The RSEs shown for the medians have been calculated using the Woodruff method.

5.2 COMPARISON WITH PREVIOUS CURFS

COMPARISON WITH PREVIOUS CURFS

While efforts have been made to maintain comparability between CURFs where possible, the integration of the SIH and HES has resulted in a number of changes to data items which may have an impact on the assessment of changes over time. CURF users should refer to Part 4 'Changes from previous surveys' provides information about changes between survey cycles.

The 2009–10 SIH and HES CURFs contain data items for the following topics now collected every 2 years as regular SIH topics: income, housing, child care use and cost, ethnicity and a range of demographic characteristics. In 2009–10, data items for detailed assets and liabilities are also available (as in 2005–06) to support analysis of household wealth. The 2009–10 HES CURF contains data items relating to expenditure and financial stress data (as in 2003–04). Items are also available for the new disability topic collected in 2009–10.

The CURF data item listing provided in Appendix 5 includes details of the key differences between the 2009–10 and previous CURFs, based on comparing core topics with the 2007–08 SIH CURF, the wealth topic with the 2005–06 SIH CURF, and the expenditure, financial stress and other HES only topics with the 2003–04 HES CURF.

Users of the HES CURFs in particular should refer to Part 4 'Changes from previous surveys' for changes in regular SIH topics in cycles since 2003–04, in particular the changes to income resulting from new income standards used from 2007–08. The Technical Manuals available for the 2007–08 and 2005–06 SIH CURFs may also be used to obtain more detail about changes in the data items available on the CURFs in cycles since 2003–04.

5.3 RECONCILIATION OF THE CURF DATA

INTRODUCTION

It is not possible to reconcile exactly the data produced from the CURF with published data. This is as a result of the steps taken to preserve confidentiality. These steps include:

- large households have been reduced to a maximum of eight people on the Expanded CURF and six people on the Basic CURF
- the level of detail for some data items has been reduced (for example, state of usual residence of the ACT and the NT have been combined as ACT/NT for the Basic CURF, but shown individually for the Expanded CURF; area of usual residence for the ACT and NT has not been made available)
- all income items, some expenditure items relating to housing, and some wealth and loan data have been perturbed
- some variables have had values ranged, collapsed or topcoded
- demographic information of some respondents has been changed.

SIH data

A sample tabulation of SIH data is included in Table 5.3.2, showing some estimates produced from the Expanded SIH CURF, and equivalent estimates produced from both the Basic SIH CURF, in Table 5.3.1, and the unconfidentialised file, in Table 5.3.3. Reference should be made to these tables for validation purposes. Note that the full population estimate derived from the Basic CURF (21,472,970) is lower than that obtained from the Expanded CURF (21,575,681) and the unconfidentialised file (21,589,428) because household size was restricted to six on the Basic CURF and eight on the Expanded CURF. Larger households were reduced in size but weights were not recalibrated to benchmark values to compensate.

A table showing the RSEs of the Expanded CURF estimates in the sample table is also included (as Table 5.3.4). For more information on the RSEs, see Part 2 'Survey methodology'.

HES data

A sample tabulation of HES data is included in Table 5.3.6, showing some estimates produced from the Expanded HES CURF, and equivalent estimates produced from both the Basic HES CURF, in Table 5.3.5, and the unconfidentialised file, in Table 5.3.7. Reference should be made to these tables for validation purposes. Note that the full population estimate derived from the Basic CURF (21,458,366) is lower than that obtained from the Expanded CURF (21,575,072) and the unconfidentialised file (21,589,428) because household size was restricted to six on the Basic CURF and eight on the Expanded CURF. Larger households were reduced in size but weights were not recalibrated to benchmark values to compensate.

A table showing the RSEs of the Expanded CURF estimates in the sample table is also included (as Table 5.3.8). For more information on the RSEs, see Part 2 'Survey methodology'.

Imputed rent data

The estimate of mean net imputed rent for 2009–10 is $108.80 per week. Estimates of mean net imputed rent produced from the SIH CURFs, HES CURFs and the unconfidentialised file for all households varies by 80 cents. Users should refer to Table 18 in *Household Income and Income Distribution, Australia, 2009–10* (cat. no. 6523.0) when validating estimates of imputed rent by tenure type. Estimates produced from the CURFs may differ slightly from those shown in the publications, because of action taken to ensure confidentiality.

TABLE 5.3.1 SIH – INCOME + CHARACTERISTICS, by main source of gross household income, 2009–10

Household characteristics		PRIVATE INCOME					
		Wages and salaries	*Own unincorporated business income*	*Other income*	*Total*	*Government pensions and allowances*	*All households*(a)
		BASIC CURF					
Income per week							
Gross household income							
Mean income per week	$	2 168	1 969	1 544	2 083	552	1 685
Median income per week	$	1 858	1 400	985	1 743	511	1 316
Mean household net worth	$	672 637	1 092 727	1 859 178	836 777	369 205	719 680
Number of households							
One family households							
Couple family with dependent children	no.	1 839 569	153 667	56 370	2 049 606	151 248	2 214 386
One parent family with dependent children	no.	231 539	*10 523	23 790	265 852	267 850	535 186
Couple only	no.	1 161 791	109 566	308 193	1 579 550	610 283	2 199 914
Other one family households	no.	732 550	35 885	52 979	821 414	157 336	978 939
Multiple family households	no.	105 945	**1 736	*6 143	113 824	20 837	134 661
Non-family households							
Lone person	no.	836 768	79 639	247 770	1 164 177	867 735	2 055 247
Group households	no.	202 329	*14 491	*23 696	240 516	39 513	280 187
Total	no.	***5 110 490***	***405 508***	***718 941***	***6 234 939***	***2 114 803***	***8 398 520***
Number of persons							
Employed persons	no.	9 437 123	708 360	361 100	10 506 583	381 571	10 937 862
Dependent children	no.	3 869 400	326 300	153 774	4 349 473	941 496	5 314 430
Persons							
Under 15 years	no.	2 909 058	253 023	100 499	3 262 580	821 884	4 101 149
15 to 64 years	no.	11 229 552	819 668	773 399	12 822 620	1 724 835	14 625 804
65 years and over	no.	446 859	45 806	553 760	1 046 425	1 696 958	2 746 876
Total	no.	***14 584 610***	***1 118 497***	***1 427 658***	***17 130 765***	***4 243 678***	***21 472 970***

* estimate has a relative standard error of 25% to 50% and should be used with caution

** estimate has a relative standard error greater than 50% and is considered too unreliable for general use

(a) Includes households with nil or negative total income

TABLE 5.3.2 SIH – INCOME + CHARACTERISTICS, by main source of gross household income, 2009–10

Household characteristics		PRIVATE INCOME					
		Wages and salaries	*Own unincorporated business income*	*Other income*	*Total*	*Government pensions and allowances*	*All households*(a)
		EXPANDED CURF					
Income per week							
Gross household income							
Mean income per week	$	2 172	1 970	1 542	2 086	556	1 687
Median income per week	$	1 858	1 405	984	1 746	511	1 319
Mean household net worth	$	673 101	1 091 989	1 861 878	837 380	368 542	719 730
Number of households							
One family households							
Couple family with dependent children	no.	1 830 231	153 667	54 200	2 038 099	155 189	2 206 820
One parent family with dependent children	no.	231 539	*10 523	23 790	265 852	267 850	535 186
Couple only	no.	1 161 854	109 433	308 263	1 579 550	610 283	2 199 914
Other one family households	no.	732 550	35 885	52 979	821 414	157 336	978 939
Multiple family households	no.	111 948	**1 736	*7 505	121 190	21 037	142 227
Non-family households							
Lone person	no.	836 768	79 639	247 770	1 164 177	867 735	2 055 247
Group households	no.	202 329	*14 491	*23 696	240 516	39 513	280 187
Total	no.	***5 107 220***	***405 374***	***718 203***	***6 230 797***	***2 118 944***	***8 398 520***
Number of persons							
Employed persons	no.	9 449 529	708 094	361 388	10 519 011	388 842	10 957 561
Dependent children	no.	3 900 916	328 731	151 352	4 380 998	983 460	5 387 919
Persons							
Under 15 years	no.	2 932 429	255 454	98 314	3 286 197	859 710	4 162 591
15 to 64 years	no.	11 250 492	819 668	770 675	12 840 836	1 743 054	14 662 238
65 years and over	no.	449 048	45 540	555 737	1 050 324	1 697 034	2 750 851
Total	no.	***14 631 969***	***1 120 662***	***1 424 725***	***17 177 356***	***4 299 798***	***21 575 681***

* estimate has a relative standard error of 25% to 50% and should be used with caution

** estimate has a relative standard error greater than 50% and is considered too unreliable for general use

(a) Inlcudes households with nil or negative total income

TABLE 5.3.3 SIH – INCOME + CHARACTERISTICS, by main source of gross household income, 2009–10

Household characteristics		PRIVATE INCOME: Wages and salaries	Own unincorporated business income	Other income	Total	Government pensions and allowances	All households(a)
		UNCONFIDENTIALISED FILE					
Income per week							
Gross household income							
Mean income per week	$	2 173	1 975	1 524	2 084	556	1 688
Median income per week	$	1 859	1 412	971	1 742	511	1 320
Mean household net worth	$	672 973	1 095 357	1 844 079	836 925	368 588	719 561
Number of households							
One family households							
Couple family with dependent children	no.	1 830 391	153 667	54 040	2 038 099	155 189	2 206 820
One parent family with dependent children	no.	231 539	*10 523	23 790	265 852	267 850	535 186
Couple only	no.	1 161 804	109 318	309 393	1 580 515	610 411	2 199 914
Other one family households	no.	733 192	35 243	52 979	821 414	157 336	978 939
Multiple family households	no.	111 948	**1 736	*7 505	121 190	21 037	142 227
Non-family households							
Lone person	no.	836 201	79 639	255 137	1 170 976	868 239	2 055 247
Group households	no.	202 329	*13 068	25 120	240 516	39 513	280 187
Total	no.	***5 107 404***	***403 194***	***727 964***	***6 238 562***	***2 119 576***	***8 398 520***
Number of persons							
Employed persons	no.	9 456 436	703 205	364 561	10 524 203	389 584	10 961 227
Dependent children	no.	3 904 440	328 731	152 010	4 385 181	989 006	5 397 648
Persons							
Under 15 years	no.	2 934 259	255 454	98 972	3 288 685	865 256	4 170 626
15 to 64 years	no.	11 255 280	814 665	785 602	12 855 547	1 743 194	14 667 599
65 years and over	no.	451 377	45 540	552 965	1 049 882	1 697 829	2 751 204
Total	no.	***14 640 916***	***1 115 658***	***1 437 539***	***17 194 113***	***4 306 279***	***21 589 428***

* estimate has a relative standard error of 25% to 50% and should be used with caution

** estimate has a relative standard error greater than 50% and is considered too unreliable for general use

(a) Includes households with nil or negative income

TABLE 5.3.4 SIH EXPANDED CURF – INCOME + CHARACTERISTICS, by main source of gross household income, relative standard errors, 2009–10

	PRIVATE INCOME					
	Wages and salaries	*Own unincorporated business income*	*Other income*	*Total*	*Government pensions and allowances*	*All households*(a)
Household characteristics	%	%	%	%	%	%
Income per week						
Gross household income						
Mean income per week	1.1	5.6	5.5	1.2	1.0	1.1
Median income per week	0.8	4.2	3.7	0.7	0.9	0.8
Mean household net worth	4.8	7.2	4.3	3.7	2.2	3.2
Number of households						
One family households						
Couple family with dependent children	1.4	7.3	12.5	1.4	8.2	1.1
One parent family with dependent children	5.6	27.5	19.6	5.5	3.6	2.8
Couple only	2.0	8.3	4.6	1.6	3.1	1.1
Other one family households	3.3	13.7	12.5	3.0	8.3	2.7
Multiple family households	11.9	79.3	38.8	11.3	21.9	10.4
Non-family households						
Lone person	3.5	10.5	5.4	2.9	2.3	1.8
Group households	6.9	28.2	26.0	6.8	14.7	6.0
Total	***0.6***	***4.0***	***3.0***	***0.5***	***1.1***	***0.3***
Number of persons						
Employed persons	0.6	5.1	5.8	0.4	5.2	0.4
Dependent children	1.4	7.4	10.1	1.1	4.2	0.5
Persons						
Under 15 years	1.5	8.2	12.2	1.1	4.1	0.2
15 to 64 years	0.6	4.7	4.9	0.4	2.7	0.1
65 years and over	4.5	19.6	4.4	2.7	1.8	0.2
Total	***0.7***	***4.9***	***3.6***	***0.4***	***1.7***	—

— nil or rounded to zero (including null cells)

(a) Includes households with nil or negative total income

TABLE 5.3.5 HES – EXPENDITURE + CHARACTERISTICS, by main source of gross household income, 2009–10

Household characteristics		PRIVATE INCOME					
		Wages and salaries	*Own unincorporated business income*	*Other income*	*Total*	*Government pensions and allowances*	*All households*(a)
		BASIC CURF					
Broad expenditure group							
Goods and services							
Current housing costs (selected dwelling)	$	276.07	259.16	142.01	260.26	114.26	223.08
Domestic fuel and power	$	35.50	37.26	31.89	35.22	24.67	32.52
Food and non-alcoholic beverages	$	238.28	233.80	191.69	232.88	119.67	203.86
Alcoholic beverages	$	40.68	41.48	26.01	39.12	12.42	32.27
Tobacco products	$	13.78	11.65	5.97	12.79	11.74	12.50
Clothing and footwear	$	54.19	55.28	46.05	53.36	17.64	44.33
Household furnishings and equipment	$	70.75	59.76	67.07	69.65	27.18	58.63
Household services and operation	$	77.21	79.79	74.05	77.03	41.96	68.01
Medical care and health expenses	$	70.30	76.84	80.41	71.83	*47.14	65.58
Transport	$	242.72	175.92	175.86	231.12	81.17	192.61
Recreation	$	188.40	202.67	218.30	192.59	70.93	161.38
Personal care	$	28.78	25.13	25.02	28.13	12.12	24.02
Miscellaneous goods and services	$	137.46	147.42	205.91	145.62	31.62	116.58
Total goods and services expenditure	$	***1 474.12***	***1 406.14***	***1 290.25***	***1 449.59***	***612.54***	***1 235.37***
Selected other payments							
Income tax	$	377.03	329.49	159.02	350.05	**0.37	259.73
Mortgage repayments - principal (selected dwelling)	$	73.20	73.88	*11.39	66.45	5.60	50.80
Superannuation and life insurance	$	91.18	97.39	*134.28	96.31	**8.00	73.79
Income per week							
Gross household income							
Mean income per week	$	2 149	1 912	1 683	2 083	556	1 685
Median income per week	$	1 839	1 369	1 014	1 726	521	1 319
Mean household net worth	$	684 023	1 019 499	1 980 592	847 824	370 600	727 771
Number of households							
One family households							
Couple family with dependent children	no.	1 827 520	164 446	51 102	2 043 068	145 728	2 202 816
One parent family with dependent children	no.	218 007	*9 965	*17 447	245 419	270 638	518 453
Couple only	no.	1 178 949	91 610	305 027	1 575 585	627 349	2 210 452
Other one family households	no.	750 762	29 152	47 479	827 393	173 334	1 001 737
Multiple family households	no.	119 267	**351	**5 348	124 966	*20 690	145 656
Non-family households							
Lone person	no.	866 997	87 362	231 631	1 185 990	847 370	2 054 782
Group households	no.	187 161	*14 133	*26 303	227 597	37 027	264 624
Total	no.	***5 148 662***	***397 019***	***684 337***	***6 230 018***	***2 122 138***	***8 398 520***

* estimate has a relative standard error of 25% to 50% and should be used with caution

** estimate has a relative standard error greater than 50% and is considered too unreliable for general use

(a) Includes households with nil or negative total income

TABLE 5.3.5 HES – EXPENDITURE + CHARACTERISTICS, by main source of gross household income, 2009–10 *continued*

Household characteristics		PRIVATE INCOME					
		Wages and salaries	*Own unincorporated business income*	*Other income*	*Total*	*Government pensions and allowances*	*All households*(a)
		BASIC CURF					
Number of persons							
Employed persons	no.	9 489 973	686 259	372 983	10 549 215	344 157	10 934 139
Dependent children	no.	3 840 194	361 576	128 677	4 330 447	936 527	5 292 252
Persons							
Under 15 years	no.	2 908 194	289 765	80 407	3 278 366	802 348	4 099 490
15 to 64 years	no.	11 283 287	779 481	757 731	12 820 499	1 718 354	14 615 529
65 years and over	no.	438 948	48 491	520 505	1 007 944	1 735 769	2 745 048
Total	no.	***14 628 729***	***1 117 737***	***1 358 642***	***17 105 108***	***4 256 471***	***21 458 366***

(a) Includes households with nil or negative total income

TABLE 5.3.6 HES – EXPENDITURE + CHARACTERISTICS, by main source of gross household income, 2009–10

Household characteristics		PRIVATE INCOME					
		Wages and salaries	*Own unincorporated business income*	*Other income*	*Total*	*Government pensions and allowances*	*All households*(a)
		EXPANDED CURF					
Broad expenditure group							
Goods and services							
Current housing costs (selected dwelling)	$	275.95	259.16	142.29	260.24	114.50	223.07
Domestic fuel and power	$	35.50	37.26	31.87	35.21	24.70	32.52
Food and non-alcoholic beverages	$	238.79	233.80	191.63	233.30	119.78	204.17
Alcoholic beverages	$	40.80	41.48	26.03	39.22	12.41	32.34
Tobacco products	$	13.89	11.65	5.97	12.88	11.73	12.57
Clothing and footwear	$	54.22	55.28	46.13	53.40	17.71	44.36
Household furnishings and equipment	$	70.79	59.76	67.19	69.69	27.19	58.65
Household services and operation	$	77.24	79.79	74.18	77.07	41.96	68.03
Medical care and health expenses	$	70.37	76.84	80.48	71.89	*47.09	65.60
Transport	$	243.14	175.92	176.09	231.51	81.26	192.88
Recreation	$	188.68	202.67	217.34	192.71	70.92	161.43
Personal care	$	28.84	25.13	25.04	28.19	12.12	24.06
Miscellaneous goods and services	$	137.55	147.42	206.31	145.71	31.59	116.61
Total goods and services expenditure	$	***1 475.74***	***1 406.14***	***1 290.56***	***1 451.02***	***612.95***	***1 236.28***
Selected other payments							
Income tax	$	377.32	329.54	154.14	349.83	**0.51	259.49
Mortgage repayments - principal (selected dwelling)	$	73.20	73.88	*11.42	66.48	5.59	50.80
Superannuation and life insurance	$	91.18	97.39	*134.72	96.35	**7.99	73.79
Income per week							
Gross household income							
Mean income per week	$	2 152	1 915	1 643	2 082	559	1 684
Median income per week	$	1 840	1 365	1 015	1 728	521	1 320
Mean household net worth	$	684 823	1 019 499	1 982 119	848 253	370 182	727 838
Number of households							
One family households							
Couple family with dependent children	no.	1 819 758	164 446	48 388	2 032 592	148 119	2 194 732
One parent family with dependent children	no.	218 007	*9 965	*17 447	245 419	270 638	518 453
Couple only	no.	1 180 553	91 610	303 423	1 575 585	627 349	2 210 452
Other one family households	no.	750 762	29 152	47 479	827 393	173 334	1 001 737
Multiple family households	no.	125 095	**351	**7 426	132 872	*20 869	153 741
Non-family households							
Lone person	no.	866 997	87 362	231 631	1 185 990	847 370	2 054 782
Group households	no.	187 161	*14 133	*26 303	227 597	37 027	264 624
Total	no.	***5 148 332***	***397 019***	***682 097***	***6 227 448***	***2 124 707***	***8 398 520***

* estimate has a relative standard error of 25% to 50% and should be used with caution

** estimate has a relative standard error greater than 50% and is considered too unreliable for general use

(a) Includes households with nil or negative total income

TABLE 5.3.6 HES – EXPENDITURE + CHARACTERISTICS, by main source of gross household income, 2009–10 *continued*

Household characteristics		PRIVATE INCOME					
		Wages and salaries	*Own unincorporated business income*	*Other income*	*Total*	*Government pensions and allowances*	*All households*(a)
		EXPANDED CURF					
Number of persons							
Employed persons	no.	9 512 239	686 259	371 509	10 570 007	348 395	10 959 169
Dependent children	no.	3 885 279	363 871	126 770	4 375 919	968 865	5 370 063
Persons							
Under 15 years	no.	2 941 919	292 060	78 918	3 312 897	831 618	4 163 291
15 to 64 years	no.	11 319 225	779 481	754 273	12 852 980	1 730 922	14 660 578
65 years and over	no.	445 032	48 491	520 505	1 014 028	1 735 841	2 751 204
Total	no.	***14 706 177***	***1 120 032***	***1 353 696***	***17 179 905***	***4 298 381***	***21 575 072***

(a) Includes households with nil or negative total income

TABLE 5.3.7 HES – EXPENDITURE + CHARACTERISTICS, by main source of gross household income, 2009–10

Household characteristics		PRIVATE INCOME: Wages and salaries	Own unincorporated business income	Other income	Total	Government pensions and allowances	All households(a)
		UNCONFIDENTIALISED FILE					
Broad expenditure group							
Goods and services							
Current housing costs (selected dwelling)	$	276.08	259.40	143.73	260.28	114.49	223.14
Domestic fuel and power	$	35.50	37.34	31.71	35.19	24.70	32.52
Food and non-alcoholic beverages	$	238.90	233.40	191.15	233.23	119.78	204.20
Alcoholic beverages	$	40.84	41.53	26.14	39.24	12.41	32.35
Tobacco products	$	13.89	11.31	6.32	12.88	11.73	12.57
Clothing and footwear	$	54.25	55.62	45.87	53.41	17.71	44.38
Household furnishings and equipment	$	70.78	60.19	66.20	69.61	27.19	58.65
Household services and operation	$	77.10	79.49	73.76	76.88	41.96	67.93
Medical care and health expenses	$	70.37	77.05	80.28	71.90	*47.09	65.60
Transport	$	243.27	175.55	173.80	231.25	81.26	192.87
Recreation	$	188.58	203.55	215.74	192.55	70.92	161.44
Personal care	$	28.84	25.31	24.72	28.16	12.12	24.06
Miscellaneous goods and services	$	137.48	146.74	204.21	145.50	31.59	116.57
Total goods and services expenditure	$	***1 475.89***	***1 406.48***	***1 283.62***	***1 450.08***	***612.94***	***1 236.28***
Selected other payments							
Income tax	$	377.74	331.35	157.23	350.24	**0.51	260.19
Mortgage repayments - principal (selected dwelling)	$	70.80	73.94	*11.27	64.36	5.59	49.31
Superannuation and life insurance	$	89.47	98.12	*146.84	96.41	**8.00	73.73
Income per week							
Gross household income							
Mean income per week	$	2 154	1 915	1 656	2 083	559	1 688
Median income per week	$	1 841	1 368	1 013	1 726	521	1 323
Mean household net worth	$	686 215	1 025 199	1 966 056	850 234	370 261	729 442
Number of households							
One family households							
Couple family with dependent children	no.	1 819 758	164 446	48 388	2 032 592	148 119	2 194 732
One parent family with dependent children	no.	218 007	*9 965	*17 447	245 419	270 638	518 453
Couple only	no.	1 178 949	91 610	306 909	1 577 468	627 349	2 210 452
Other one family households	no.	752 043	27 871	47 479	827 393	173 334	1 001 737
Multiple family households	no.	125 095	**351	**7 426	132 872	*20 869	153 741
Non-family households							
Lone person	no.	866 997	87 362	239 104	1 193 463	847 370	2 054 782
Group households	no.	187 161	*12 221	*28 215	227 597	37 027	264 624
Total	no.	***5 148 009***	***393 826***	***694 969***	***6 236 803***	***2 124 707***	***8 398 520***

* estimate has a relative standard error of 25% to 50% and should be used with caution

** estimate has a relative standard error greater than 50% and is considered too unreliable for general use

(a) Includes households with nil or negative total income

TABLE 5.3.7 HES – EXPENDITURE + CHARACTERISTICS, by main source of gross household income, 2009–10 *continued*

Household characteristics		PRIVATE INCOME					
		Wages and salaries	*Own unincorporated business income*	*Other income*	*Total*	*Government pensions and allowances*	*All households*(a)
		UNCONFIDENTIALISED FILE					
Number of persons							
Employed persons	no.	9 520 898	678 592	377 656	10 577 146	348 395	10 963 985
Dependent children	no.	3 889 727	363 871	126 770	4 380 367	973 957	5 379 602
Persons							
Under 15 years	no.	2 944 162	292 060	78 918	3 315 139	836 710	4 170 626
15 to 64 years	no.	11 326 880	771 815	772 544	12 871 239	1 730 922	14 667 599
65 years and over	no.	445 032	48 491	520 505	1 014 028	1 735 841	2 751 204
Total	no.	***14 716 074***	***1 112 365***	***1 371 967***	***17 200 406***	***4 303 473***	***21 589 428***

(a) Includes households with nil or negative total income

TABLE 5.3.8 HES EXPANDED CURF – EXPENDITURE + CHARACTERISTICS, by main source of gross household income, relative standard errors, 2009–10

	PRIVATE INCOME					
Household characteristics	*Wages and salaries* %	*Own unincorporated business income* %	*Other income* %	*Total* %	*Government pensions and allowances* %	*All households*(a) %
Broad expenditure group						
Goods and services						
Current housing costs (selected dwelling)	1.5	6.6	6.7	1.5	2.6	1.3
Domestic fuel and power	1.1	4.9	3.7	1.2	1.7	1.0
Food and non-alcoholic beverages	1.3	4.1	3.1	1.2	1.9	1.0
Alcoholic beverages	3.6	10.0	8.9	3.2	7.2	2.9
Tobacco products	4.7	19.6	20.6	4.3	7.4	3.6
Clothing and footwear	4.1	11.2	10.5	3.6	5.9	3.3
Household furnishings and equipment	4.2	10.0	11.3	3.5	5.2	3.2
Household services and operation	1.9	8.5	9.1	1.8	3.7	1.5
Medical care and health expenses	2.3	8.1	4.9	2.2	25.0	4.7
Transport	2.7	9.7	13.5	2.6	9.4	2.6
Recreation	2.1	9.4	7.5	2.0	4.3	1.8
Personal care	3.0	8.2	9.8	2.7	5.3	2.4
Miscellaneous goods and services	3.9	9.7	22.6	4.5	6.5	4.1
Total goods and services expenditure	***1.2***	***4.0***	***6.6***	***1.1***	***2.8***	***1.0***
Selected other payments						
Income tax	2.1	12.2	19.0	2.2	72.3	2.1
Mortgage repayments - principal (selected dwelling)	8.0	20.7	26.3	7.4	16.6	7.2
Superannuation and life insurance	7.8	21.6	42.0	8.8	61.1	8.6
Income per week						
Gross household income						
Mean income per week	1.2	6.3	6.3	1.2	1.2	1.1
Median income per week	1.2	5.9	4.2	1.0	0.8	0.9
Mean household net worth	7.8	10.7	6.1	5.6	3.4	6.1
Number of households						
One family households						
Couple family with dependent children	2.0	9.8	17.1	1.7	12.4	1.4
One parent family with dependent children	9.4	35.5	31.2	8.7	4.7	3.7
Couple only	2.4	12.4	6.9	2.1	4.2	1.5
Other one family households	4.1	23.3	18.3	3.6	9.5	3.3
Multiple family households	12.7	113.6	56.4	12.1	32.5	11.3
Non-family households						
Lone person	4.3	14.4	7.7	3.6	3.2	1.8
Group households	10.5	38.2	37.3	9.2	24.1	8.1
Total	***0.8***	***5.6***	***4.5***	***0.6***	***1.3***	***0.3***
Number of persons						
Employed persons	0.7	6.8	8.7	0.5	7.6	0.4
Dependent children	2.1	10.9	14.3	1.6	6.0	0.8
Persons						
Under 15 years	2.4	12.6	17.9	1.6	6.1	0.2
15 to 64 years	0.8	6.3	7.4	0.5	3.3	0.1
65 years and over	6.5	20.8	5.8	3.7	2.2	0.2
Total	***1.0***	***6.8***	***5.4***	***0.5***	***2.1***	—

— nil or rounded to zero (including null cells)

(a) Includes households with nil or negative total income

5.4 CONDITIONS OF CURF RELEASE

CONDITIONS OF RELEASE

The 2009–10 SIH and HES CURF comprises SIH (Basic and Expanded) and HES (Basic and Expanded) files. This CURF is released in accordance with a Ministerial Determination (Clause 7, Statutory Rules 1983, No.19) in pursuance of Section 13 of the *Census and Statistics Act 1905*. As required by the Determination, the CURF has been designed so that the information on the file is not likely to enable the identification of the particular person or organisation to which it relates.

The Australian Statistician's approval is required for each release of the CURF. The CURF Undertaking is required by Clause 7 of the Statistics Determination 1983 under the *Census and Statistics Act 1905*. This states that, prior to the CURF being released to an organisation, a Responsible Officer must undertake to ensure that the organisation will abide by the conditions of use of CURFs. For details refer to <www.abs.gov.au/about/microdata>, click on CURF Tool Kits, then Responsible Officer Tool Kit, then CURF Undertaking.

All organisations and individuals within organisations who request access will, prior to being granted access to the CURF, be required to sign an Undertaking to abide by the legislative restrictions on CURF usage.

Further, each individual applicant must agree to terms and conditions of use prior to applying for access to the combined 2009–10 SIH and HES. Some of the conditions of the Undertaking required of persons who purchase or access the combined 2009–10 SIH and HES CURF are, that in using the data, they will:

- use the information only for statistical purposes
- not attempt to identify particular persons or organisations
- not disclose, either directly or indirectly, the information to any other person or organisation
- not attempt to match the information with any other unit level list of persons
- in relation to data made available via the Remote Access Data Laboratory (RADL) of the ABS Data Laboratory (ABSDL), access the data only in a manner specifically authorised in writing by the ABS
- not attempt to access the data after the term of their authorisation is rescinded by the organisation which provided it, or after they cease to be a member of that organisation.

Use of the data for statistical purposes means use, by persons who have signed the Undertaking, to produce information of a statistical nature. Examples of statistical purposes are:

- manipulation of the data to produce means, correlations or other descriptive or summary measures
- estimation of population characteristics
- use of data as input to mathematical models or for other types of analysis (e.g. factor analysis)
- providing graphical or pictorial representations of the characteristics of the population or subsets of the population.

Use of the data for unauthorised purposes may render the purchaser liable to severe penalties. Advice about the propriety of any particular intended use of the data is available from the ABS Microdata Access Strategies Section at <microdata.access@abs.gov.au>.

Accessing the CURF

Clients wishing to access the 2009–10 SIH and HES Basic and/or Expanded CURFs are required to agree to Terms and Conditions of Use. Assistance in applying for CURF access is provided on the ABS website <www.abs.gov.au/about/microdata> click on About CURF Microdata. Before applying, CURF clients should read the *Technical Manual: Responsible Access to ABS CURFs Training Manual* (cat. no. 1406.0.55.003) and other related CURF information which are available on the CURF Microdata web pages: <www.abs.gov.au/about/microdata>, before downloading the Application and Undertaking to apply for access. Clients requiring more information than that provided on the ABS website should contact <microdata.access@abs.gov.au>.

Due to the level of detail provided, the 2009–10 SIH and HES Expanded CURFs are only available via the ABS Remote Access Data Laboratory (RADL). The Basic CURF is available on both CD–ROM and the RADL.

Australian Universities

The ABS/Universities Australia Agreement provides participating universities with access to a range of ABS products and services. This includes access to the 2009–10 SIH and HES Basic and/or Expanded CURFs for research and teaching purposes. For further information, university clients should refer to the ABS website <www.abs.gov.au/about/microdata> then click on ABS/Universities Australia Agreement located on the left menu panel. University clients wishing to use the CURF for commercial purposes outside the ABS/Universities Australia Agreement may apply under the standard ABS application process detailed on the ABS web site: <www.abs.gov.au> (see Services, ABS Microdata, CURFs: CURF MicroDATA, Apply for CURF Microdata).

Conditions of sale

All ABS products and services are provided under Conditions of sale. Any queries relating to these Conditions of Sale should be referred to <microdata.access@abs.gov.au>.

Price

CURF access is priced according to ABS Pricing Policy and Commonwealth Cost Recovery Guidelines. For these details refer to <www.abs.gov.au> click on About Us then ABS Pricing Policy. The current recommended retail price of the 2009–10 SIH and HES CURF is $1,540 per CURF access type. A bundled price of $2,310 is available where clients request access to both the Basic and Expanded CURFs in one single application. CURF prices are listed on the ABS website: <www.abs.gov.au/about/microdata> then click on About CURF Microdata, under related links click Microdata prices.

Further information

The CURF Microdata entry page on the ABS website <www.abs.gov.au/about/microdata> contains links to all the information required for understanding and accessing CURFs. However, if other information is required, clients should contact the Microdata and Multidimensional data Access Strategies Section of the ABS, email: <microdata.access@abs.gov.au> or phone: (02) 6252 7714).

ABBREVIATIONS

ABS	Australian Bureau of Statistics
ABSDL	Australian Bureau of Statistics Site Data Laboratory
ACT	Australian Capital Territory
ANZSCO	Australian and New Zealand Standard Classification of Occupations
ARIA	Accessibility/Remoteness Index of Australia
ASGC	Australian Standard Geographical Classification
ASNA	Australian System of National Accounts
ATO	Australian Taxation Office
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
CD-ROM	compact disc read-only memory
CNOS	Canadian National Occupancy Standard
COAG	Council of Australian Governments
COICOP	Classification of Individual Consumption According to Purpose
CPI	Consumer Price Index
CRA	Commonwealth Rent Assistance
CURF	confidentialised unit record file
ERP	estimated resident population
FTB	Family Tax Benefit
HEC	Household Expenditure Classification
HECS	Higher Education Contribution Scheme
HELP	Higher Education Loan Program
HES	Household Expenditure Survey
HH	household
IU	income unit
nec	not elsewhere classified
nfd	not further defined
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
Qld	Queensland
RADL	Remote Access Data Laboratory
RSE	relative standard error
SA	South Australia
SAS	software package for preparing and executing computerised data analysis
SE	standard error
SEIFA	Socio-Economic Indexes for Areas
SFSS	Student Financial Supplement Scheme
SIH	Survey of Income and Housing
SPSS	software package for preparing and executing computerised data analysis
STATA	software package for preparing and executing computerised data analysis

STRP	severance, termination and redundancy payments
Tas.	Tasmania
Vic.	Victoria
WA	Western Australia
WC	workers' compensation

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, 2009–10*, (cat. no. 6523.0)) or dollars per year (as presented in Table A1.2).

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 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, 2009–10* (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 2009–10 dollars								
Low income(a)	$	292	327	12.0	297	332	11.8	–0.2
High income (b)	$	1 022	1 186	16.0	1 039	1 214	16.8	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(d)	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(d)	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(d)	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(d)	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(d)	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(d)	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

(d) 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*

	2007-08(b)	*2008-09*(b)	*2009-10*(b)
	$b	$b	$b
Wages and salaries			
Current income	513.1	na	546.6
Previous financial year income(c)	na	503.1	na
Government pensions and allowances			
Current income	65.2	na	79.3
Previous financial year income(c)	na	77.1	na
Own unincorporated business income			
Current income	40.7	na	40.5
Previous financial year income(c)	na	34.7	na
Investment income			
Current income	43.4	na	39.3
Previous financial year income(c)	na	35.7	na
Other income			
Current income	31.6	na	33.3
Previous financial year income(c)	na	30.1	na
Total income			
Current income	694.0	na	739.0
Previous financial year income(c)	na	680.7	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, PREVIOUS FINANCIAL YEAR INCOME(a)

Person weighted indicator		*1993–94*	*1994–95*	*1995–96*	*1996–97*	*1998–99*	*1999–2000*	*2001–02*
Mean income per week(b)								
Lowest quintile	$	205	215	221	222	225	231	229
Second quintile	$	353	357	361	358	381	386	402
Third quintile	$	492	491	497	502	537	540	560
Fourth quintile	$	658	660	663	678	719	723	752
Highest quintile	$	1 029	1 039	1 057	1 085	1 157	1 181	1 201
All persons	$	547	552	560	569	604	612	629
Second and third deciles	$	291	297	301	299	314	320	328
Income per week at top of selected percentiles(b)								
10th (P10)	$	235	241	246	247	255	259	261
20th (P20)	$	287	295	302	299	311	320	324
30th (P30)	$	352	356	359	358	381	383	400
40th (P40)	$	420	420	426	423	455	457	482
50th (P50)	$	493	490	497	501	536	540	558
60th (P60)	$	566	568	569	581	624	625	647
70th (P70)	$	647	655	661	674	715	719	749
80th (P80)	$	770	773	768	783	835	844	875
90th (P90)	$	942	938	939	960	1 019	1 051	1 064
Income share								
Lowest quintile	%	7.5	7.8	7.9	7.8	7.5	7.5	7.3
Second quintile	%	12.9	12.9	12.9	12.6	12.6	12.6	12.8
Third quintile	%	18.0	17.8	17.8	17.6	17.8	17.6	17.8
Fourth quintile	%	24.0	23.9	23.7	23.8	23.8	23.6	23.9
Highest quintile	%	37.6	37.6	37.8	38.2	38.3	38.6	38.2
All persons	%	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
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
P80/P20	ratio	2.68	2.62	2.54	2.62	2.68	2.64	2.70
P80/P50	ratio	1.56	1.58	1.55	1.56	1.56	1.56	1.57
P20/P50	ratio	0.58	0.60	0.61	0.60	0.58	0.59	0.58
Gini coefficient	no.	0.304	0.302	0.302	0.308	0.312	0.313	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, PREVIOUS FINANCIAL YEAR INCOME(a) *continued*

Person weighted indicator		*2002–03*	*2004–05*(b)	*2006–07*(c)	*2008–09*(d)
Mean income per week(d)					
Lowest quintile	$	236	244	238	254
Second quintile	$	403	430	451	488
Third quintile	$	562	600	642	691
Fourth quintile	$	746	791	875	929
Highest quintile	$	1 214	1 338	1 527	1 580
All persons	$	632	681	747	789
Second and third deciles	$	332	350	361	392
Income per week at top of selected percentiles(d)					
10th (P10)	$	266	278	278	296
20th (P20)	$	330	348	360	390
30th (P30)	$	401	427	448	487
40th (P40)	$	483	514	547	588
50th (P50)	$	562	601	639	690
60th (P60)	$	644	688	742	794
70th (P70)	$	740	786	874	922
80th (P80)	$	869	925	1 024	1 094
90th (P90)	$	1 071	1 142	1 284	1 370
Income share					
Lowest quintile	%	7.4	7.2	6.4	6.5
Second quintile	%	12.8	12.6	12.1	12.4
Third quintile	%	17.8	17.6	17.2	17.5
Fourth quintile	%	23.6	23.3	23.4	23.6
Highest quintile	%	38.4	39.3	40.9	40.1
All persons	%	100.0	100.0	100.0	100.0
Second and third deciles	%	10.5	10.3	9.7	9.9
Ratio of incomes at top of selected income percentiles					
P90/P10	ratio	4.02	4.11	4.61	4.63
P80/P20	ratio	2.63	2.66	2.85	2.80
P80/P50	ratio	1.55	1.54	1.60	1.59
P20/P50	ratio	0.59	0.58	0.56	0.57
Gini coefficient	no.	0.312	0.323	0.346	0.337

(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 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.

GROSS INCOME AND EQUIVALISED DISPOSABLE INCOME *continued*

TABLE A2.1 GROSS INCOME TO PERSON WEIGHTED, EQUIVALISED DISPOSABLE INCOME, 2009–10

		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	$	363	na	365	332	344
P20	$	566	na	563	389	425
P50	$	1 320	na	1 183	698	715
P80	$	2 498	na	2 072	1 162	1 145
P90	$	3 316	na	2 706	1 467	1 448
P90/P10	ratio	9.14	na	7.42	4.42	4.21
P80/P20	ratio	4.42	na	3.68	2.99	2.70
Means						
All households	$	1 688	257	1 430	834	848
One family households						
Couple family with dependent children	$	2 442	446	1 996	889	870
One parent family with dependent children	$	1 085	89	996	562	547
Couple only	$	1 591	223	1 368	913	913
Other one family households	$	2 118	282	1 836	914	938
Multiple family households	$	2 643	309	2 334	792	773
Non-family households						
Lone person	$	821	114	707	707	707
Group households	$	2 025	301	1 725	980	982

na not available

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 $610 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,

GROSS INCOME AND EQUIVALISED DISPOSABLE INCOME *continued*

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 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 ($344) is higher than the household weighted estimate of P10 ($332). 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 ($707). 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 and other measures of income distribution') 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.

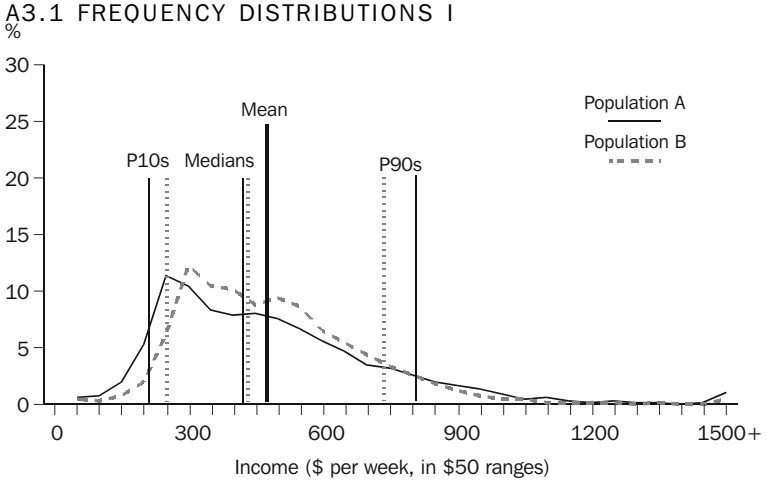
Unequal distributions of income can occur in many different ways. The majority of people may have very similar incomes with pockets of very high or very low income. Or entire populations may be heavily clustered at the top and the bottom of the income distribution with few people receiving incomes in 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

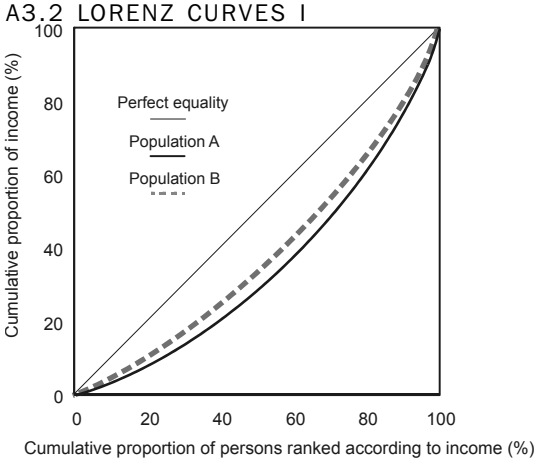


The extent to which the income distributions for populations A and B vary from equality, and from each other, can be illustrated graphically another way, using Lorenz curves.

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, i.e., where all people have the same equivalised disposable household income. 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.

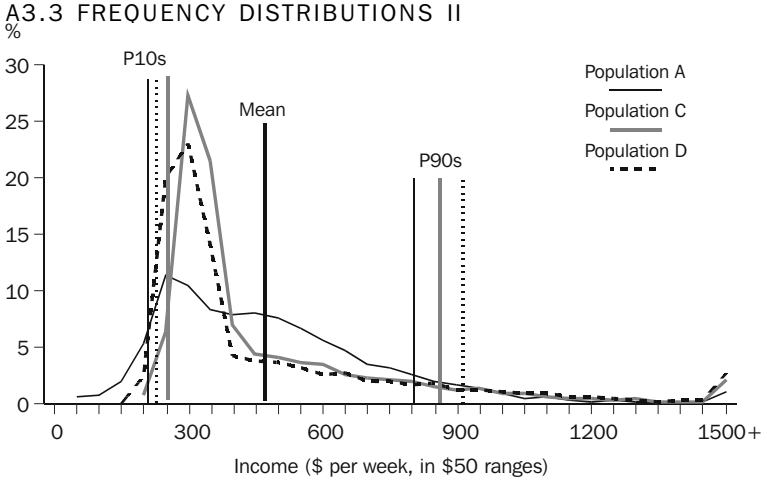
However, if the Lorenz curves of two populations cross over there is no Lorenz dominance and there is no generally accepted way of defining which of the two populations has the more equal income distribution.

Consider the income distributions of the populations in a second example, as shown in Graph A3.3 'Frequency Distributions II'. Population A is the same as that 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 incomes of populations C and D have been

LORENZ CURVES *continued*

transformed in such a way that the lower income people are relatively better off than for population A and the higher income people are also relatively better off than for population A. Conversely, the incomes of the middle of the populations have been 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. Also, 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.

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, i.e., income is unambiguously distributed more equally in population C than in population D.

LORENZ CURVES *continued*

A3.4 LORENZ CURVES II

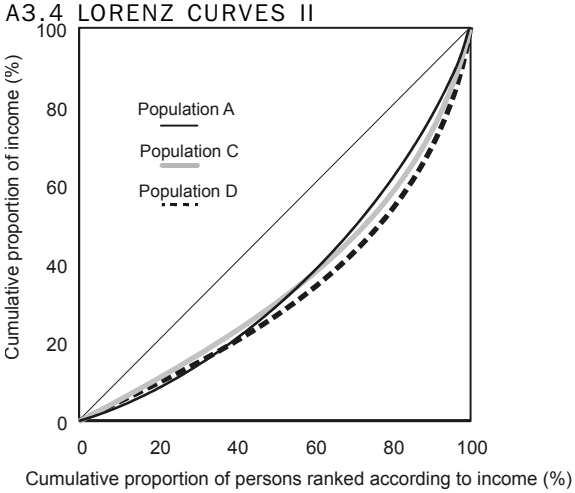


Table A3.5 shows the years for which the income distribution has Lorenz dominance over the income distributions of other years. Table A3.5 also shows the years for which the lack of Lorenz dominance is due only to the crossing of the Lorenz curves in the bottom decile of the income distribution, that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

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 distribution
(b) Lorenz curves cross at least once outside the first decile of the income distribution

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 that for population A. The Gini coefficient for population C is a little above that for population A, and that 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

η is the number of people in the population

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

and γ_i and γ_j are the equivalised disposable household income of the *i*th and *j*th 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

GINI COEFFICIENT *continued*

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, i.e., they have identical Lorenz curves. (The other single statistic summary indicators discussed in this Appendix also have this characteristic.)

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

ATKINSON INDEX *continued*

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, i.e., 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 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 either 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.

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					
ε = 0.5	. .	0.085	0.085	0.084	0.077
ε = 0.75	. .	0.135	0.134	0.131	0.116
ε = 1.0	. .	0.219	0.205	0.191	0.155
ε = 1.25	. .	0.458	0.355	0.286	0.199
ε = 1.5	. .	0.879	0.665	0.464	0.253
ε = 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.

CHOICE OF SUMMARY MEASURES *continued*

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 SIH, often reflecting their business and investment arrangements rather than any distinctly low economic wellbeing of these respondents. In other cases, incomes may be under reported 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 DATA ITEM LISTING

DATA ITEM LISTING

For details of the data items available from the 2009–10 SIH and HES see the Excel spreadsheet available as a data cube 'Appendix 4 HES and SIH 2009–10 data item listing' accompanying this User Guide.

APPENDIX 5 CURF DATA ITEMS AND RECORD STRUCTURE

CURF DATA ITEMS

For data items and structure of the SIH and HES CURFs see the Excel spreadsheet available as a data cube 'Appendix 5 HES and SIH 2009–10 CURF data items and record structure' accompanying this User Guide.

Subject index and field name index

The Excel spreadsheet contains indexed listings of the SIH and HES CURF data items by subject and by field name in 2009–10.

Data items and record structure

The Excel spreadsheet contains detailed listings of the SIH and HES CURF data items by level, providing item labels and categories, item identifiers, index numbers and populations.

Comparison of 2009–10 and previous CURFs

The Excel spreadsheet contains two lists outlining the differences between the 2009–10 and previous SIH and HES CURFs.

- A list of data items for key topics which are not on both the 2009–10 and previous CURFs - this includes items no longer included on the CURF, and items which have been replaced by new items. Imputation flags excluded or included on the 2009–10 CURF are not listed explicitly as changes, but the list of included imputation flags is available in the main data item list for the CURF.
- A list of data items which are different on the 2007–08 and 2009–10 CURFs (excluding items not on both CURFs) - this includes items changed as a result of changes such as standards used, category codes or labels, data item labels and field names.

Important or conceptual changes documented for specific items in Part 4.1 'Changes in the 2009–10 SIH and HES' and other minor underlying or flow-on changes, are not documented in these lists unless they resulted in changes to the items included on the CURFs or in changes to the data item field names, labels or categories used.

COMPARISON OF 2009–10 AND PREVIOUS SIH CURFS

The list of data items for key topics which are not on both the 2009–10 and previous CURFs primarily contains data items which are new, replaced or removed in 2009–10 compared to 2007–08. However, differences in the wealth topic are limited to changes in data items since the 2005–06 SIH CURF (i.e. wealth data items available in 2009–10 which are the same as in 2005–06, are not listed here even though they were not on the 2007–08 CURF).

COMPARISON OF 2009–10 AND PREVIOUS HES CURFS

The list of data items for key topics which are not on both the 2009–10 and previous CURFs does not compare all differences between the 2003–04 and 2009–10 HES CURFs, as there have been significant changes in the 2005–06 and 2007–08 SIH cycles to income data items in particular. The list provides differences in HES only items, and CURF users should refer to data item changes provided in Technical Manuals for the 2005–06 and 2007–08 cycles if detail about those changes is required.

Comparison of 2009–10 Basic and Expanded CURFs

The Excel spreadsheet also contains a list of differences between items on the 2009–10 Basic and Expanded SIH and HES CURFs.

Expenditure classifications

The Excel spreadsheet contains the classification codes and structures for the Household Expenditure Classification (HEC) and the Classification of Individual Consumption According to Purpose (COICOP), used to classify household expenditure data on the HES 2009–10 Basic and Expanded CURFs.

APPENDIX 6 HOUSEHOLD EXPENDITURE CLASSIFICATION

HOUSEHOLD EXPENDITURE CLASSIFICATION

The Household Expenditure Classification (HEC) used to classify the HES expenditure data, is available as data cube 'Appendix 6 - Household Expenditure Classification 2009–10' accompanying this User Guide. This appendix provides the hierarchical HEC, from the broad two-digit level classification through to the most detailed ten-digit level classification.

Three different collection methods were used to collect expenditure data. These were to collect it via a computer assisted household interview questionnaire (using a variety of recall periods); for the respondents to collect it in a paper diary; or to derive it using modelling techniques. The way in which expenditure for each HEC good or service was collected is also included in the data cube. The 2003–04 HEC code is provided, if it has changed in the 2009–10 HEC.

Household Expenditure Classification 2003–04 to 2009–10 Concordance

In addition, this datacube contains a concordance, that identifies classification changes between the 2003–04 and the 2009–10 HEC items, at the most detailed 10-digit classification level.

APPENDIX 7 HEC CODING LIST

HOUSEHOLD EXPENDITURE CLASSIFICATION CODING LIST

The Household Expenditure Classification (HEC) Coding List identifies the goods and services included in the detailed HEC codes in numerical and alphabetical order. New codes, and codes that have changed since 2003–04, are also provided. It is available as data cube 'Appendix 7– HEC coding list 2009–10' accompanying this User Guide.

APPENDIX 8 HEC AND COICOP CONCORDANCE

HEC AND COICOP CONCORDANCE

In 2009–10, household expenditure has also been classified according to the Classification of Individual Consumption According to Purpose (COICOP) which is the international classification of consumption expenditures.

A concordance has been developed between the detailed Household Expenditure Classification (HEC) commodity codes and the COICOP at the two digit COICOP level. For the purpose of the concordance, all HEC commodity codes have been included, including non-consumption expenditures which have been labelled 'Other expenditure'. This concordance is available as an Excel data cube.

GLOSSARY

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.

Age
Person's age last birthday.

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.

Average weekly expenditure
Value obtained by dividing the estimated weekly expenditure of a group of households by the estimated number of households in the group.

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.

Broad expenditure group
The broadest level of the Household Expenditure Classification (HEC) used in the 2009–10 survey. For details of the classification see Appendices 6 and 7.

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 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.

Child Care Rebate (CCR)
A tax offset that allows families with a tax liability to receive a rebate of their out-of pocket expenses incurred for approved child-care. The CCR is available for families who receive Child Care Benefit (CCB) and meet the CCB 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).

Classification of Individual Consumption According to Purpose (COICOP) — The international standard classification framework for classifying consumption expenditures on goods and services.

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.

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, 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.

Diary A notebook in which each person aged 15 years and over who was usually resident in the selected HES dwelling recorded his or her daily expenditure over two weeks.

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.

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.

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.

Expenditure The cost of goods and services acquired during the reference period for private use, whether or not the goods were paid for or consumed. Expenditure is net of refunds. For example, payments for health services are net of any refunds received or expected to be received. Expenditure is classified according to the *Household Expenditure Classification* which contains over 600 detailed items.

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 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.

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). 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, ownership of an incorporated business, shares, debentures and bonds, trusts, superannuation funds, and loans to other persons.

Financial stress A range of items which provide a subjective measure of the household's economic wellbeing. One person in each household was asked to provide assistance of the current household's circumstances. This person was randomly chosen from the reference person and spouse. Items include management of household income, present standard of living compared with two years ago, ability to raise emergency money, and a range of cash flow problems. For further information see Part 1.14 'Deprivation and financial stress indicators'.

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.

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.

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.

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

Household Expenditure Classification (HEC)
The expenditure classification used in the *Household Expenditure Survey, Australia, 2009–10* (cat. no. 6530.0). In the 2009–10 survey it consists of over 600 items at the most detailed level. At the broadest level it consists of 17 broad expenditure groups. For details of the classification see Appendices 6 and 7.

Household questionnaire
Used to collect information on household characteristics, housing costs and household assets and liabilities. Also used to collect irregular or infrequently occurring expenditure items and regular expenditure items common to all household members for the HES. Households were asked to recall expenditures over a period ranging from their last payment (e.g. for household bills) to three years (e.g. for house purchases).

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 costs
Housing costs for the purposes of the publication *Housing Occupancy and Costs, Australia, 2009–10* (cat. no. 4130.0), to be released in October 2011, 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. See 'Notes on specific data items' in Part 5.1 'Using the CURF data' for alternative measures of housing costs included on the files.

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 (CNOS).

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 items available on the CURF include income measures derived in a similar manner to income items used in previous CURFs, and these may differ from the definition above. See 'Notes on specific data items' in Part 5.1 'Using the CURF data' for alternative measures of income included on the files.

Income tax

This item was estimated for all households using the relevant taxation criteria and the income and other characteristics of household members reported in the survey.

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 Investment 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 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 are an overdraft from a bank, money lent by a building society 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.

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 expenditure
Expenditure may be negative if a household's receipts for a good or service (e.g. refunds, trade-ins, sales or successful insurance claims), over a specific period, exceeds the cost of acquisitions. For example, if a household sold a car in the previous 12 months and did not buy a replacement car or they bought a less expensive car, this household would report negative expenditure on cars.

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 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).

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 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 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 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 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—owners without a mortgage and owners 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.

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. For further information see Part 5.1 'Using the CURF data'

Previous financial year income Income earned in the period July 2008 to June 2009.

Private income Current receipts from private organisations, 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.

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 2.10.

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

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.

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. Multistorey 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.

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 2.10 'Reliability of estimates'.

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 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.

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.

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.

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.

Wages and salaries *continued*

Income items available on the SIH CURFs include income measures derived in a similar manner to income items used in previous SIH CURFs, and the wage and salary components may differ from the definition above. See 'Notes on specific data items' in Part 5.1 'Using the CURF data' for alternative measures of income included on the files.

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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