

# Jersey Household Income Distribution 2014/15

Statistics Unit: [www.gov.je/statistics](http://www.gov.je/statistics)



## Key statistics

- Average (**mean**) household weekly income: £860 per week before, and £720 after, housing costs
  - *an increase of 2% since 2009/10*
- **Median** average equivalised income: £680 per week before housing costs, and £560 per week after
  - *an increase of 9% since 2009/10 after housing costs*
  - *around 50% higher in Jersey than the UK*
- Three-quarters (75%) of household income in Jersey was from **employment earnings**, 4% was from income support, benefits and grants and 12% from pensions
- **Income support and benefits** made up 37% of household income for one-parent families with dependent children, and 3% of household income for couples with dependent children
- Relative low income threshold (60% of median) was £410 per week before, and £340 after, housing costs
- After housing costs, 26% of households and 23% of individuals were living in **relative low income (RLI)**
  - *one in three (29%) **children** were in RLI, a similar proportion to the UK (28%)*
  - *one in three (28%) **pensioners** in Jersey were in RLI, twice the proportion of that in the UK (14%)*
- Households living in rental accommodation (including the qualified, social and non-qualified sectors) spent, on average, around a third of their income on **housing costs**

## Key themes

- Since 2009/10, mean and median household incomes have increased by **less than inflation** (as measured by the Retail Prices Index)
- Median equivalised household income after housing costs *decreased* (in nominal terms) for those living in **non-qualified** and **social rental** accommodation since 2009/10. The decrease in household incomes for certain groups was driven by:
  - a **reduction in employment income**, particularly for those aged under 40 years and those in non-qualified accommodation, and
  - an **increase in housing costs** for those in rental accommodation (particularly qualified and social renters)
- The average household income (after housing costs) of those in the lowest quintile *decreased* by a sixth (17%) in nominal terms over the last five years.
- Over half (56%) of one-parent families were in relative low income after housing costs
- Once housing costs were taken into account:
  - the proportion of **qualified** rent households in **relative low income (RLI)** **trebled**, from one in ten (10%) to three in ten (31%)
  - the proportion of **social rental** households in RLI increased from a quarter (27%) to two-thirds (66%)
  - the proportion of **non-qualified** rental households in RLI also increased, from 22% to 39%
- The benefits and tax system improve **income inequality**; housing costs almost remove this improvement
- Income inequality has **increased since 2009/10**, that is the distribution of household income has become more unequal, particularly after housing costs are included
- Income inequality was **worse in Jersey** in 2014/15 than in the UK

## Contents

<b>SECTION 1 – Average household income and its sources</b>	<b>3</b>
Introduction	3
Average (mean) income	4
All households	4
By household type	4
By tenure	5
Composition of income	6
All households	6
Pensioner households	6
Households with dependent children	7
Other working-age households	7
<b>SECTION 2 – The income distribution in more detail</b>	<b>8</b>
Distribution of household income at each stage of analysis	8
Equivalised income distribution	9
Median average household income	10
All households	10
By household type	10
By tenure	11
Quintiles	12
All households	12
By household type	12
By tenure	14
<b>SECTION 3 – Relative low income and inequality</b>	<b>15</b>
Relative low income	15
By household type	15
By tenure	15
Individuals in relative low income	16
Relative low income within each household type	17
Relative low income within each tenure	17
A lower threshold of relative low income	18
Income inequality measures	22
<b>SECTION 4 – Comparisons</b>	<b>23</b>
Comparison with 2009/10 results	23
Mean household income	24
Median household income	24
Quintile changes	26
Relative low income	26
Income inequality indicators	28
Comparison with UK	29
<b>SECTION 5 - APPENDICES</b>	<b>30</b>
I - Definitions	30
II - Survey Methodology	34
III - Methodological changes for 2014/15	35
IV - Median employment earnings	36

## Introduction

This report presents robust and representative information on the incomes of Jersey households, from a large survey of Jersey households carried out over the thirteen month period from April 2014 to May 2015.

Over 1,200 randomly selected households took part in the Household Spending and Income Survey, providing detailed information on all sources of income (including employment, pensions and unearned income) and spending on housing costs (for example mortgage interest, rent and parish rates), as well as demographic information on the make-up of the household.

This report is broken down into four main sections:

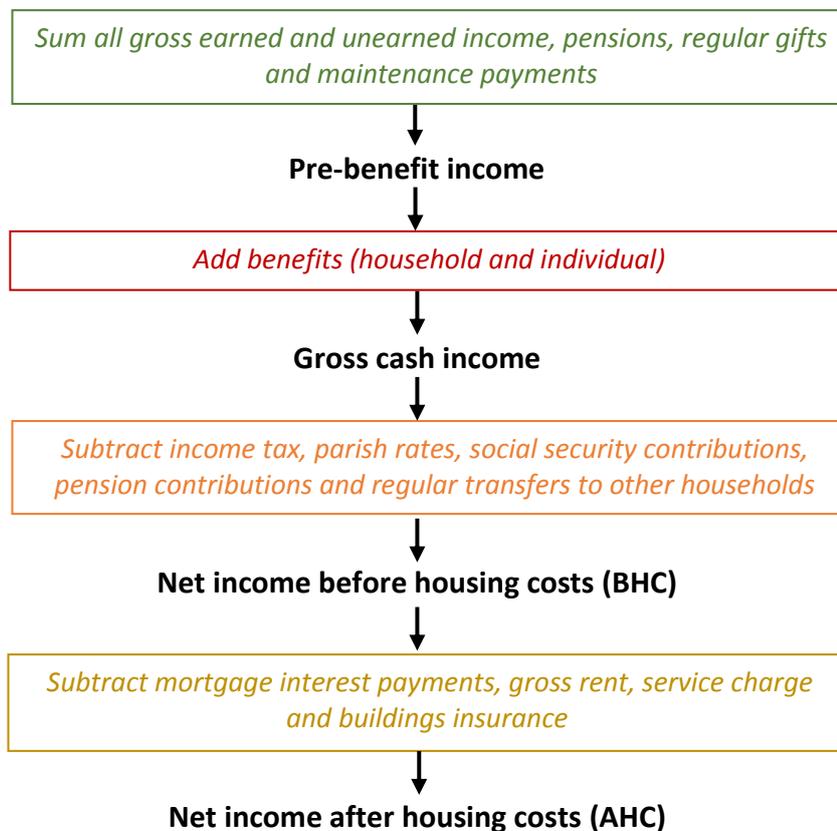
- **Section 1** provides a basic overview of average household income, at each stage of income analysis. It also shows the contribution of various sources of household income for different household types.
- **Section 2** gives more detail, describing in particular how the incomes for households of different tenures and household types are distributed once the data has been standardised for household size.
- **Section 3** focusses on the lower end of the income distribution, looking at those households with a 'relative low income', as well as presenting measures of income inequality.
- **Section 4** compares the current situation in Jersey with 5 years previously, and also with the UK.

### Analysis outline

Four stages of household income calculations are presented throughout this report - see Figure 1.1. Between each stage of analysis, components of income are included (e.g. pensions, benefits) and deductions are made (e.g. income tax and social security contributions).

Two key stages are: "Net income before housing costs" (BHC) and "Net income after housing costs (AHC)".

**Figure 1.1 Four main stages of household income**



## Average (mean) income

### All households

Table 1.1 shows the average (mean) household weekly income for all households in Jersey, for each stage of household income. The change in mean income in moving from one stage of income to the next is apparent<sup>1</sup>.

**Table 1.1: Mean household income**

	£ per week
Pre-benefit income	1,020
Gross cash income	1,070
Net income before housing costs (BHC)	860
Net income after housing costs (AHC)	720

### By household type

Focussing on Net income *before* housing costs (BHC) and *after* (AHC), the mean level of household income can be compared across different household types (see Table 1.2). See Appendix I for the definitions of household groups.

**Table 1.2: Mean household income, before and after housing costs, by household type**

	BHC £ per week	AHC £ per week	% of BHC income spent on housing
Pensioner households (includes single and couple pensioners)	580	520	9
One-parent with dependent child(ren)*	590	380	35
Couple with dependent child(ren) *	1,190	990	17
Couple – no children	1,010	850	16
Working-age adult living alone	510	390	24
Other	1,180	1,060	11
<b>All households</b>	<b>860</b>	<b>720</b>	<b>16</b>

\*dependent children defined as under 16 years of age

- Working-age adults living alone had the lowest mean average income per week at £510 before housing costs, a quarter (24%) of which was spent on housing costs, giving a mean net income of £390 per week once housing costs were taken into account.
- Housing costs affected the income of pensioner households the least: on average a tenth (9%) of pensioner household income was spent on housing costs.
- Couples with dependent children had more than twice the average household income as one-parent households with dependent children: £990 per week compared to £380 per week after housing costs.

It should be noted that the household incomes presented in this section have not been adjusted for household size: households with more adults may be more likely to have a higher income. Section 2 presents the data adjusted for household size, to allow fairer comparisons to be made.

<sup>1</sup> Throughout this section, which presents mean income figures, the income data was winsorised at 2.5%, and weekly figures are rounded to the nearest £10. In winsorisation, the incomes of the lowest 1.25% and the highest 1.25% of households are assigned to the value of the 1.25<sup>th</sup> percentile household, and the 98.75<sup>th</sup> percentile household respectively. This technique is commonly used to avoid particularly high or low income households from excessively influencing the mean value.

## SECTION 1 - Average household income and its sources

### By tenure

Table 1.3 shows mean average household income, before and after housing costs, for each tenure category.

**Table 1.3: Mean household income, before and after housing costs, by tenure**

	<b>BHC £ per week</b>	<b>AHC £ per week</b>	<b>% of BHC income spent on housing</b>
Owner occupied, with mortgage	1,270	1,130	12
Owner occupied, without mortgage	870	860	1
Qualified rental	750	500	32
Social rental	510	330	36
Non-qualified accommodation	660	460	30
<b>All households</b>	<b>860</b>	<b>720</b>	<b>16</b>

- Around a third of household income was spent on housing costs by households living in the different categories of rented accommodation (including rental properties in the qualified, social housing and non-qualified sectors).
- Households with a mortgage spent, on average, an eighth (12%) of their household income on housing costs. Such households had the highest mean income after housing costs, at £1,130 per week.
- Households living in social rented accommodation had the lowest weekly household income, at £510 per week before housing costs, reducing to £330 per week once housing costs were taken into account.

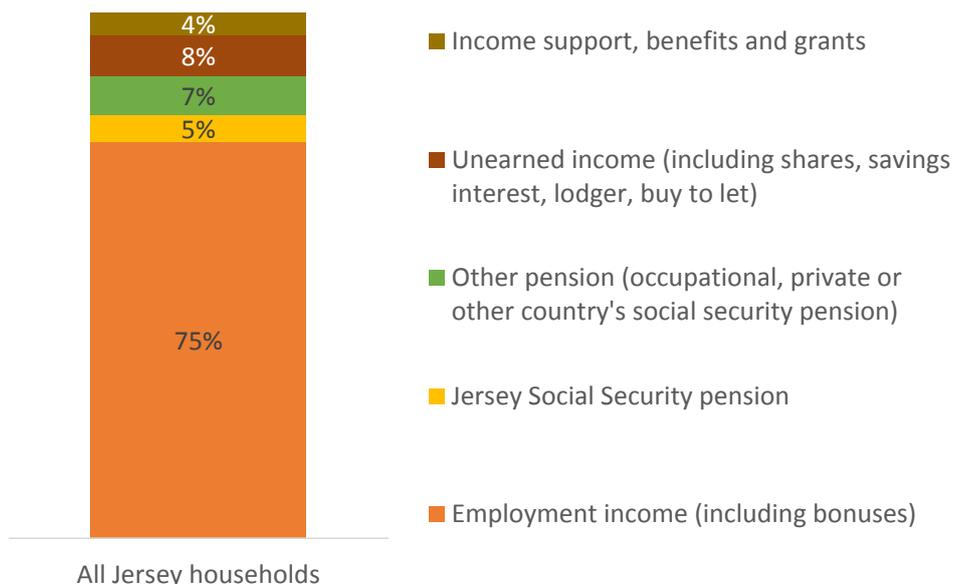
## Composition of income

### All households

Analysing gross cash household income by source (see Figure 1.2) showed that:

- three-quarters (75%) of total household income in Jersey originated from employment (including self-employed earnings)
- nearly a tenth (8%) was from unearned income sources such as shares or dividends, savings interest, buy to let profits and income from lodgers
- an eighth (12%) of total household income was from a pension – 5% of total household income was from the Jersey social security pension, and 7% from either occupational, private or another country's social security pension.

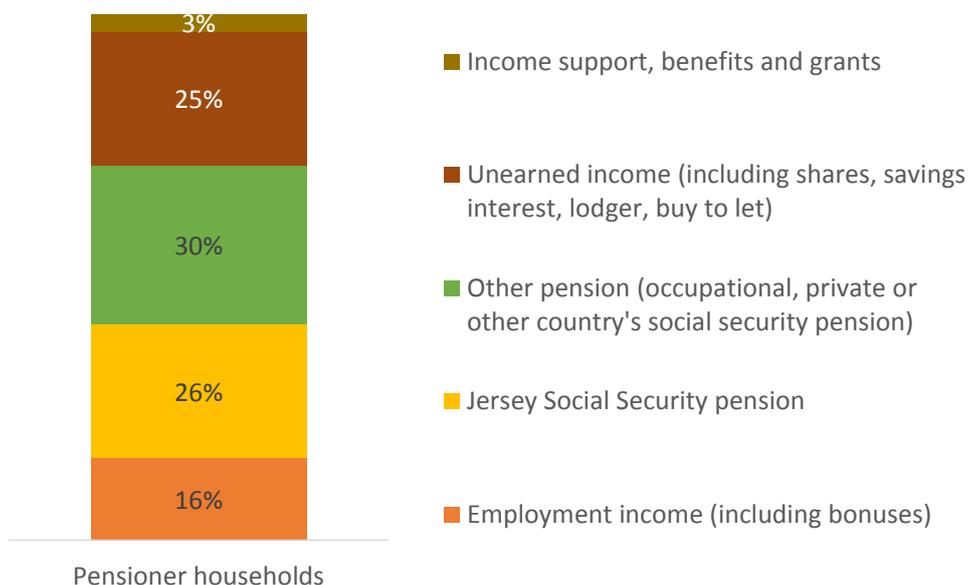
Figure 1.2: Composition of household income in Jersey



### Pensioner households (21% of all households, corresponding to 8,800 households at the 2011 Jersey Census)

A sixth (16%) of pensioner household income was from employment income, a quarter (26%) from the Jersey social security pension and a small proportion (3%) from income support, benefits and grants. Unearned income accounted for a quarter (25%) of pensioner household income, and nearly a third (30%) came from other pension types, such as occupational, private, or social security pensions from other countries.

Figure 1.3: Composition of household income in Jersey for pensioner households

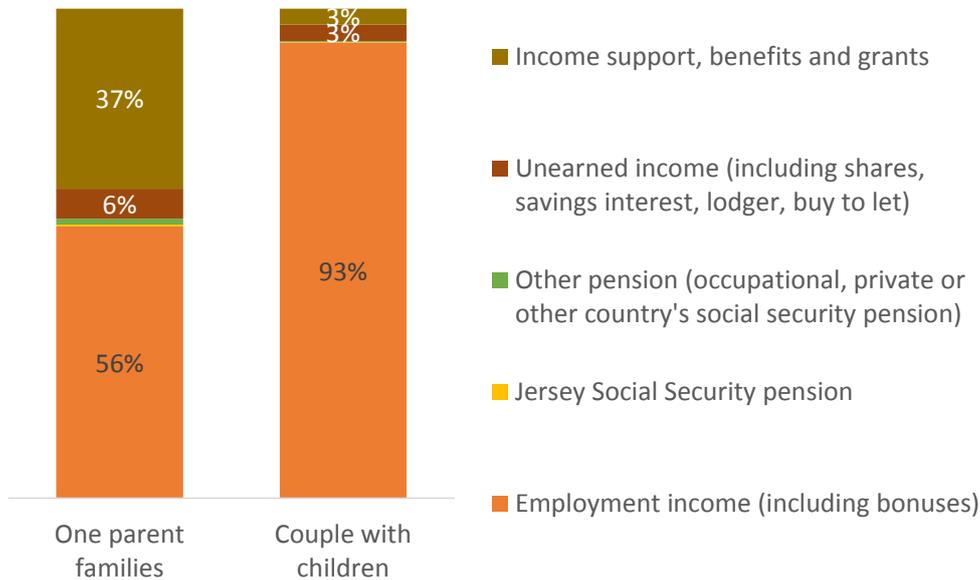


## SECTION 1 - Average household income and its sources

### Households with dependent children (23% of all households; 9,500 households at the 2011 Jersey Census)

For one-parent families, over half (56%) of their income came from employment whilst over a third (37%) was from income support, benefits and grants. In contrast, the large majority (93%) of income for couples with dependent children was from employment, and only 3% from income support, benefits and grants.

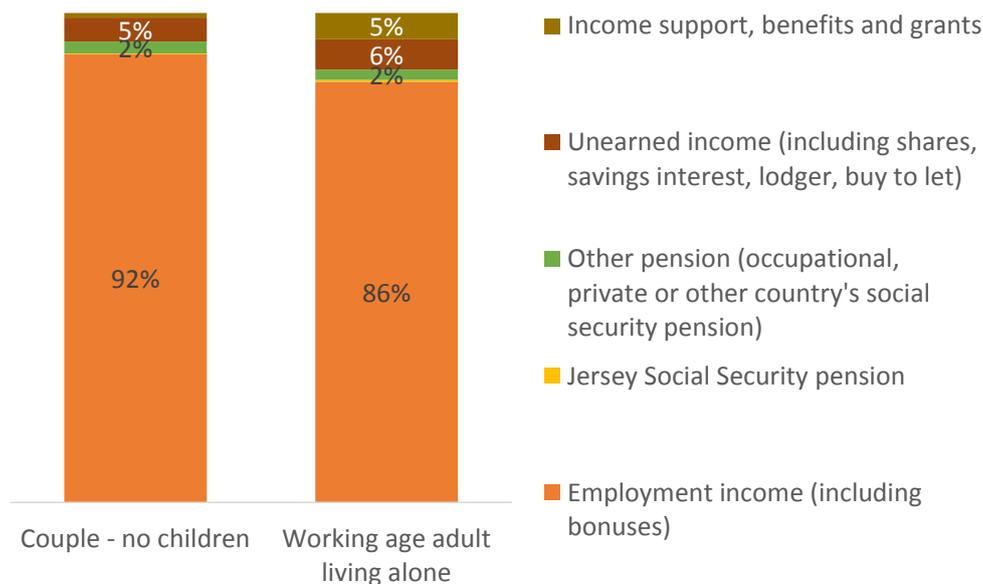
Figure 1.4: Composition of household income in Jersey for households with dependent children



### Other working-age households (34% of all households; 14,300 households at the 2011 Jersey Census)

For households of working-age, either couples or single persons, with no children in the household, a similarly high proportion of household income arose from employment earnings (92% and 86% respectively). For both these household types, a small proportion of income (5% and 6% respectively) came from unearned sources such as shares, dividends, savings interest or profits from buy to let. For adults of working-age living alone, 5% of their income was from income support, benefits and grants.

Figure 1.5: Composition of household income in Jersey for working-age households



### Changes in household income at each stage of analysis

The following three charts illustrate how the income distribution changes at each stage of analysis.

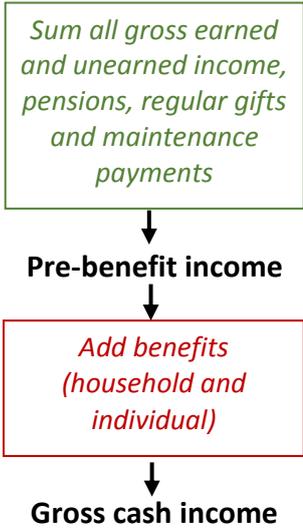


Figure 2.1 Pre-benefit income -> Gross cash income

As income support and benefits payments are added into the earned and unearned income of households, the proportion of households at the lowest band of income reduces.

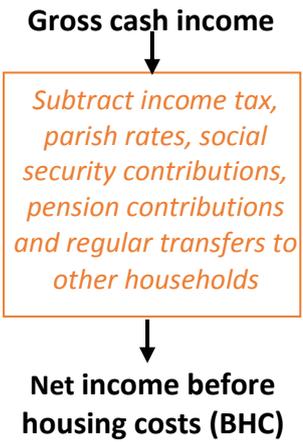
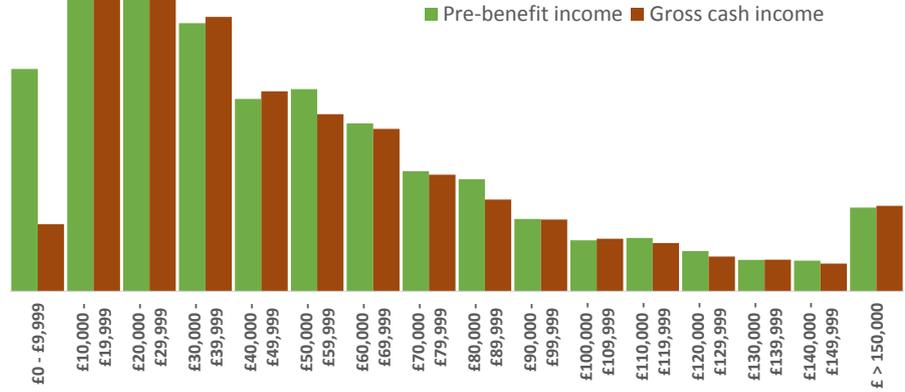


Figure 2.2 Gross cash income -> Net income before housing costs

Deducting income tax, social security and pension contributions from household income increases the number of households in lower income bands (below £60,000), and decreases the number in higher income bands (above £60,000).

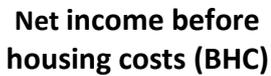
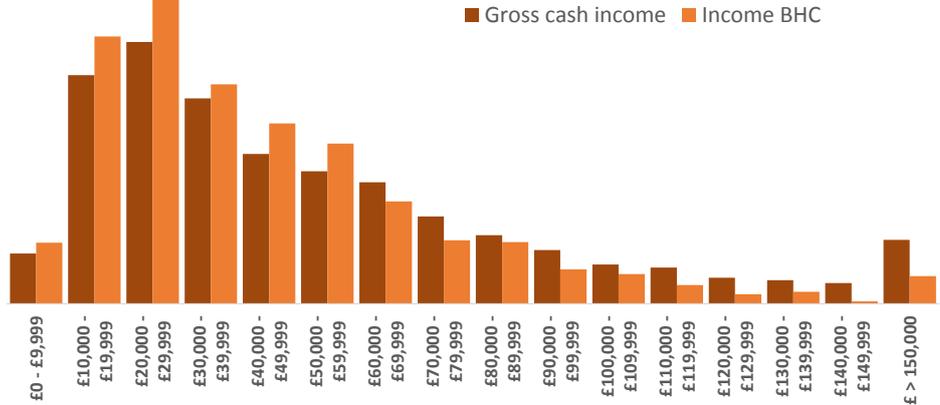
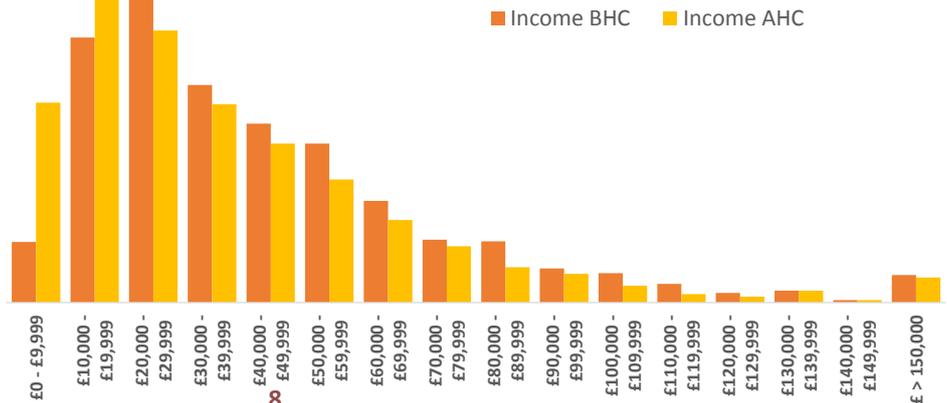


Figure 2.3 Net income before housing costs -> after housing costs

Finally, once housing costs (both rent and mortgage interest) are taken into account, the distribution moves leftwards, with higher proportions of households in the lowest income bands (below £20,000).



### Equivalised income distribution

Average (mean) household income will generally be affected by household size: e.g. single adult households will generally have lower incomes than two or more adult households. Furthermore, housing costs will have differing impacts according to the size of the household.

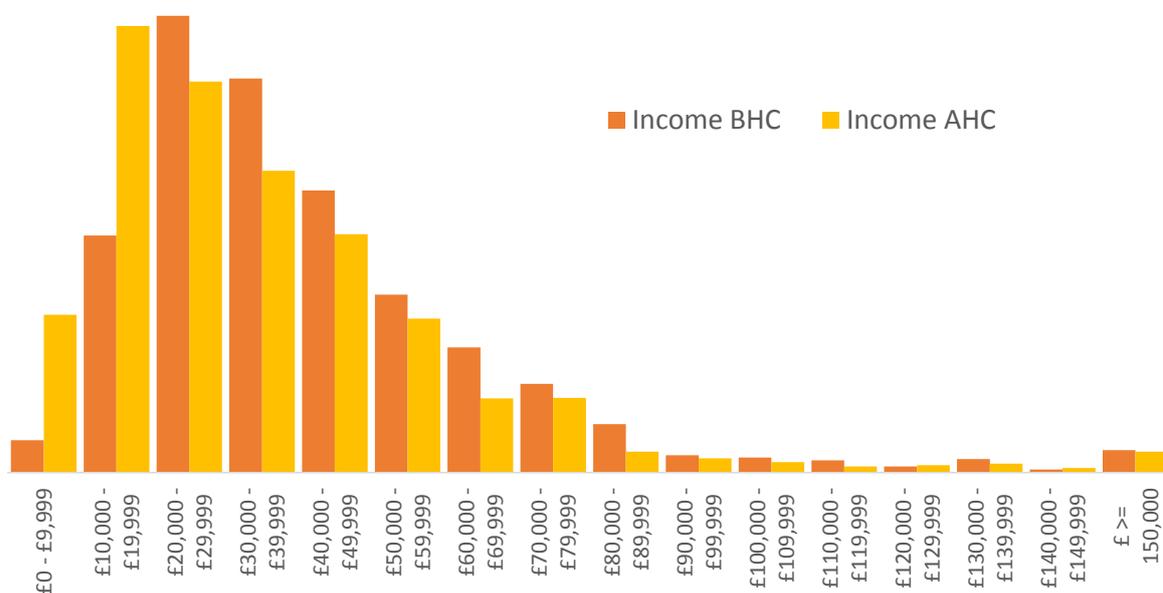
To remove the variation caused by differences in household size, and also in make-up (e.g. numbers of children versus adults), a process of equivalisation is used to standardise every household to the same household size and type. The standard used here, and generally in this field of analysis, is that of an adult couple with no children.

This process of standardisation, called equivalisation, allows fairer comparisons to be made across different sized households. For example, one person with an income of £500 a week living on their own will experience a different standard of living to a family of four with an income of £500 per week. Through the process of equivalisation, household incomes for persons living alone are adjusted upwards, whilst households with more than two adults would have their incomes adjusted downwards.

Using the Modified OECD equivalence scale, a person living alone with a weekly income of £500 would be equivalent to an adult couple with an income of £746 per week. Similarly a family of four with an income of £500 per week would be equivalent to an adult couple earning £357 per week (see Appendix I for further information).

Figure 2.4 shows the **equivalised** income distribution for Jersey households before and after housing costs. The leftward shift in the distribution is clearly apparent as more households fall into the lower income bands, once housing costs are taken into account.

Figure 2.4: Equivalised household income before (BHC) and after (AHC) housing costs

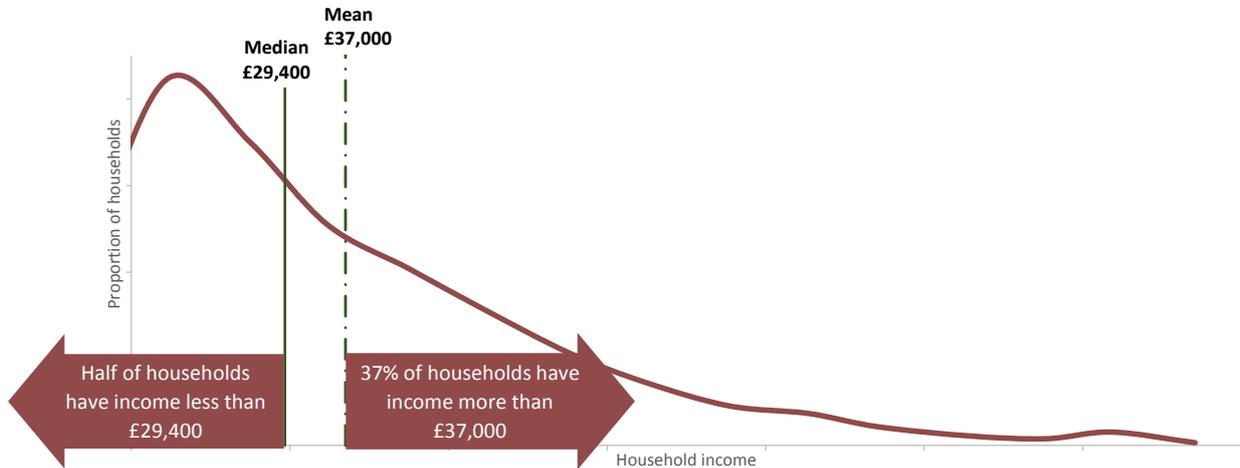


### Median average household income

The equivalised **median household income**<sup>2</sup> is a particularly meaningful average measure when the overall distribution is skewed (as income distributions typically are, whereby a small number of households may have particularly high incomes).

To illustrate the skewness of the income data, nearly two-thirds (63%) of households had an income, after housing costs, *below* the mean average, whilst 37% had an income above the mean.

Figure 2.5: Illustration of the skewness of income data:



### All households

The median (equivalised) income for households in Jersey before housing costs was £680 per week, and £560 per week after housing costs. In other words, if all the households were ordered according to their equivalised household income, the middle household (the 50<sup>th</sup> percentile) had an income of £560 per week after housing costs.

Table 2.1: Median equivalised household income

	All households (£ per week)
Pre-benefit income	800
Gross cash income	820
Net income before housing costs (BHC)	680
Net income after housing costs (AHC)	560

The median equivalised household income can be calculated for each household type and tenure, and is presented in Tables 2.2 and 2.3.

### By household type

Comparing Table 2.2 below with Table 1.2 (page 4) shows the effect of equivalisation on the relative incomes by household type. The spread of values is narrower, as the household incomes across the different household types have been standardised to the equivalent of an adult couple, as well as focussing on the median ('middle') value rather than the mean average.

<sup>2</sup> The equivalised income of the middle (50<sup>th</sup> percentile) household.

Table 2.2: Median equivalised household income, by household type

	BHC £ per week	AHC £ per week
Pensioner households	540	490
One-parent with dependent child(ren)	530	310
Couple with dependent child(ren)	720	600
Couple – no children	850	710
Working-age adults living alone	640	450
Other	800	750
<b>All households</b>	<b>680</b>	<b>560</b>

After housing costs, households comprising one-parent with dependent child(ren) had the lowest equivalised median income, followed by working-age adults living alone and pensioner households. Couples with no children had the highest equivalised median household income.

### By tenure

Households living in social rented accommodation had the lowest median equivalised income before and after housing costs, at £470 and £280 per week, respectively (see Table 2.3).

Once housing costs were taken into account, the median equivalised income of non-qualified and qualified rental households were similar, at just over £400 per week.

Owner occupied households with a mortgage had the highest median equivalised income both before and after housing costs (£1,010 and £890, respectively).

Table 2.3: Median equivalised household income, by tenure

	BHC £ per week	AHC £ per week
Owner occupied, with mortgage	1,010	890
Owner occupied, without mortgage	680	670
Qualified rental	650	440
Social rental	470	280
Non-qualified accommodation	560	420
<b>All households</b>	<b>680</b>	<b>560</b>

## Quintiles

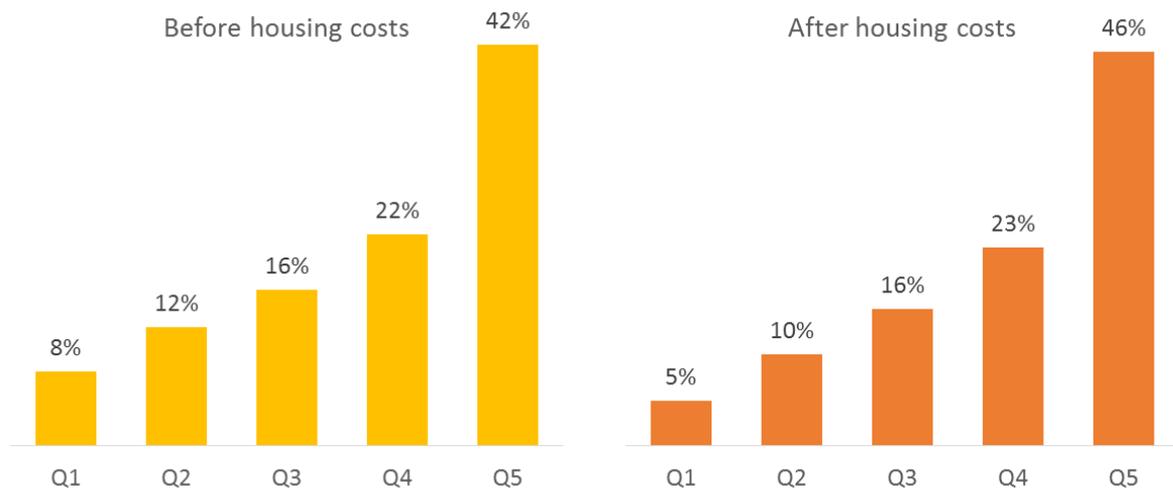
A useful approach for exploring the distribution of household income is to divide households in Jersey into five equal sized groups ('quintiles') according to their income level – the first quintile being the 20% of households with the lowest incomes, the second quintile being the next 20% of households and so on, up to the fifth, or top, quintile being the 20% of households with the highest incomes.

### All households

Figure 2.6 illustrates the proportion of total household income for each quintile group (before and after housing costs). The top 20% of households were found to have just under half (46%) of total household income, after housing costs, whilst the bottom 20% of households had 5% of total household income.

It should be noted that the income distribution survey did not include questions on assets, and this report focusses on *income* rather than overall wealth.

**Figure 2.6 Proportion of total household income for each of the five quintiles**



The quintile boundaries are given in Table 2.4.

**Table 2.4 Annual household income (equivalised): upper boundaries for income quintiles (rounded to the nearest £100)**

	Quintile 1	Quintile 2	Quintile 3	Quintile 4
Net income before housing costs	23,000	30,900	41,000	57,700
Net income after housing costs	15,200	23,900	34,900	50,700

### By household type

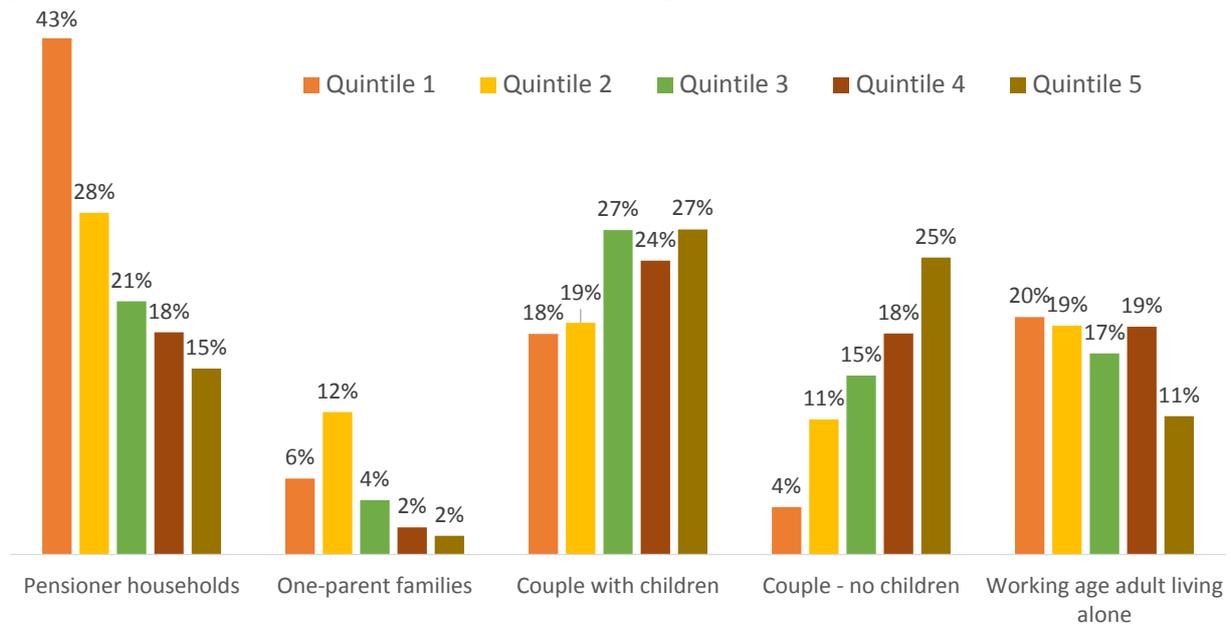
Figure 2.7 presents each household type and the proportion of each income quintile that they occupy, before housing costs were taken into account. For example, focussing on pensioner households, these made up two-fifths (43%) of the first income quintile, and a sixth (15%) of the top income quintile. Pensioner households were more likely to be in the lower income quintiles.

Overall there were much fewer one-parent families than pensioner households (as represented by the overall shorter bars for this household type compared to pensioner households in Figure 2.7), but these too tended to be in the lower income quintiles.

The opposite pattern was seen for couples with no children, who made up a quarter (25%) of the top income quintile but only 4% of the bottom income quintile. For couples with children, and working-age adults living alone, there was generally a more even spread across the income quintiles.

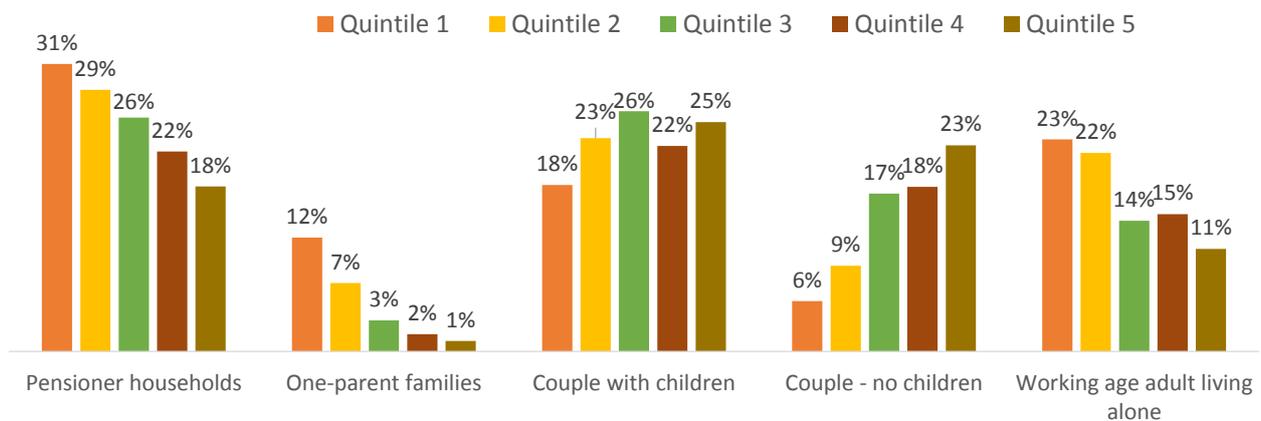
## SECTION 2 - The income distribution in more detail

Figure 2.7: Proportion of each income quintile before housing costs by household type



After housing costs were taken into account, the patterns were similar. The trend for pensioner households to be in the lower income quintiles remained but was less pronounced. The pattern that couples with no children tended to be in the higher income quintiles remained strong – see Figure 2.8.

Figure 2.8: Proportion of each income quintile after housing costs by household type

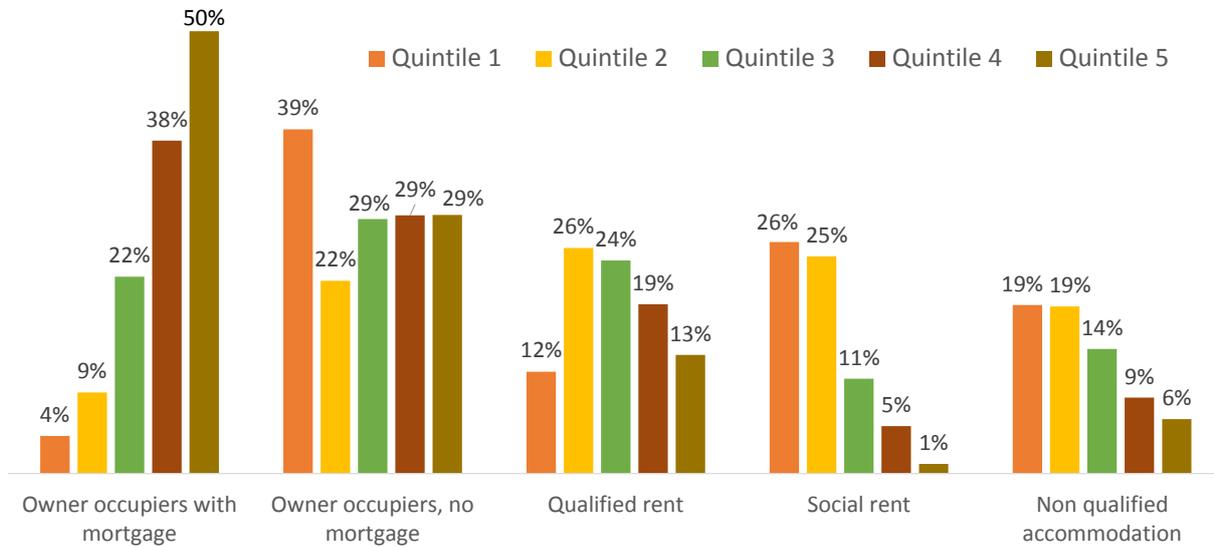


One-parent families made up 12% of the lowest income quintile, but only 1% of the highest income quintile. For persons living alone (of working-age), once housing costs were taken into account, there was a slight trend towards being in the lower income quintiles.

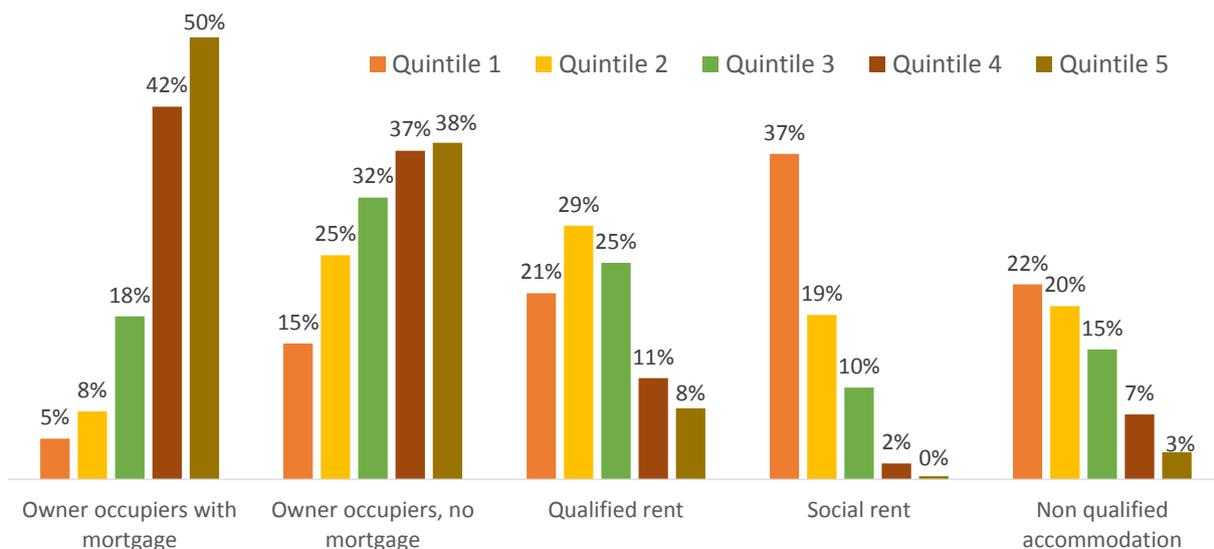
**By tenure**

Similar analyses were performed grouping households by tenure. The distributions before and after housing costs are shown in Figures 2.9 and 2.10.

**Figure 2.9: Proportion of each income quintile before housing costs, by tenure**



**Figure 2.10: Proportion of each income quintile after housing costs, by tenure**



Focussing on household income after housing costs (Figure 2.10), a downward trend was seen for households living in non-qualified accommodation and social rent – both groups made up very small proportions of the top income quintile (of the top income quintile, 3% were living in non-qualified accommodation and 0% were households living in social rent). Nearly two-fifths (37%) of the lowest income quintile were those living in social rent, whilst around a fifth (22%) were those living in non-qualified accommodation and another fifth (21%) in qualified rent.

Half (50%) of the highest income quintile were owner occupiers with a mortgage, even when housing costs were taken into account; two-fifths (38%) were owner occupiers without a mortgage. Those in qualified rent generally tended to be in the lower income quintiles, with around a quarter of the lowest (21%) and second lowest (29%) income quintiles being households living in qualified rental accommodation.

**Relative low income**

This section of the report focusses on households at the lower end of the income distribution.

A commonly used threshold of relative low income is 60% of the median equivalised income for a jurisdiction<sup>3</sup>. It should be noted that this provides a *relative* measure of low income, within the context of a particular jurisdiction, and relative to all household types, rather than an absolute measure of low income for a particular household. In addition, this measure does not take into account spending patterns, which are likely to vary between household types.

This measure of relative low income does not therefore indicate which households have an income level below that which is necessary to maintain a certain standard of living for that household type.

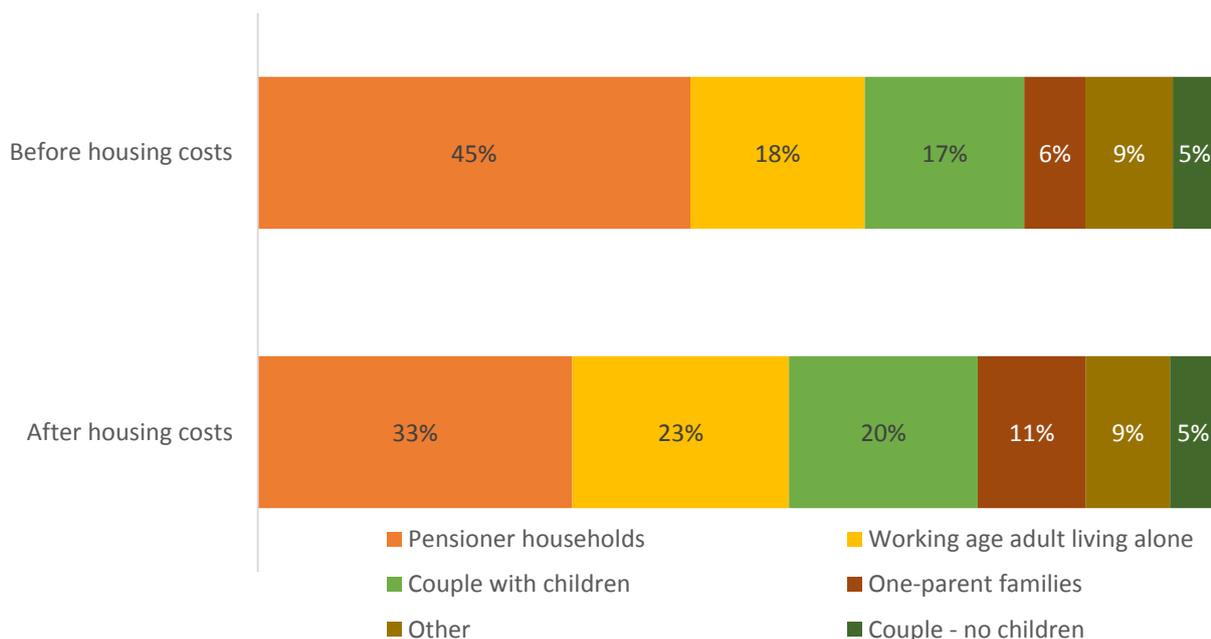
The relative low income threshold in Jersey in 2014/15, defined as 60% of median equivalised household income, was £410 per week before housing costs, and £340 per week after housing costs.

One in six (16%) households were in the category of relative low income before housing costs, rising to more than one in four (26%) households after housing costs had been taken into account.

**Relative low income households, by household type**

A third (33%) of the group of households in relative low income after housing costs were pensioner households, whilst around a fifth were working age adults living alone (23%) and couples with dependent children (20%), see Figure 3.1 for full results.

**Figures 3.1 Relative low income households, by household type**

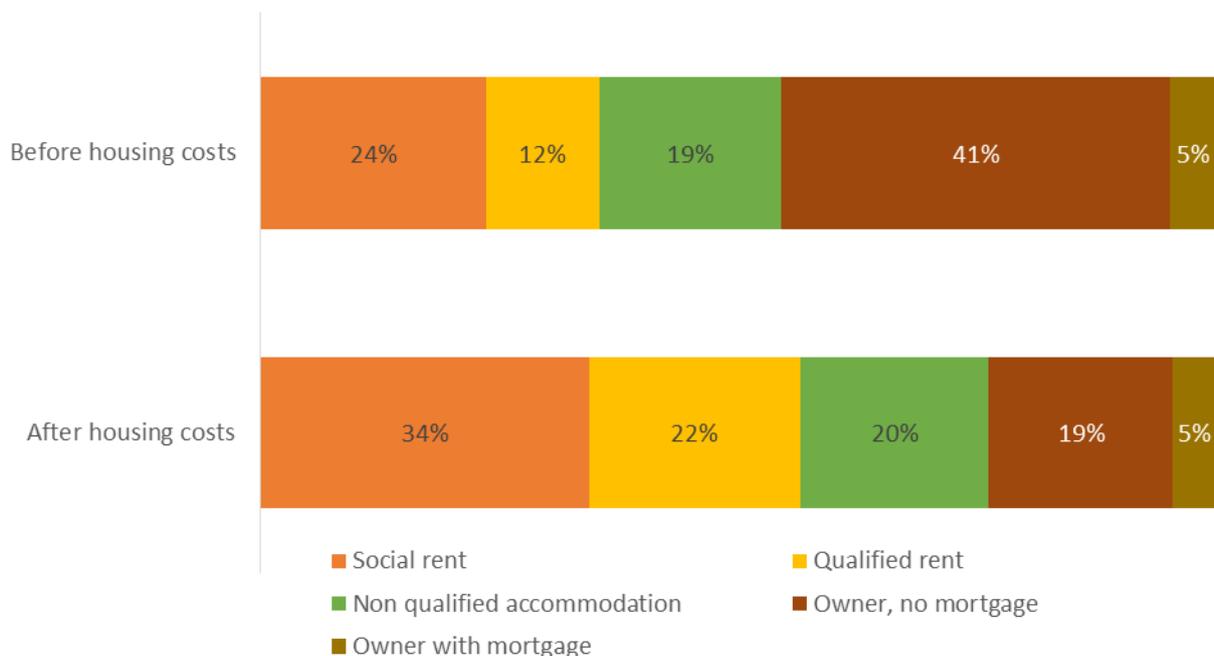


**Relative low income households, by tenure**

A third (33%) of the group of households in relative low income after housing costs were those living in social rental accommodation, whilst around a fifth were in qualified rent (22%), non-qualified accommodation (20%), or in owner occupied accommodation without a mortgage (19%) (see Figure 3.2).

<sup>3</sup> 1998 Eurostat Task Force

Figures 3.2 Relative low income households, by tenure



Applying housing costs increased the proportion of relative low income households who were living in social rent from a quarter (24%) to a third (34%).

#### Individuals in relative low income

Assuming a household's income can be equally attributed to each household member, the proportion of *individuals* living in relative low income before and after housing costs can be calculated, the results are displayed in Table 3.1.

Table 3.1 Percent and count of individuals<sup>4</sup> in relative low income before and after housing costs.

	Before housing costs		After housing costs	
	%	persons	%	persons
Children	13	2,100	29	4,900
Working-age adults	10	6,400	19	12,700
Pensioners	24	4,200	28	4,900
<b>All individuals</b>	<b>13</b>	<b>13,100</b>	<b>23</b>	<b>23,000</b>

Similar proportions of children and working-age adults lived in households with relative low income before housing costs (13% and 10% respectively); whereas a quarter (24%) of pensioners were living in households with relative low income.

The picture was different after housing costs, with the proportion of children living in relative low income increasing to nearly a third (29%).

Overall, a quarter (23%) of individuals, approximately 23,000 persons, were living in a household with relative low income after housing costs were taken into account.

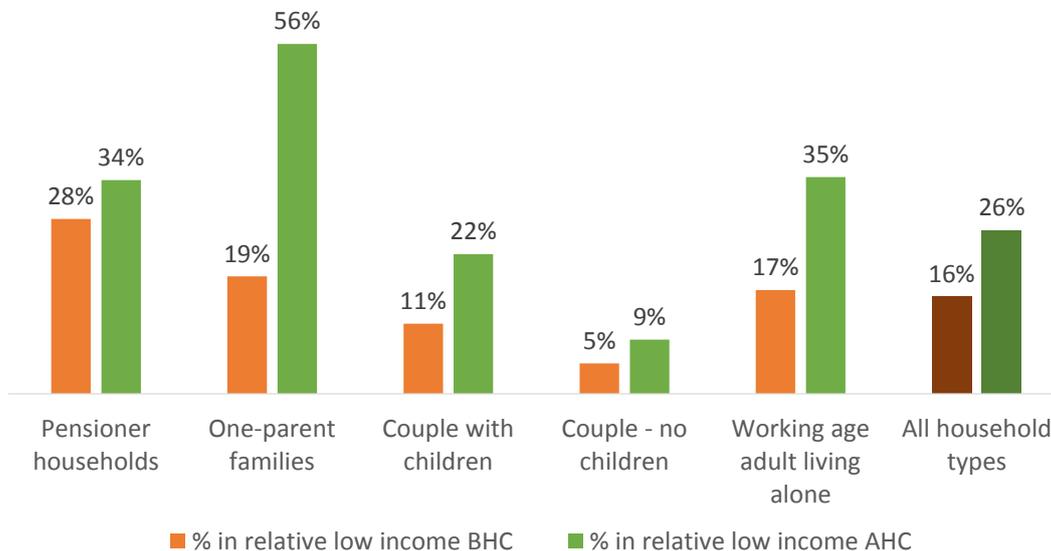
<sup>4</sup> Estimate of count of persons was calculated using annual population estimate 2014 for total population (100,800) and proportions of age groups as at Census 2011

**Relative low income within each household type**

A complementary analysis looks at the proportion of households in relative low income *within* each household type and tenure in turn, as shown in the following series of figures and tables.

The proportion of each household type in relative low income before, and after, housing costs is shown in Figure 3.3.

**Figure 3.3: Proportion of each household type in relative low income before and after housing costs**



Overall around a quarter (26%) of households, ranging from 9% of couples with no children, to 56% of one-parent families, were in relative low income after housing costs.

Pensioner and single working-age adult households also had a higher proportion living in relative low income after housing costs (34% and 35% respectively) than the proportion across all households (26%).

Couples with no children were the household type with the lowest proportion living in relative low income, both before and after housing costs were taken into account.

One-parent families were particularly impacted by the removal of housing costs from household income, with a fifth (19%) in relative low income before housing costs and three times this proportion (56%) in relative low income after housing costs.

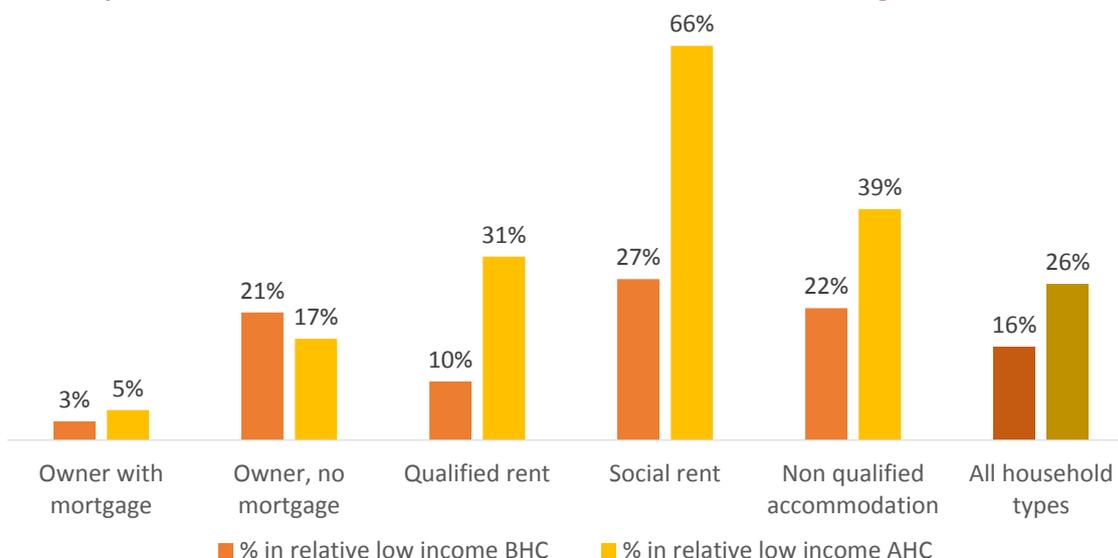
An increase was also seen for working-age adults living alone, from 17% living in relative low income before housing costs, rising to a third (35%) living in relative low income after housing costs.

**Relative low income within each tenure category**

The effect of housing costs on the proportion of households in relative low income for each tenure category can be seen in Figure 3.4.

For social rental households, housing costs considerably increased the proportion in relative low income from around a quarter (27%) to two-thirds (66%). For those living in qualified rental, housing costs trebled the proportion of households in relative low income, from one in ten (10%) to three in ten (31%). Housing costs increased the proportion of non-qualified rental households in relative low income from a fifth (22%) to two-fifths (39%).

Figure 3.4: Proportion of each tenure in relative low income before and after housing costs



### A lower threshold of relative low income

#### All households

Further analysis was carried out using a lower threshold of relative low income: namely 50% of median income (£340 per week equivalised income before housing costs and £280 after). As the threshold lowers, fewer households fall below it; whilst 16% of all households fall below the 60% threshold, one in ten (10%) fall below the 50% threshold, before housing costs (see Table 3.2).

Table 3.2 Equivalised weekly household income at various thresholds

<i>Before housing costs</i>	Median	60% of median	50% of median
Equivalised weekly household income	680	410	340
% of households with income below threshold	50	16	10

<i>After housing costs</i>	Median	60% of median	50% of median
Equivalised weekly household income	560	340	280
% of households with income below threshold	50	26	18

#### By household type

The relative low income results by household type are shown in Table 3.3 (before housing costs) and Table 3.4 (after housing costs), and the information on the full distribution by household type is presented visually in Figures 3.5 and 3.6.

A fifth (20%) of pensioner households had an income less than 50% of the median before housing costs, and a similar proportion (23%) had an income less than 50% of the median after housing costs.

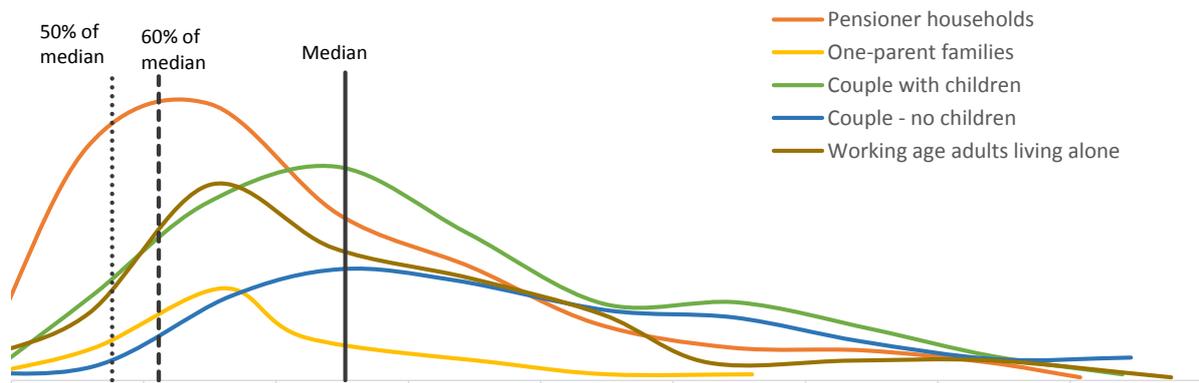
For one-parent families, one in eight (14%) fell under this lower threshold of relative low income before housing costs, rising to nearly half (46%) once housing costs were taken into account.

## SECTION 3 – Relative low income and inequality

**Table 3.3** Proportion of each household type with income lower than various thresholds, before housing costs

	Median	60% of median	50% of median
Pensioner households	64	28	20
One-parent with dependent child(ren)	83	19	14
Couple with dependent child(ren)	45	11	7
Couple – no children	30	5	3
Working-age adults living alone	56	17	10
Other	36	9	5
<b>All households</b>	<b>50</b>	<b>16</b>	<b>10</b>

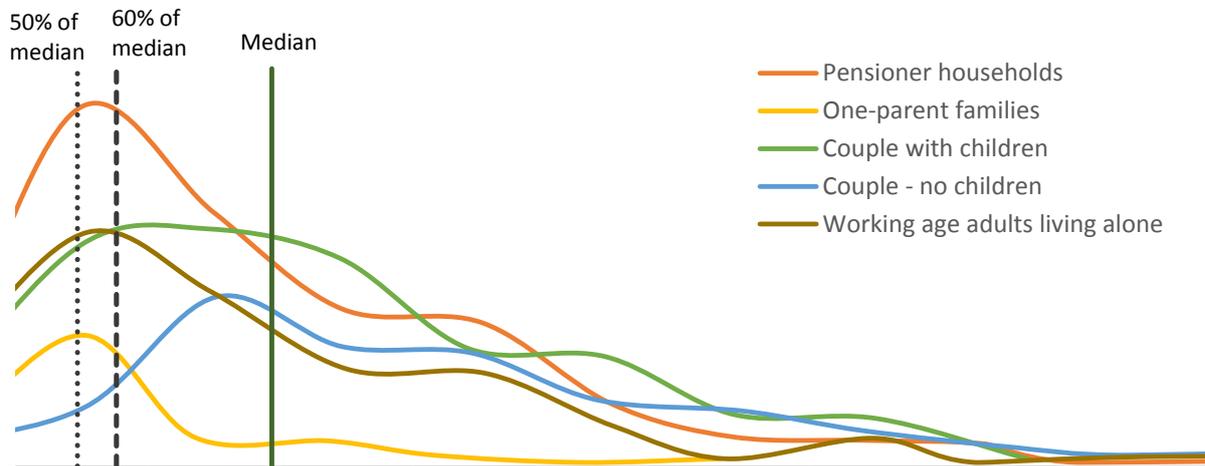
**Figure 3.5** Distribution of annual household income by household type, before housing costs



**Table 3.4** Proportion of each household type with income lower than various thresholds, after housing costs

	Median	60% of median	50% of median
Pensioner households	59	34	23
One-parent with dependent child(ren)	81	56	46
Couple with dependent child(ren)	46	22	14
Couple – no children	33	9	7
Working-age adults living alone	62	35	23
Other	32	15	11
<b>All households</b>	<b>50</b>	<b>26</b>	<b>18</b>

**Figure 3.6** Distribution of annual household income by household type, after housing costs



**By tenure**

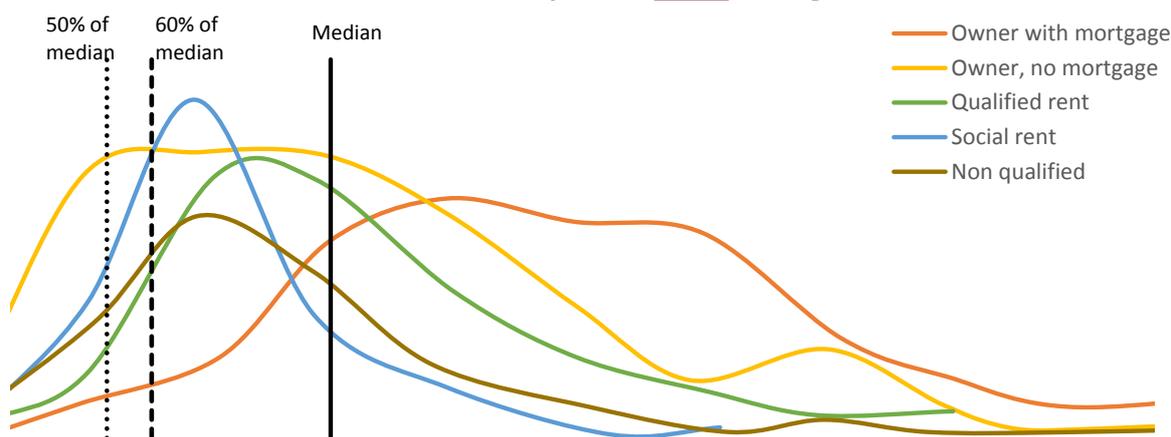
Similar analysis by tenure shows that around a sixth of households living in social rent (16%) and of owner occupied households without a mortgage (16%) had an income lower than 50% of the median before housing costs (see Table 3.5). It is worth noting that owner occupied households without a mortgage will tend to be older, on average, than those with a mortgage, and more likely to be pensioner households without employment income.

**Table 3.5 Proportion of each tenure with income lower than various thresholds, before housing costs**

	Median	60% of median	50% of median
Owner with mortgage	18	3	2
Owner, no mortgage	49	21	16
Qualified rent	54	10	7
Social rent	84	27	16
Non-qualified accommodation	70	22	11
<b>All households</b>	<b>50</b>	<b>16</b>	<b>10</b>

The large proportion of owner occupied households (with a mortgage) having an income *above* the thresholds of 50% or 60% of median can be seen clearly in Figure 3.7, as the income distribution for this household type is predominantly to the right of these low income thresholds.

**Figure 3.7 Distribution of annual household income by tenure, before housing costs**



Taking housing costs into account and exploring the shapes of the distributions by tenure (see Figure 3.8), it can be seen that owner occupied households, both with and without mortgages, tend to be to the right of (ie. lie above) the thresholds of relative low income.

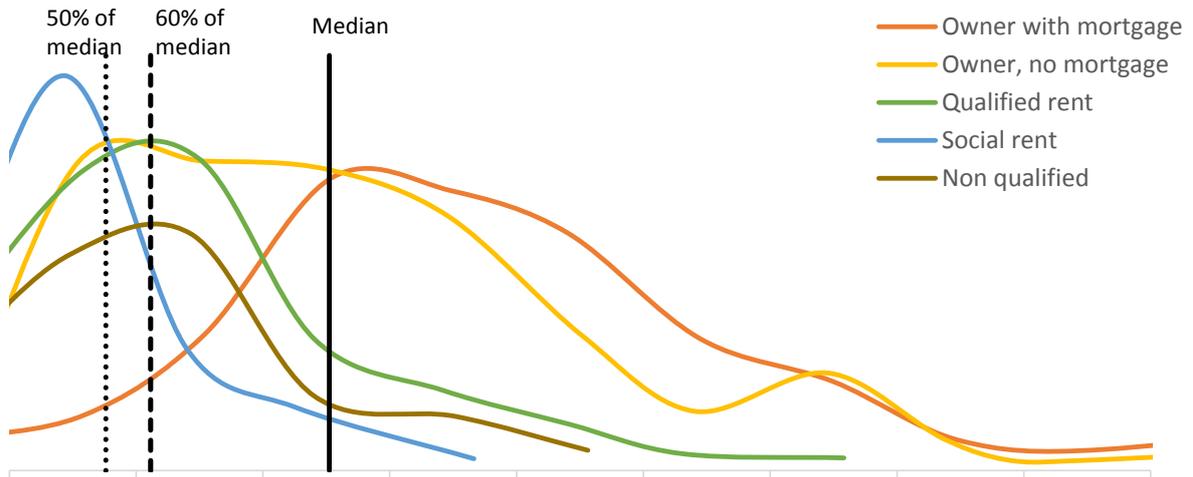
In contrast, half (50%) of households living in social rent, and nearly a third (29%) in non-qualified accommodation had an income lower than the lower threshold of 50% of median – see Table 3.6 and Figure 3.8).

**Table 3.6 Proportion of each tenure with income lower than various thresholds, after housing costs**

	Median	60% of median	50% of median
Owner with mortgage	15	5	4
Owner, no mortgage	38	17	9
Qualified rent	67	31	20
Social rent	89	66	50
Non-qualified accommodation	76	39	29
<b>All households</b>	<b>50</b>	<b>26</b>	<b>18</b>

SECTION 3 – Relative low income and inequality

Figure 3.8 Distribution of annual household income by tenure, after housing costs



### Income inequality measures

Incomes are generally distributed unevenly across households living in a jurisdiction – that is some households will have a higher income than others. **Income inequality measures** provide a way of quantifying the *extent* of inequality between households into a single statistic, to facilitate comparison across time and with other jurisdictions. Three measures, all calculated on the equivalised household incomes, are presented here.

#### 90-10 ratio

The 90-10 ratio divides the income of the 90<sup>th</sup> percentile household by that of the 10<sup>th</sup> percentile. This ratio shows how many times greater the income of the 90<sup>th</sup> percentile household is relative to that of the 10<sup>th</sup> percentile household.

The 90-10 ratio was highest (7.6) at the pre-benefit income stage, reducing to 5.4 once household and individual benefits were included, indicating an improvement in income inequality through the benefits system. At the next stage of income analysis, after including tax, social security and pension contributions, the ratio reduces further to 4.2.

However, after including housing costs, the ratio increases again (i.e. income inequality worsens), to 6.0, indicating the income of the 90<sup>th</sup> percentile household is 6 times that of the 10<sup>th</sup> percentile household once housing costs are taken into account.

#### 90-10 shares ratio

The 90-10 shares ratio divides the mean average income of those households in the top 10% by the mean average income of those households in the bottom 10%.

The top 10% of households had an average income 9 times that of the bottom 10% before housing costs, rising to 19 times that of the bottom 10% after housing costs, again showing housing costs increase income inequality.

#### Gini coefficient

The Gini coefficient is an indicator taking values between 0 and 1, where 0 represents complete equality (all households have equal income) and 1 represents complete inequality (one household accounts for all the income). Therefore a reduction in the Gini coefficient represents a more equal distribution of incomes across households. See Appendix I for further information on how the Gini is calculated.

A similar pattern is seen using the Gini coefficient as an indicator of income inequality: the tax and benefits system both serve to reduce income inequality across Jersey households. However, once housing costs are taken into account, the measure of inequality rises again to a level close to that seen before taxes and benefits were applied.

**Table 3.7 Income inequality measures, by income analysis stage**

	Pre-benefit income	Gross cash income	Net income BHC	Net income AHC
90-10 ratio	7.6	5.4	4.2	6.0
90-10 shares ratio	25	11	9	19
Gini coefficient	0.42	0.38	0.34	0.41

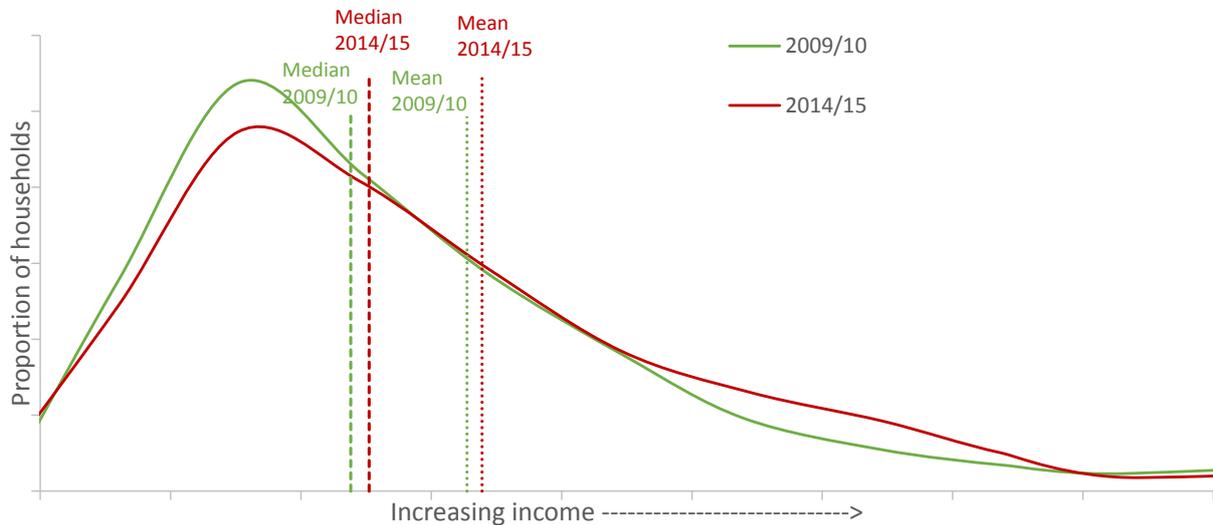
**Across all income inequality indicators** the benefits and tax system was seen to improve income inequality; housing costs almost removed this improvement.

### Comparison with 2009/10 data<sup>5</sup>

Throughout this section, the data is presented in nominal terms – i.e. not adjusted for inflation.

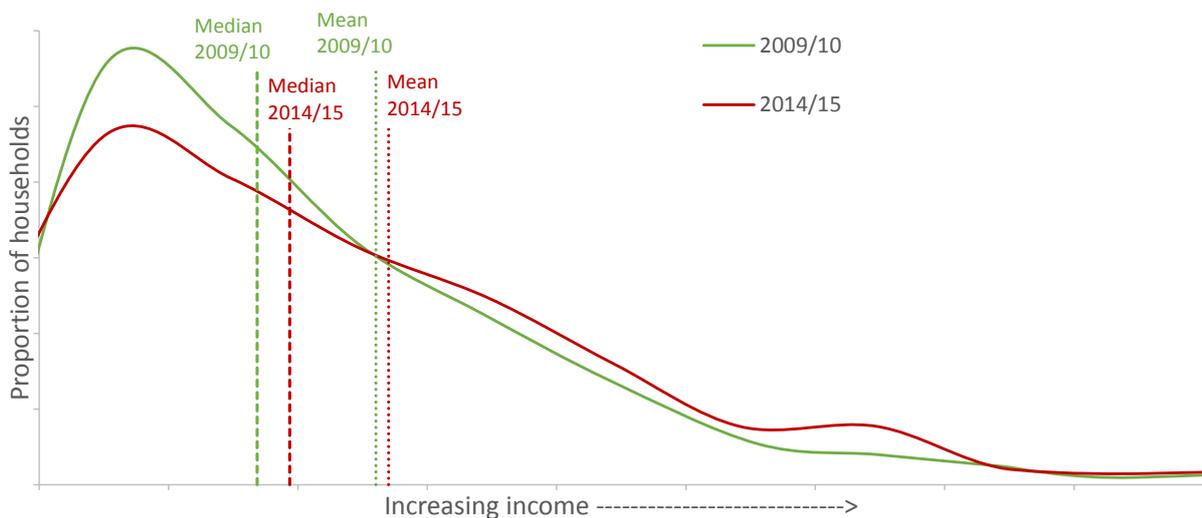
Figure 4.1 and 4.2 shows the equivalised household income distribution from 2009/10 and 2014/15, before and after housing costs. The “Before housing costs” distribution was less peaked in 2014/15, than in 2009/10, with lower proportions having an income just below the median income.

**Figure 4.1 Equivalised household income distribution, before housing costs**



After housing costs, the peak in 2014/15 is reduced further – those with an income lower than the median are more evenly spread across the range of low incomes in 2014/15 than they were in 2009/10. For those households with income above the median for each survey year, again there is more of a spread in 2014/15, with a lower proportion of households having an income around the median itself.

**Figure 4.2 Equivalised household income distribution, after housing costs**



<sup>5</sup> Several methodological improvements were introduced to the analysis of the 2014/15 dataset (see Appendix for further details). In order to make fair comparisons across time, the 2009/10 data was reanalysed following the updated methodology. There will be slight differences noted between the 2009/10 results reported here and those in the previously published report

### Mean household income

Table 4.1 shows the mean household income for households, at each stage, for 2009/10 and 2014/15, in nominal terms, as well as the percentage change from 2009/10. After housing costs, the mean average household income has increased by 2% over the five-year period.

**Table 4.1 Mean household income for all households, £ per week**

	2009/10 £ per week	2014/15 £ per week	% change
Pre-benefit income	1,000	1,020	2
Gross cash income	1,050	1,070	2
Net income before housing costs (BHC)	840	860	2
Net income after housing costs (AHC)	710	720	2

For comparison, the Jersey all items Retail Prices Index (RPI) increased by 13% from December 2009 to December 2014, and the Index of Average Earnings increased by 11% between June 2010 and June 2015<sup>6</sup>.

### Median household income

As discussed in previous sections of this report, the mean household income can be influenced by households at the extremes, and also does not take into account varying household sizes. A more informative comparison can be made with the median equivalised household income – see Table 4.2.

**Table 4.2 Median equivalised household income at each income stage, 2009/10 and 2014/15**

	2009/10 £ per week	2014/15 £ per week	Difference £ per week	% change
Pre-benefit income	750	800	50	6
Gross cash income	780	820	40	6
Net income BHC	650	680	30	4
Net income AHC	520	560	40	9

For pre-benefit income, gross cash, and net income BHC, the difference in median income between 2009/10 and 2014/15 ranged from 4% to 6%. The increase for the same period was greater for net income after housing costs, at 9%, a result of lower average housing costs for those with a mortgage in 2014/15.

The median net income after housing costs for all households increased by £40 to £560 per week.

### By household type

The percent change in median equivalised income for the different household types is given in Table 4.3.

Overall median household income after housing costs rose by 9% after housing costs, however:

- median household income of one-parent families decreased by 3%
- median household income of working-age couples and single adults remained unchanged
- pensioner households had above average increases in net income after housing costs.

<sup>6</sup> Interpolating between the June figures for the Average Earnings Index gives a percentage change for the period December 2009 to December 2014 (the reference periods for each survey) of 11%.

## SECTION 4 - COMPARISONS

**Table 4.3 Percent change in median equivalised household income from 2009/10 to 2014/15, by household type**

	Net income BHC	Net income AHC
Pensioner households	10	12
One-parent families	6	-3
Couple with at least one dependent child	4	10
Couple with no children	-2	0
Working-age adults living alone	-3	0
Other	18	26
<b>All household types</b>	<b>4</b>	<b>9</b>

### By tenure

The percent change in median equivalised income for the different tenures is given in Table 4.4.

**Table 4.4 Percent change in median equivalised household income from 2009/10 to 2014/15, by tenure**

	Net income BHC	Net income AHC
Owner with mortgage	11	18
Owner, no mortgage	7	6
Qualified rent	12	12
Social rent	0	-8
Non-qualified accommodation	-5	-2
<b>All tenures</b>	<b>4</b>	<b>9</b>

Whilst overall average household income was seen to increase both before, and after, housing costs (4% and 9% respectively), for those households living in social and non-qualified rental dwellings, their income was seen to decrease once housing costs were taken into account (by 8% for social renters, and by 2% for those in non-qualified accommodation).

In contrast, owner occupiers with a mortgage saw an above average increase in their household income after housing costs over the same time period – a result of persistently low mortgage interest rates during the period between surveys.

### Employment income

To understand the different changes in incomes across the tenures and household types over the five-year period, further analysis was performed on the employment income information, and in particular looking at change in average hourly earnings reported by workers by their age and tenure. The results are shown in Tables 4.5 and 4.6. A considerable decrease in average hourly earnings was noted for younger earners (notably between 30 and 39 years of age) and people living in non-qualified accommodation.

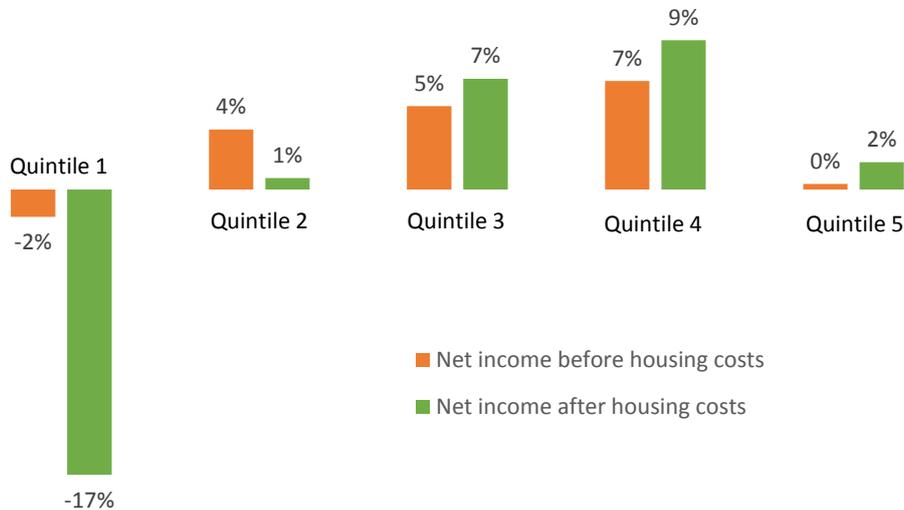
**Tables 4.5 and 4.6 Percent change in workers' average hourly earnings, by age and tenure, 2009/10 to 2014/15**

Tenure	% change	Age group	% change
Owner with mortgage	3	20 – 29 years	-3
Owner, no mortgage	12	30 – 39 years	-18
Qualified rent	15	40 – 49 years	4
Social rent	7	50 – 59 years	9
Non-qualified accom.	-13	<b>All ages</b>	<b>2</b>
<b>All tenures</b>	<b>2</b>		

### Quintile changes

Figure 4.3 illustrates the change in mean average income in nominal terms for each quintile from 2009/10 to 2014/15. The average household income (after housing costs) of those in the lowest quintile *decreased* by a sixth (17%) in nominal terms over the last five years, whilst that of the third and fourth quintiles *increased* by 7% and 9% respectively.

Figure 4.3 Change in mean average income of each quintile, 2009/10 to 2014/15



### Relative low income

Table 4.7 shows that the proportion of households with income lower than the thresholds of 60% and 50% of median household income *before* housing costs have not changed significantly when compared to 2009/2010.

After housing costs, there has been a slight increase (of around 5 to 6 percentage points) in the proportion of households falling below the relative low income thresholds from 2009/10 to 2014/15 (see Table 4.7).

Table 4.7: Percent of households with equivalised income below relative low income thresholds, before and after housing costs, 2009/10 and 2014/15 compared

	% of households with income below 60% of median		% of households with income below 50% of median	
	2009/10	2014/15	2009/10	2014/15
Before housing costs	15	16	9	10
After housing costs	21	26	12	18

The following tables look at the group of households with income below the relative low income threshold of 60% of median in more detail.

Table 4.8 Percent of each household type in "Relative Low Income" in Jersey, before housing costs, 2009/10 and 2014/15 compared

<i>Before housing costs</i>	2009/10	2014/15	% of total households in Jersey
Pensioner households	33	28	21
One-parent families	29	19	4
Couple with at least one dependent child	8	11	19
Couple with no children	5	5	16
Working-age adults living alone	12	17	18
Other	10	9	22
<b>All households</b>	<b>15</b>	<b>16</b>	<b>100</b>

## SECTION 4 - COMPARISONS

**Table 4.9 Percent of each household type in “Relative Low Income” in Jersey, after housing costs, 2009/10 and 2014/15 compared**

<i>After housing costs</i>	<b>2009/10</b>	<b>2014/15</b>	<b>% of total households in Jersey</b>
Pensioner households	31	34	21
One-parent families	47	56	4
Couple with at least one dependent child	17	22	19
Couple with no children	9	9	16
Working-age adults living alone	28	35	18
Other	12	15	22
<b>All households</b>	<b>21</b>	<b>26</b>	<b>100</b>

For working-age persons living alone, the proportion of such households being in relative low income, after housing costs, increased from a quarter (28%) in 2009/10 to a third (35%) in 2014/15. The same trend is seen for one-parent families, whereby under half (47%) were in relative low income in 2009/10, rising to more than half (56%) in 2014/15.

There was no significant change seen for other household types – a similar proportion of pensioner households were in relative low income in 2009/10 compared to 2014/15, and similarly for couples with no children and couples with at least one dependent child, there was no significant change noted across the time period.

By tenure, an increase was noted in the proportion of households living in non-qualified and social rented accommodation who were in relative low income after housing costs from 2009/10 to 2014/15 (see Tables 4.10 and 4.11). There was not any significant change for other tenures.

**Table 4.10 Percent of each tenure type in “Relative Low Income” in Jersey, before housing costs, 2009/10 and 2014/15 compared**

<i>Before housing costs</i>	<b>2009/10</b>	<b>2014/15</b>	<b>% of total households in Jersey<sup>7</sup></b>
Owner with mortgage	2	3	24
Owner, no mortgage	22	21	30
Qualified rent	16	10	19
Social rent	29	27	14
Non-qualified accommodation	11	22	13
<b>All households</b>	<b>15</b>	<b>16</b>	<b>100</b>

**Table 4.11 Percent of each tenure type in “Relative Low Income” in Jersey, after housing costs, 2009/10 and 2014/15 compared**

<i>After housing costs</i>	<b>2009/10</b>	<b>2014/15</b>	<b>% of total households in Jersey<sup>7</sup></b>
Owner with mortgage	3	5	24
Owner, no mortgage	14	17	30
Qualified rent	31	31	19
Social rent	50	66	14
Non-qualified accommodation	29	39	13
<b>All households</b>	<b>21</b>	<b>26</b>	<b>100</b>

<sup>7</sup> Estimate of households with a mortgage based on the proportion of owner occupiers from the 2011 Census (54% of households) and the proportion of owner occupiers who have a mortgage from the 2001/15 Income distribution Survey (45%)

After housing costs, a small increase was seen in the number of *individuals* living in households in relative low income over the five year period, up 4 percentage points from 19% to 23%. For children, the proportion in relative low income after housing costs increased by 7 percentage points from 22% to 29% (see Table 4.12).

**Table 4.12 Individuals living in relative low income households, before and after housing costs, 2009/10 and 2014/15**

	Before housing costs		After housing costs	
	2009/10	2014/15	2009/10	2014/15
Children	12	13	22	29
Working-age adults	9	10	16	19
Pensioners	28	24	25	28
<b>All individuals</b>	<b>13</b>	<b>13</b>	<b>19</b>	<b>23</b>

### Income inequality indicators

Table 4.13 presents three measures of income inequality.

**Table 4.13 Income inequality measures at each income stage, 2009/10 and 2014/15**

90-10 ratio	Pre-benefit income	Gross cash income	Net income BHC	Net income AHC
2009/10	7.0	4.8	3.9	4.8
2014/15	7.6	5.4	4.2	6.0

90-10 shares ratio	Pre-benefit income	Gross cash income	Net income BHC	Net income AHC
2009/10	26	11	9	12
2014/15	25	11	9	19

Gini coefficient	Pre-benefit income	Gross cash income	Net income BHC	Net income AHC
2009/10	0.42	0.39	0.35	0.39
2014/15	0.42	0.38	0.34	0.41

Overall, across all stages of income, the 90-10 ratio was found to be higher in 2014/15 than in 2009/10 – i.e. the relative income of the 90th percentile household to the 10th percentile was higher in 2014/15 than in 2009/10.

The 90-10 shares ratio also shows an increase in inequality after housing costs, with the top 10% having an average income 12 times that of the bottom 10% in 2009/10, rising to 19 times in 2014/15.

Finally, the Gini coefficient, an inequality measure that can have a value between 0 (if every household had the same income) to 1 (if one household held all the income and the others had none), showed a slight increase after housing costs in 2014/15 compared to 2009/10.

The change in the three indicators imply that income inequality worsened since 2009/10, particularly once housing costs were taken into account – a result of persistently low interest rates for mortgage holders but increasing rents for those in rental accommodation.

## Comparison with UK

(Source of UK data: 'Households Below Average Income 2013/14' report, ONS)

Comparing the Jersey 2014/15 results with the most up-to-date results available from the UK (Table 4.13) shows that equivalised incomes were 50% higher in Jersey than in the UK, before housing costs, and 46% higher after housing costs were taken into account.

Before housing costs, household income inequality was similar to that in the UK as shown by the three indicators in Tables 4.14 and 4.15, namely the 90-10 ratio, the 90-10 shares ratio and the Gini coefficient.

However, the three indicators of income inequality were all higher in Jersey than the UK after housing costs were taken into account, showing income inequality to be worse in Jersey than in the UK.

**Table 4.14 Jersey household income distribution compared with the UK, before housing costs**

Before housing costs	Median household income	% of individuals below 60% of median	90-10 ratio	90-10 shares ratio <sup>8</sup>	Gini-coefficient
Jersey 2014/15	680	13	4.2	9	0.34
UK 2013/14	453	15	3.9	9	0.34
<i>Difference</i>	<i>50%</i>				

**Table 4.15 Jersey household income distribution compared with the UK, after housing costs**

After housing costs	Median household income	% of individuals below 60% of median	90-10 ratio	90-10 shares ratio <sup>8</sup>	Gini-coefficient
Jersey 2014/15	560	23	6.0	19	0.41
UK 2013/14	386	21	5.1	15	0.39
<i>Difference</i>	<i>45%</i>				

A similar proportion of individuals lived in households with a relative low income in Jersey compared with the UK before and after housing costs. In 2009/10, Jersey had a slightly lower proportion of individuals in relative low income compared to the UK, particularly before housing costs.

There was a notable variation when looking in more detail by age (see Table 4.16). Focussing on those in relative low income after housing costs: over a quarter (28%) of Jersey pensioners were in this group, compared to a lower proportion - one in seven (14%) - of UK pensioners who were living in relative low income.

For children and working-age adults very similar proportions were living in relative low income in Jersey compared to in the UK.

**Table 4.16 Percent of individuals living in a household below relative low income threshold, before and after housing costs, Jersey (2014/15) and UK (2013/14)**

	Before housing costs		After housing costs	
	Jersey	UK	Jersey	UK
Children	13	17	29	28
Working-age adults	10	14	19	21
Pensioners	24	16	28	14
<b>All individuals</b>	<b>13</b>	<b>15</b>	<b>23</b>	<b>21</b>

<sup>8</sup> Most recently available figure for the 90-10 shares ratio in the UK is from 2011/12, source HBAI 2013/14 report

## Appendix I - Definitions

**Equivalisation** is used to enable a fairer comparison between different sized households. For example a single person living on his own earning £44,000 a year might be considered to have a higher equivalent income compared to an adult couple and three young children with total income £44,000.

Equivalisation was carried out using an internationally recognised equivalence scale: the 1998 Eurostat Task Force recommended the use of the Modified OECD equivalence scale for continuity and comparability reasons. In addition, the UK publication “Households Below Average Income” uses the Modified OECD equivalence scale, with a slight variation introduced for incomes after housing costs. Therefore this report uses the equivalisation scales below.

**Table A: The Modified OECD equivalence scale**

	Before housing costs	After housing costs
First adult in household	0.67	0.58
Any additional persons aged 14 years or over	0.33	0.42
Any children aged 0 – 13 years	0.20	0.20

### Gini coefficient

An internationally used measure of income inequality, which aims to summarise the degree of sharing of income across households. A Gini coefficient of 0 indicates that income is evenly spread across households, with each household receiving the same proportion of income (i.e. complete equality); whilst a Gini coefficient of 1 would represent a single household in the population receiving all the income and the rest of the population receiving nothing (i.e. complete inequality).

A **household** was defined as one person living alone, or a group of people (not necessarily related) living at the same address, who share a shopping bill, eat together *and* share the same living space.

**Household types** were categorised according to the following definitions:

**Pensioner households:** includes one adult living alone at or above pensionable age (65 years for men, 60 years for women), or a couple, both of whom were at or above pensionable age.

**One-parent families:** One adult living with one or more children, at least one of whom was aged under 16 years.

**Couple with children:** A couple living with one or more children, at least one of whom was aged under 16 years.

**Couple – no children:** A couple living together, both of whom are of working-age.

**Person living alone:** A person of working-age living alone (aged between 16 and 59 for women and 16 to 64 for men).

**Other:** any other household type, including couple households with one pensioner and one of working-age; couples living with their children all of whom are aged 16 years or over; house-shares; multi-generation households; families living with an au-pair.

**Household tenures** were categorised according to the following:

**Owner occupied:** includes households who own their home, bought with a mortgage, and/or States loan, or outright. This category also includes homes that were being lived in for ‘lifetime enjoyment’

**Social rent:** includes any home rented from the States of Jersey, a housing trust or a parish

**Qualified private rent:** includes any home being rented as a residentially qualified property

**Non-qualified accommodation:** includes lodging houses, lodgers in private households, staff, service or tied accommodation and ‘non-qualified rental’

**Table B: Distribution of tenure by household type**

	Owner occupiers		Social rent	Qualified rent	Non-qualified	All
	with mortgage	without a mortgage				
Pensioner households	2	70	18	9	1	100
One-parent families	13	7	37	29	14	100
Couple with children	46	6	10	18	20	100
Couple - no children	33	18	1	26	22	100
Working-age adults living alone	20	13	14	31	22	100
Other	31	36	15	13	6	100
<b>All households</b>	<b>25</b>	<b>30</b>	<b>14</b>	<b>19</b>	<b>13</b>	<b>100</b>

### Income

**Gross Cash Income** was defined on a household level as: all financial flows into the household, both unearned and earned, over the previous 12 months. This included:

- earnings from any employment (including self-employment, bonuses, benefits in kind)
- income from pensions, including the Jersey Social Security pension, other countries' social security pensions, private, superannuation and occupational pensions
- income support awards, including payments paid directly to landlord, HMA ("Household Medical Account") fund and childcare provision
- benefits, from Jersey social security or other countries, e.g. maternity grants and allowances, sickness allowance, Christmas bonus, cold weather payments, TV licence schemes
- income from lodgers or buy-to-lets (profit only)
- income from child maintenance arrangements
- income from shares, share options, dividends, fixed income and interest from savings
- income from any other source, including regular gifts
- **the actual value of assets and/or savings were not included**

**Net income before housing costs (BHC)** was defined as Gross Cash Income, minus:

- income tax
- rates (parish and Island-wide)
- social security payments
- pension contributions
- child maintenance payments made to other households

**Net income after housing costs (AHC)** was defined as Net Income BHC, minus:

- mortgage interest or rent payments on place of residence
- service charge on place of residence
- buildings insurance for place of residence

### Income quintile

If every household were ordered according to its income, from the lowest to highest, the first 20% of households represent the "first income quintile" of households – i.e. those households who have the lowest income. The second income quintile is the next 20% of households, and so on up to the fifth income quintile, which corresponds to the 20% of households who have the highest income.

### Mean income / winsorisation

The mean income is a measure of the average of all household incomes. As the distribution of household incomes tends to be 'skewed' (that is there are a number of households with very high incomes), the mean household income will tend to be higher than the median, and there will be more than half of households whose income is less than the mean. To prevent exceptionally high or low values from unduly influencing the mean value, 2.5% winsorisation was used, whereby the top 1.25%

and the bottom 1.25% of household incomes were assigned to the 1.25th and 98.75th percentile values respectively.

### Median income

The median income is the income of the middle household of the distribution (the 50th percentile). Half of households will have a lower income than the median, and half will have a higher income than the median.

### Reference period

The reference point in time for this survey is December 2014.

### Relative low income

There are a number of internationally used definitions for 'relative low income'. The 1998 Eurostat Task Force recommended the use of the relative low income threshold at **60% of the median** equivalised income value.

### Sampling error

By definition, a sample survey does not involve approaching every household in the Island. However, the aim is that the results are representative of all Jersey households. To this end, the sample was randomly chosen, and stratified by parish (that is, the sample included households within each parish in proportion to that which is found in Jersey as a whole).

However, given that not every household in Jersey was approached, the results will include some 'sampling error', the degree of which can be estimated. Calculations show that, for the results reported in this document, income values are accurate<sup>9</sup> to within 6%. For example an estimated value of £1,000 derived from respondents implies the true population value to be between £940 and £1,060.

Any proportions which are reported are accurate to within 3 percentage points<sup>8</sup>. For example a sample proportion of 22% would indicate the true population value to be within 19% and 25%.

### Weighting

Whilst every effort is made to encourage the randomly sampled households to take part, there is inevitably some variation in the willingness and ability of households to do so. In order to ensure the representativeness of the sample, so that inferences can be drawn about the population of Jersey as a whole, the set of respondents was inspected by tenure type. The responses of each household were assigned a 'weight' according to whether its particular tenure was over or under-represented in the set of respondents, compared with the known distribution for all Jersey households.

The known distribution of tenures in Jersey is taken from the 2011 Census.

Table C presents the distribution of tenure for all respondents to the Income Distribution survey alongside the *updated* tenure profile. The implied weighting factor (which indicates by how much each record is weighted up or downwards) is also given.

---

<sup>9</sup> At 95% confidence interval

## SECTION 5 - APPENDICES

**Table C: Household Tenure profile of the un-weighted Income Distribution Survey (IDS) responses.**

Tenure	IDS	Census 2011	Implied weighting factor
Owner Occupied	56	54	0.96
Social rent	15	14	0.96
Qualified private rent	20	19	0.89
Non-qualified accommodation	9	13	1.53
<b>Total</b>	<b>100</b>	<b>100</b>	<b>n/a</b>

The weighting method ensures that households of each tenure type are represented in the analysis according to the proportion of each tenure type in Jersey as a whole. Table D shows the distribution of household type across this weighted dataset, and shows that no category is particularly over or under represented in the set of respondents relative to the 2011 Census distribution of household types.

**Table D: The percent of each household types in the weighted dataset compared to the 2011 Census**

Household type	% in 2011 Census	Weighted % in IDS sample
Pensioner households	21	25
One-parent families	4	5
Couple with at least one dependent child	19	23
Couple with no children	16	15
Person living alone (working-age)	18	17
Other	22	15
<i>All households</i>	<i>100</i>	<i>100</i>

## Appendix II – Survey Methodology

### Sample

Over a 13 month period from April 2014 to April 2015, a *random* sample of around 200 households was approached each month to take part in Jersey's Household Spending and Income Survey.

### Data quality

Detailed information was gathered on household income sources through interviewer-led questions and entered directly into a laptop. The software included a number of consistency checks; in addition the data was manually checked a second time by office staff to optimise data quality and consistency.

### Content

Questions were asked of every member of the household, covering both earned and unearned income, and including pensions, benefits and income support, as well as income from sources such as buy-to-let properties, lodgers, maintenance payments made and received, regular gift income and so on.

Individuals were asked to give their earnings from employment over the preceding 12-month period and/or their profit from self-employment.

Additional questions were included in the questionnaire in order to explore how different factors are linked to household income levels, for example tenure of property, age and residential qualifications of household members.

Expenditure on housing (including mortgage interest payments, rent and buildings insurance payments, parish rates) was used to determine the proportion of household income spent on such items. In particular income *before* and *after* housing costs is reported, as is common in surveys of this nature, to give a more complete picture of income distribution and the effects of housing costs.

Throughout this report, unless otherwise identified, income is presented at household level – i.e. household income, rather than individual income. Where individual income is used, it is assumed that household income is uniformly distributed across household members.

### Response rates

A total of 1,250 households agreed to take part and completed the survey, representing a response rate of 44%. This can be considered a good response rate for a survey of this nature.

### Weighting

To ensure the results from the sample was representative of the population of Jersey as a whole, the sample was weighted by tenure type according to whether its particular tenure was over or under-represented, compared with the known distribution of Jersey households. For more information see Appendix I.

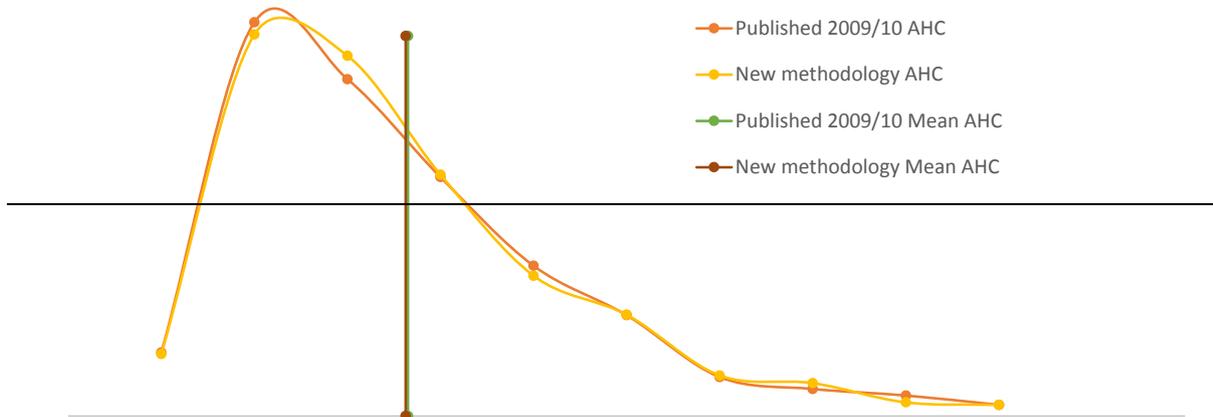
**Given the stratified, random survey design, the survey respondents can be shown to be representative of all Jersey households** to within  $\pm 6\%$  for income values (such as mean income before housing costs), and within  $\pm 3$  percentage points for proportions (such as proportion of households below a level of income). See Appendix I for further details.

### Appendix III – Methodological changes for 2014/15

A number of small improvements have been introduced for 2014/15 to bring the analysis methodology closer in line with the UK publication 'Households below average income':

1. Only regular gifts to households are counted as income – one-off gifts and inheritance are considered to increase capital/assets and are not treated as income
2. Benefits in kind – the monetary value of benefits in kind were not included in the 2014/15 analysis (these were included at an additional stage of income in 2009/10)
3. Monetary transfers to other households are subtracted between stage 3 and stage 4 to avoid double counting of monetary transfers (and are included as an income for the receiving household in Stage 1)
4. Parish rates are treated as a tax, consistent with UK HBAI methodology, rather than as a housing cost (as was done for previous rounds of the income distribution survey)
5. Revised equivalence scales for 'after housing costs' have been introduced. The 2009/10 analysis used the same Modified OECD equivalence scales at both before and after housing cost stages
6. Negative incomes at Stage 4 are re-set to zero, to be consistent with UK HBAI methodology

Figure A: Effect of methodological changes on 2009/10 data after housing costs



## Appendix IV – Median employment earnings

On 26 August 2015, the States of Jersey Statistics Unit published the Index of Average Earnings (IAE). This index gives a measure of the annual *change* in the average (mean) full-time equivalent earnings for a matched sample of businesses in Jersey. The IAE shows that the increase in full-time equivalent earnings was 11% from June 2010 to June 2015.

IAE methodology is specifically designed to measure change in earnings over time within industry sectors and overall, and does not capture *individual* employee level earnings data to enable a median earnings figure to be produced.

The Income Distribution Survey *does* capture information on individual employment earnings, and a separate analysis was carried out to focus in on this component of income. Gross earnings of employees and the self employed were converted into an hourly rate, before being uprated to full-time equivalent. Bonus payments were excluded (as they are in IAE). The earnings data were weighted according to industry, to ensure the sample of jobs was representative of employment in Jersey.

Using this methodology, IDS gives a **median** average employment earnings per full time employee of £540 per week as at December 2014.