

# Jersey Household Income Distribution

Statistics Jersey: www.gov.je/statistics 2021/2022

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### Context

This report is an update on the interim 2021/2022 report published in August 2022, which was based on approximately 800 survey responses collected from October 2021 up until May 2022. This full report uses responses from approximately 1,300 households collected between October 2021 and November 2022.

When making comparisons between reports, it is important to note that the reference period for this full report is March 2022, and the reference period for the interim report was December 2021. The results of this full report are broadly in line with those observed in the interim report.

# Summary

### **Key statistics**

- Mean household income was £930 per week after housing costs, representing a decrease of 4% since 2019/2020 after adjusting for inflation as measured by the Retail Prices Index (RPI)
- Median equivalised household income was £710 per week after housing costs, representing a decrease of 5% since 2019/2020 after adjusting for inflation
  - Median household income was 42% higher in Jersey than the UK after housing costs, but not adjusted for relative cost of living
- Half (49%) of equivalised household income after housing costs went to households in the top 20% of the income distribution, compared with 5% going to households in the bottom 20%
- After housing costs, a quarter (24%) of households were living in relative low income (RLI), defined
  as household income below 60% of median equivalised income: £520 per week before housing
  costs, and £430 per week after housing costs
  - One in five (21%) individuals were in RLI, marginally lower than the UK (22%)
  - One in four (24%) children were in RLI, a lower proportion than the UK (29%)
  - More than one in four (28%) pensioners were in RLI, a higher proportion than the UK (18%)

# **Key themes**

- Mean and median household net income after housing costs have decreased in real terms by 4% and 5% respectively when compared with 2019/2020 (adjusting for inflation as measured by RPI)
  - Mean household net income after housing costs decreased in real terms compared with 2009/2010 (down 6%), while the median was essentially unchanged (down 1%)
- The benefits and tax system improve income inequality; housing costs almost remove this
  improvement. This effect of housing costs increasing income inequality has grown over the last 12
  years.
- The overall proportions of households and individuals living in relative low income (RLI) are similar to those recorded in 2014/2015 and 2019/2020
- Income inequality has increased over the last decade, that is the distribution of household income has become more unequal, particularly after housing costs are included
  - The 90-10 ratio of equivalised net income after housing costs, which measures the income of the 90<sup>th</sup> percentile over the income of the 10<sup>th</sup> percentile, has increased from 4.8 in 2009/2010, to 6.0 in 2014/2015, and to 6.6 in 2021/2022
  - The Gini coefficient for net income after housing costs, where 0 is complete equality and 1 is complete inequality, increased from 0.39 in 2009/2010, to 0.41 in 2014/2015, to 0.43 in 2021/2022
- This report covers household income and spending on housing; it does not cover wealth or assets. For example, 19% of households in the lowest quintile after housing costs are owner-occupiers without a mortgage, so while they have lower incomes they have assets including their home.



# Introduction

This report presents results on the incomes of Jersey households from the 2021/2022 Living Costs and Household Income Survey. This is a large survey of Jersey households that runs for one year. It started in October 2021 and finished in November 2022. The results presented herein are based on the approximately 1,300 households surveyed.

The previous Living Costs and Household Income Survey started in July 2019 but was cut short in March 2020 due to Covid-19 public health measures introduced at that time, as the survey involves face-to-face interviews in people's homes. Due to the smaller number of responses collected and the shortened collection period, much of the income and spending analysis was not possible. A new survey was launched in October 2021; this report presents the full results of that survey. Interim results were published in August 2022 based on survey results collected from October 2021 to May 2022. The full results presented in this report are broadly in line with the interim results.

The Living Costs and Household Income Survey collects detailed information on household income and spending. This includes all sources of income (including employment, pensions, and unearned income), taxation (income tax, parish rates), pension contributions (Jersey social security and other pension contributions), and spending on housing costs (for example rent and mortgage interest payments), as well as demographic information on the make-up of the household. Using demographic information, the results were weighted to ensure they were representative of the Jersey population, and to account for inflation during the survey period; details of the weighting and survey methodology can be found in the <u>appendix</u>. The information on household spending will be analysed and published in a separate report.

The Living Costs and Household Income Survey collects data on household income and spending only, and it does not collect data on household assets, wealth, or debts. Mortgage payments on a household's primary residence are covered by the survey, but other mortgages, for example on buy-to-ley properties, are excluded. It should be borne in mind that some households with low incomes may have a high net wealth which could provide them a higher standard of living than their income implies, and similarly some households with high incomes may have a net negative total wealth and may be making debt repayments. It is worth noting that owner-occupied households who own their home outright (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. Such households tend to have lower income but higher wealth; as this survey only collects information on incomes, it is not possible to report on their wealth beyond the fact that they own their home.

Note that figures in this report are rounded independently. As a result, the sum of the rounded percentages may not always add up to 100%.

Statistics Jersey thanks households for participating in the Living Costs and Household Income Survey and making this report possible.

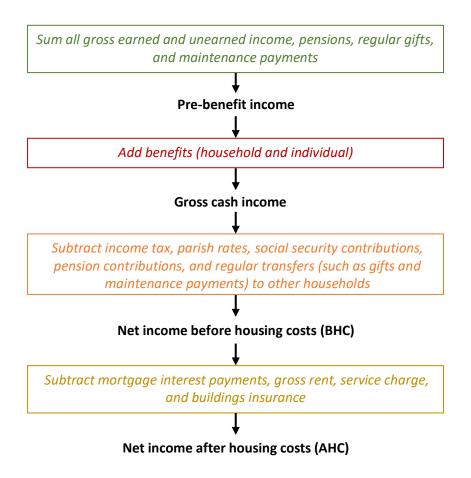


# **Analysis outline**

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

Two key stages are net income <u>before</u> housing costs (BHC) and net income <u>after</u> housing costs (AHC).

Figure 1.1 Four main stages of household income



# Mean household income

#### All households

<u>Table 1.1</u> shows the mean (average) 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>.

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<sup>&</sup>lt;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.



Table 1.1 Mean household income

	All households (£ per week)
Pre-benefit income	1,320
Gross cash income	1,380
Net income before housing costs (BHC)	1,080
Net income after housing costs (AHC)	930

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. The later section on <a href="equivalised income">equivalised income</a> presents the data adjusted for household size, to allow fairer comparisons to be made.

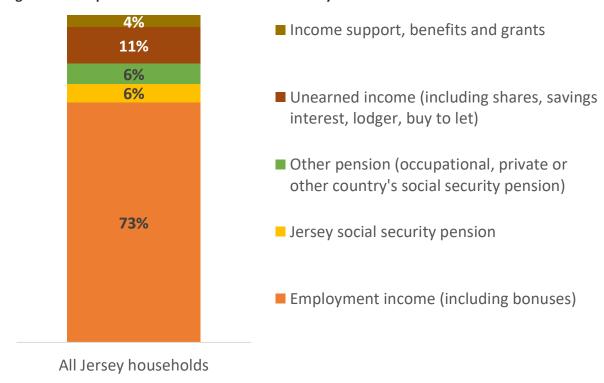
# **Composition of income**

#### All households

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

- close to three-quarters (73%) of total household income in Jersey originated from employment (including self-employed earnings)
- over a tenth (12%) of total household income was from a pension 6% of total household income was from the Jersey social security pension, and 6% from either occupational, private or another country's social security pension
- a tenth (11%) was from unearned income sources such as shares or dividends, savings interest, buy to let profits, and income from lodgers
- State financial support income support, benefits, and grants made up 4% of total household income

Figure 1.2 Composition of household income in Jersey





#### Pensioner households

Close to a third (31%) of pensioner income was from the Jersey social security pension, and 29% was from other pension types, such as occupational, private, or social security pensions from other countries; see <u>Figure 1.3</u>. Unearned income accounted for a quarter (24%) of pensioner household income, employment made up 12% of household income, and the remaining 4% came from income support, benefits, and grants.

Income support, benefits and grants
Unearned income (including shares, savings interest, lodger, buy to let)
Other pension (occupational, private or other country's social security pension)
Jersey social security pension

Figure 1.3 Composition of household income in Jersey for pensioner households

Pensioner households

**12%** 

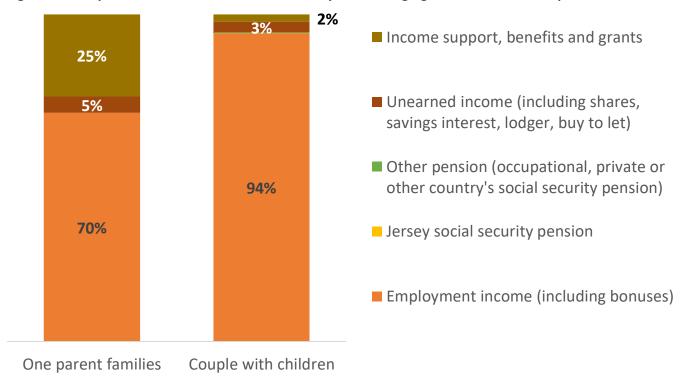
### Working-age households with dependent children

For one-parent families, 70% of their income came from employment whilst a quarter (25%) was from income support, benefits and grants; see <u>Figure 1.4</u>. In contrast, a larger majority (94%) of income for couples with dependent children was from employment, and only 2% from income support, benefits and grants.

Employment income (including bonuses)



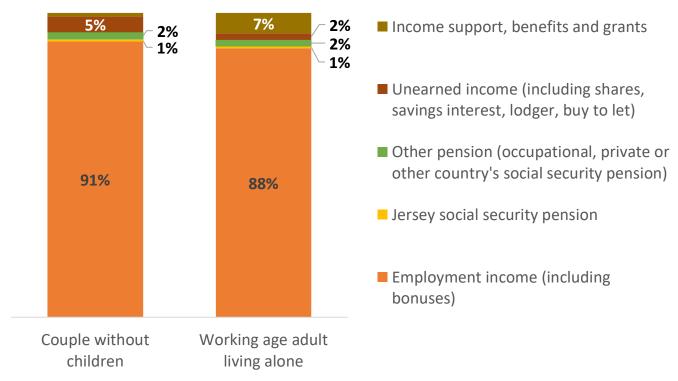
Figure 1.4 Composition of household income in Jersey for working-age households with dependent children



# Working-age households without children

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 (91% and 88% respectively); see Figure 1.5. For both these household types, a small proportion of income (5% and 2% respectively) came from unearned sources such as shares, dividends, savings interest or profits from buy to let. For adults of working-age living alone, 7% of their income was from income support, benefits and grants.

Figure 1.5 Composition of household income in Jersey for working-age households without children





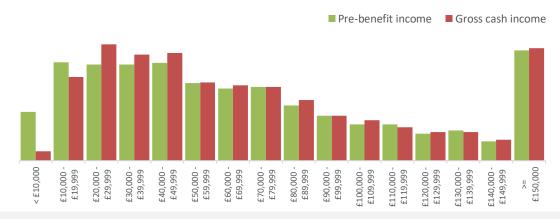
# Changes in household income at each stage of analysis

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.



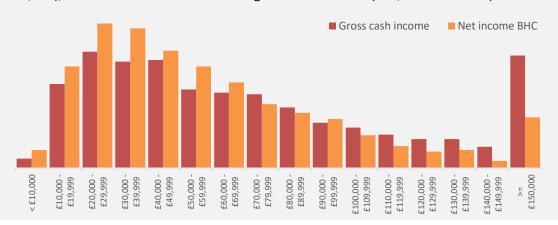
Pre-benefit income

Add benefits
(household and individual)

Gross cash income

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 and middle income bands (below £70,000), and decreases the number in higher income bands (£70,000 and above).



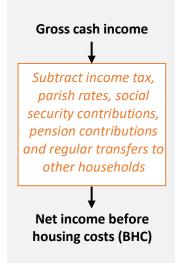
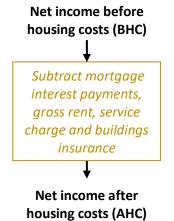
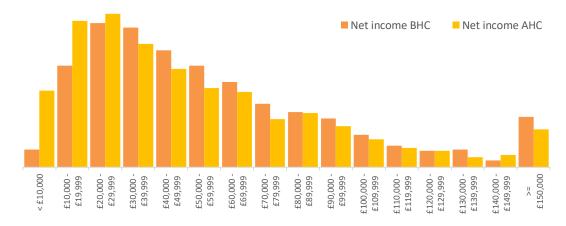


Figure 2.3 Net income before housing costs → Net income after housing costs

Finally, once housing costs (both rent and mortgage interest) are taken into account, the distribution moves leftwards, with higher proportions of households in the lower income bands below £30,000.







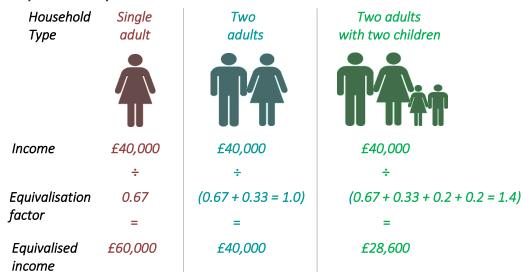
# **Equivalised income distribution**

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 per 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. Figure 2.4 illustrates an example of this process; see the appendix for further information.

Figure 2.4 The equivalisation process



# Median equivalised household income

The <u>median</u> equivalised household income is calculated by ordering all households by their equivalised household income, and taking the income of the middle household (the 50<sup>th</sup> percentile) as the median. The median 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).

The median equivalised net income for households in Jersey <u>before</u> housing costs was £860 per week, and £710 per week <u>after</u> housing costs; see <u>Table 2.1</u>. This means if all households were ordered by their equivalised household income after housing costs, the middle household had an income of £710 per week.

Table 2.1 Median equivalised household income

	£ per week
Pre-benefit income	1,040
Gross cash income	1,060
Net income before housing costs (BHC)	860
Net income after housing costs (AHC)	710



#### Quintiles

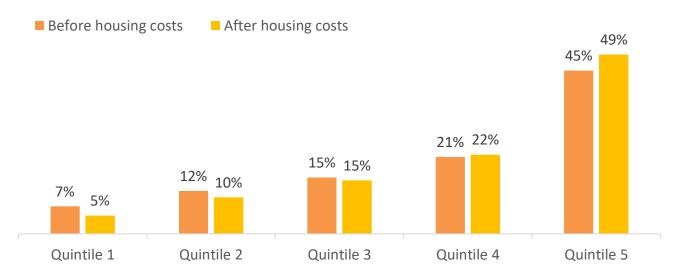
A useful approach for exploring the distribution of household income is to divide households in Jersey into five equal sized groups ('quintiles') according to their income level – the first quintile being the 20% of households with the lowest incomes, the second quintile being the next 20% of households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

#### All households

<u>Figure 2.5</u> illustrates the proportion of total household equivalised net income before and after housing costs for each quintile. The top 20% of households received half (49%) of the total household income after housing costs, whilst the bottom 20% of households received 5% of the total household income.

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

Figure 2.5 Proportion of total household equivalised net income in each quintile



The boundaries between the five quintiles – the upper boundaries for quintiles 1 to  $4^2$  – are given in Table 2.2.

Table 2.2 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	28,900	39,900	51,700	73,300	-
Net income after housing costs	19,800	30,600	43,100	66,500	

# By household type

<u>Figure 2.6</u> presents each household type and the proportion of each income quintile that they occupy, before housing costs were taken into account. For example, pensioner households made up two-fifths (40%) of the first income quintile, decreasing to 18% in each of the top three income quintiles. That is, pensioner households were more likely to be in the lower income quintiles.

<sup>&</sup>lt;sup>2</sup> As quintile 5 includes the 20% of households with the highest incomes, there is no upper limit on income for this quintile.



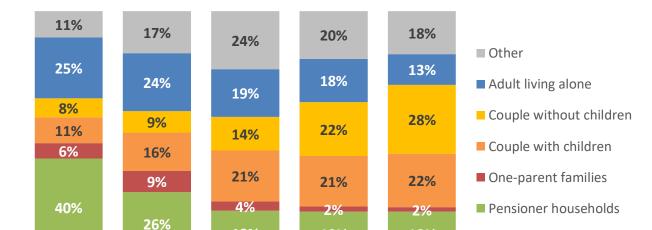
Quintile 1

Quintile 2

Overall there were many fewer one-parent families than pensioner households (as represented by the overall narrower band for this household type compared to pensioner households in <u>Figure 2.6</u>), but these too tended to be in the lower income quintiles, decreasing from 8% of the lower two quintiles to 2% of the upper two quintiles.

The opposite pattern was seen for couples with no children, who made up more than a quarter (28%) of the top income quintile but only 8% of the bottom income quintile. A similar pattern was seen for couples with children, but less pronounced, making up over a fifth (22%) of the top quintile compared to 11% of the bottom quintile.

Working-age adults living alone made up a quarter (25%) of the bottom two quintiles, with the proportion decreasing to 15% in the upper two quintiles.



18%

Quintile 4

18%

Quintile 5

Figure 2.6 Proportion of each income quintile before housing costs by household type

After housing costs were taken into account, the patterns were similar; see Figure 2.7. 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. The trend for one-parent families to be in the lower income quintiles was more pronounced after housing costs were accounted for, with one-parent families making up 11% of the lowest income quintile, but only 1% of the highest two income quintiles. For persons of working age living alone, once housing costs were taken into account, the trend towards being in the lower income quintiles was slightly more pronounced.

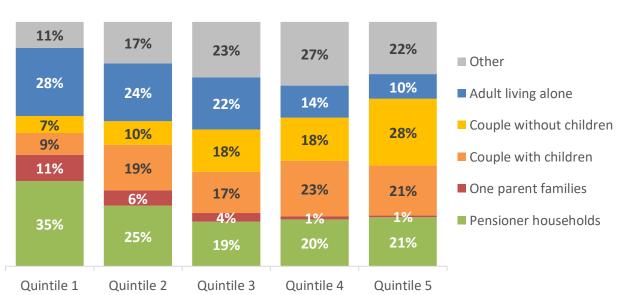


Figure 2.7 Proportion of each income quintile after housing costs by household type

18%

Quintile 3



# By tenure

Similar analyses were performed grouping households by tenure. The distributions before and after housing costs are shown in Figures 2.8 and 2.9.

Figure 2.8 Proportion of tenure group in each income quintile, before housing costs

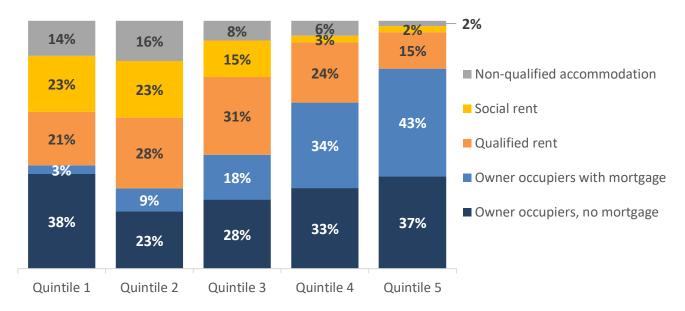
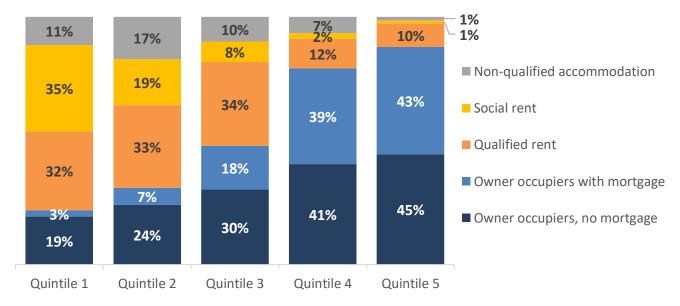


Figure 2.9 Proportion of tenure group in each income quintile, after housing costs



Focusing on household income after housing costs (Figure 2.9), a strong downward trend was seen for households living in social rent; over a third (35%) of households in the lowest quintile lived in social rent, compared to 1% of those in the highest quintile. The reverse was seen in owner-occupier households with a mortgage; 43% of the highest quintile were owner-occupiers with a mortgage, compared to 3% of the lowest quintile. A similar trend was seen among owner-occupier households without a mortgage but was less pronounced (45% of the highest quintile, compared to 19% of the lowest quintile). Qualified rental households were more likely to be in the lower and middle quintiles, with qualified rental tenure making up a third (33%) of the three lower quintiles compared with 11% of the upper two quintiles.

Households living in rental accommodation (including the qualified, social, and non-qualified sectors) spent, on average, close to a third (30%) of their income on rent – similar to the proportion in 2014/2015 (32%). Owner-occupier households with a mortgage paid, on average, a tenth (9%) of their income on mortgage interest – slightly smaller than the proportion in 2014/2015 (13%).



### Relative low income

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

An internationally recognised 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 2021/2022, defined as 60% of median equivalised household income, was £520 per week before housing costs, and £430 per week after housing costs.

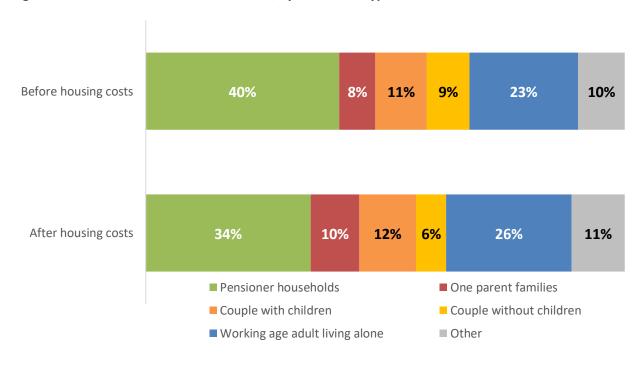
16% of households were in the category of relative low income before housing costs, rising to a quarter (24%) of households after housing costs were taken into account.

# Relative low income households, by household type

Two-fifths (40%) of the group of households in relative low income before housing costs were pensioner households, and after housing costs this reduced to a third (34%). For both income types, pensioner households were the most common household type among households in relative low income.

Close to a quarter (23%) of the group in relative low income before housing costs were working age adults living alone, which increased to a quarter (26%) of households in relative low income after housing costs; see <u>Figure 3.1</u> for full results.

Figure 3.1 Relative low income households, by household type



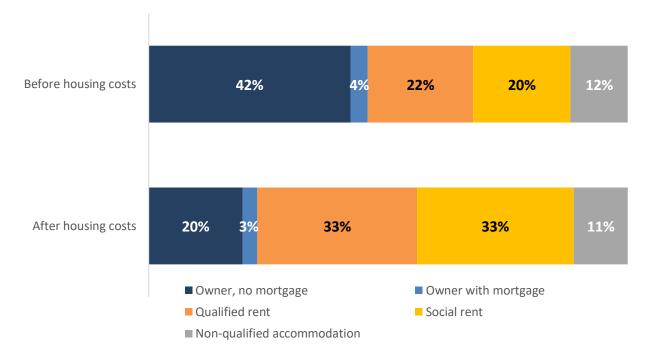
<sup>&</sup>lt;sup>3</sup> The <u>1998 Eurostat Task Force</u> recommended the use of the relative low income threshold at 60% of the median equivalised income value. See the above section on <u>equivalised income</u> for details on the equivalisation process.



# 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, and another third (33%) were those living in qualified rent; see <u>Figure 3.2</u>. Those in owner-occupied accommodation without a mortgage made up a fifth (20%).

Figure 3.2 Relative low income households, by tenure



Applying housing costs decreased the proportion of relative low income households who were living in owner-occupied accommodation without a mortgage from two in five (42%) to one in five (20%). Conversely, the proportion living in both social rent and qualified rent increased from one in five (20% and 22% respectively) before housing costs to a third (both 33%) after housing costs.

#### 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 <u>Table 3.1</u>.

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

	Before housing costs		After ho	using costs
	%	persons	%	persons
Children	15	2,500	24	4,000
Working-age adults	10	7,000	18	12,200
Pensioners	23	4,200	28	5,200
All individuals	14	14,000	21	21,600

<sup>&</sup>lt;sup>4</sup> Estimates of the number of individuals were calculated using the totals for each age group as at the 2021 census.



A tenth (10%) of working-age adults lived in households with relative low income before housing costs, compared with 15% of children and 23% of pensioners.

The proportions for each age group increased after taking housing costs into account. The proportion of working-age adults living in relative low income increased to 18% after housing costs, while it increased to a quarter (24%) for children. Pensioners remained the age group with the highest proportion in relative low income at 28%, but the proportional increase after taking housing costs into account was lower than for other age groups.

Overall, a fifth (21%) of individuals, approximately 21,600 people, were living in a household with relative low income after housing costs were taken into account.

# 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.

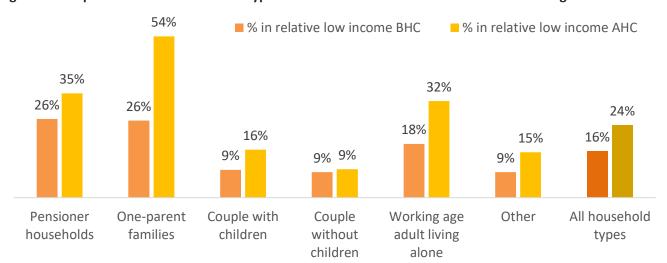


Figure 3.3 Proportion of each household type in relative low income before and after housing costs

Overall, a quarter (24%) of households were in relative low income after housing costs, ranging from 9% of couples with no children to 54% of one-parent families.

Pensioner and single working-age adult households also had a higher proportion living in relative low income after housing costs (35% and 32% respectively) than the proportion across all households (24%).

Before housing costs, essentially the same proportion of couples with and without children were living in relative low income, 9% for both household types. The proportion increased to 16% for couples with children after housing costs were taken into account, while it was essentially unchanged for couples without children (9%).

One-parent families were particularly impacted by the effect of housing costs on net household income, with a quarter (26%) in relative low income before housing costs and more than half (54%) in relative low income after housing costs.

A notable increase was also seen for working-age adults living alone, from 18% living in relative low income before housing costs, rising to a third (32%) 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 more than doubled the proportion in relative low income from a quarter (24%) to 61%, and similarly for those living in qualified rental the proportion increased from 14% to a third (34%). Housing costs increased the proportion of non-qualified rental households in relative low income from 20% to 30%. The only tenure group to see its proportion in relative low income reduce, after housing costs were included, were owner-occupiers without a mortgage, decreasing from 21% to 15%.

■ % in relative low income AHC ■ % in relative low income BHC 61% 34% 30% 24% 24% 21% 20% 15% 16% 14% 3% 3% Qualified rent Owner with Owner, no Social rent Non-qualified All household accommodation mortgage mortgage types

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 (£430 per week equivalised income before housing costs and £360 after). As the threshold lowers, fewer households fall below it; whilst 16% of all households fall below the 60% threshold before housing costs, less than one in ten (8%) fall below the 50% threshold (see Table 3.2).

Table 3.2 Equivalised median weekly household income and relative low income thresholds

Before housing costs	Median	60% of median	50% of median
Equivalised weekly household income	860	520	430
% of households with income below threshold	50	16	8
After housing costs	Median	60% of median	50% of median
Equivalised weekly household income	710	430	360
% of households with income below threshold	50	24	18



# Relative low income and income distribution by household type

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

Slightly under a fifth (18%) of pensioner households had an income less than 50% of the median before housing costs, and a quarter (24%) had an income less than 50% of the median after housing costs. As noted before, these measures are relative to the median for all household types.

For one-parent families, 6% fell under this lower threshold of relative low income before housing costs, rising to more than two-fifths (44%) once housing costs were taken into account.

For working-age adults living alone, 7% had an income less than this lower threshold of relative low income before housing costs, rising above a quarter (27%) after housing costs.

Table 3.3 Proportion of each household type with income below the median and in relative low income, <u>before</u> housing costs

	Median	60% of median	50% of median
Pensioner households	63	26	18
One parent with dependent children	76	26	6
Couple with dependent children	41	9	4
Couple with no children	30	9	6
Working-age adults living alone	58	18	7
Other	46	9	4
All households	50	16	8

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

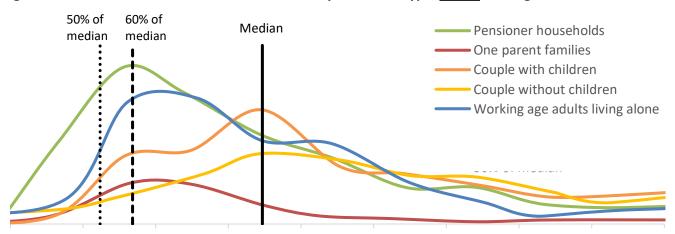
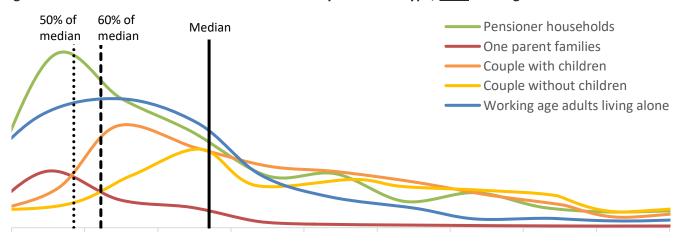




Table 3.4 Proportion of each household type with income below the median and in relative low income, <u>after</u> housing costs

	Median	60% of median	50% of median
Pensioner households	61	35	24
One parent with dependent children	88	54	44
Couple with dependent children	40	16	9
Couple with no children	29	9	7
Working-age adults living alone	63	32	27
Other	39	15	10
All households	50	24	18

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



# Relative low income and income distribution by tenure

Similar analysis by tenure shows that 12% of households living in social rent and 14% of owner-occupied households without a mortgage had an income lower than 50% of the median before housing costs; see <u>Table 3.5</u>. 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.

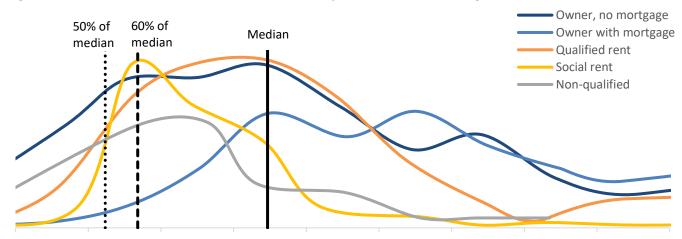
Table 3.5 Proportion of each tenure with income below the median and in relative low income, <u>before</u> housing costs

	Median	60% of median	50% of median
Owner with mortgage	20	3	2
Owner, no mortgage	47	21	14
Qualified rent	53	14	7
Social rent	81	24	12
Non-qualified accommodation	76	20	3
All households	50	16	8



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 <u>Figure 3.7</u>, 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

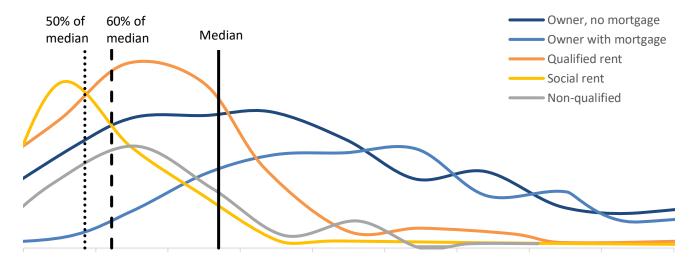


Taking housing costs into account and exploring the shapes of the distributions by tenure (see <u>Figure 3.8</u>), it can be seen that owner-occupied households, both with and without mortgages, tend to be above the thresholds of relative low income. In contrast, close to half (47%) of households living in social rent, and a quarter living in qualified rent and non-qualified accommodation (25% and 24% respectively) had an income below the lower threshold of 50% of the median.

Table 3.6 Proportion of each tenure with income below the median and in relative low income, <u>after</u> housing costs

	Median	60% of median	50% of median
Owner with mortgage	16	3	2
Owner, no mortgage	36	15	9
Qualified rent	69	34	25
Social rent	92	61	47
Non-qualified accommodation	68	30	24
All households	50	24	18

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. For each measure, a higher value indicates a higher level of income inequality. These measures are calculated using equivalised household income.

#### 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 (7.1) at the pre-benefit income stage, reducing to 5.0 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 4.1.

However, after including housing costs, the ratio increases again (i.e. income inequality worsens), to 6.6, indicating the income of the 90<sup>th</sup> percentile household was close to seven 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 pre-benefit income 27 times that of the bottom 10%, which reduced to 12 times after benefits were taken into account (gross cash income). The top 10% of households had an average net income 10 times that of the bottom 10% before housing costs, rising to 21 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 the appendix for further information on how the Gini coefficient 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 was essentially the same as 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	7.1	5.0	4.1	6.6
90-10 shares ratio	27	12	10	21
Gini coefficient	0.43	0.40	0.38	0.43

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

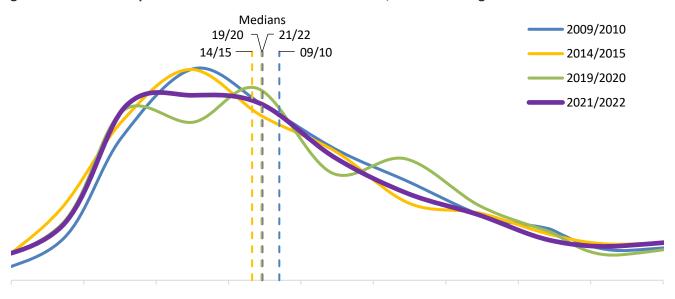


# Comparison with 2019/2020, 2014/2015, and 2009/2010

Throughout this section, monetary amounts are presented in nominal terms unless otherwise specified – i.e. <u>not</u> adjusted for inflation.

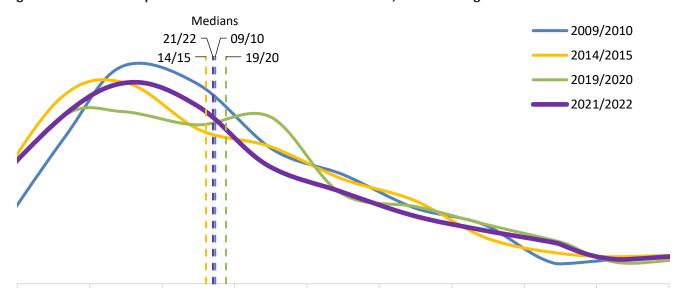
<u>Figures 4.1</u> and <u>4.2</u> show the real-term equivalised household income distribution from the last four surveys, i.e. adjusted for inflation. All of the surveys exhibit similar real-term income distributions after adjusting for inflation, with a peak below their median. In 2021/2022 the peak is more of a plateau, with the higher end close to the median. This indicates that the distribution of net income before housing costs has remained relatively constant over this period at the population level.

Figure 4.1 Real-term equivalised household income distribution, before housing costs



Taking housing costs into account results in the distributions being slightly less peaked, and the peaks being further below the median.

Figure 4.2 Real-term equivalised household income distribution, after housing costs





#### Mean household income

<u>Table 4.1</u> shows the mean household income for households, at each stage, for 2009/2010, 2014/2015, and 2019/2020, in nominal terms, as well as the nominal percentage changes.

Table 4.1 Comparison of nominal mean household income, £ per week, and nominal percentage changes

		£ per week			Nominal % change		
	2009/2010	2014/2015	2019/2020	2021/2022	2 year	7 year	12 year
Pre-benefit income	1,000	1,020	1,240	1,320	6	29	32
Gross cash income	1,050	1,070	1,290	1,380	7	29	31
Net income before housing costs (BHC)	840	860	1,040	1,080	4	26	29
Net income after housing costs (AHC)	710	720	890	930	4	29	31

<u>Table 4.2</u> shows the mean household income for households, at each stage, for 2009/2010, 2014/2015, and 2019/2020, in real terms (adjusted for inflation), as well as the real-term percentage changes.

Table 4.2 Comparison of real-term mean household income (constant 2022 prices), £ per week, and real-term percentage changes

		£ per week			Real-term % change		
	<b>2009/2010</b> <sup>5</sup>	<b>2014/2015</b> <sup>6</sup>	<b>2019/2020</b> <sup>7</sup>	2021/2022	2 year	7 year	12 year
Pre-benefit income	1,390	1,260	1,340	1,320	-1	5	-5
Gross cash income	1,470	1,320	1,390	1,380	-1	5	-5
Net income before housing costs (BHC)	1,190	1,050	1,130	1,080	-4	3	-8
Net income after housing costs (AHC)	1,000	890	970	930	-4	4	-6

In the last two years, there was a 4% nominal increase in mean household income after housing costs. For comparison, the Jersey all items Retail Prices Index (RPI) increased by 8.2% from December 2019 to March 2022, and the Index of Average Earnings increased by 8.6% over this period<sup>8</sup>. After adjusting for inflation as measured by RPI, this resulted in a real-term decrease of 4% over the period.

After housing costs, the mean household income has nominally increased by more than a quarter (29%) over the last seven years. For comparison, the Jersey all items Retail Prices Index (RPI) increased by 22.8% from December 2014 to March 2022, and the Index of Average Earnings increased by 22.6% over this period<sup>9</sup>. This resulted in a real-term increase of 4% over the period.

Statistics Jersey

<sup>&</sup>lt;sup>5</sup> Adjusted for inflation as measured by RPI, which increased by 39.0% from December 2009 to March 2022.

<sup>&</sup>lt;sup>6</sup> Adjusted for inflation as measured by RPI, which increased by 22.8% from December 2014 to March 2022.

<sup>&</sup>lt;sup>7</sup> Adjusted for inflation as measured by RPI, which increased by 8.2% from December 2019 to March 2022.

<sup>&</sup>lt;sup>8</sup> Interpolating between the June figures for the Average Earnings Index gives a percentage change for the period December 2019 to March 2022 of 8.6%.

<sup>&</sup>lt;sup>9</sup> Interpolating between the June figures for the Average Earnings Index gives a percentage change for the period December 2014 to March 2022 (the reference periods for each survey) of 22.6%.



There was a similar nominal increase of close to a third (31%) in the mean household income after housing costs over the last 12 years. For comparison, the Jersey all items Retail Prices Index (RPI) increased by 39.0% from December 2009 to March 2022, and the Index of Average Earnings increased by 35.7% over this period<sup>10</sup>. This resulted in a real-term decrease of 6% over the period.

# Median equivalised 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 <u>Table 4.3</u>.

Table 4.3 Comparison of nominal median equivalised household income, £ per week, and nominal percentage changes

	£ per week				No	ominal % cha	inge
	2009/2010	2014/2015	2019/2020	2021/2022	2 year	7 year	12 year
Pre-benefit income	750	800	950	1,040	9	30	39
Gross cash income	780	820	960	1,060	10	29	36
Net income before housing costs (BHC)	650	680	790	860	9	26	32
Net income after housing costs (AHC)	520	560	690	710	3	27	37

Table 4.4 Comparison of real-term median equivalised household income (constant 2022 prices), £ per week, and real-term percentage changes

	£ per week				Red	al-term % ch	ange
_	2009/2010 <sup>5</sup>	2014/2015 <sup>6</sup>	2019/20207	2021/2022	2 year	7 year	12 year
Pre-benefit income	1,040	980	1,030	1,040	1	6	0
Gross cash income	1,080	1,010	1,040	1,060	2	5	-2
Net income before housing costs (BHC)	900	830	860	860	0	4	-4
Net income after housing costs (AHC)	720	690	750	710	-5	3	-1

For pre-benefit income, gross cash, and net income BHC, the nominal two-year increases in median income between 2019/2020 and 2021/2022 were 9% to 10%. The increase for the same period was smaller for net income after housing costs, at 3%. This smaller increase after housing costs was primarily as a result of rental payments increasing faster than household income. The median net income after housing costs increased by £20 to £710 per week, which is a real-term decrease of 5% after adjusting for inflation.

Over the seven-year period from 2014/2015 to 2021/2022, the nominal change in median pre-benefit income, and gross cash were 30% and 29%. Over this period there were slightly smaller increases in net income before and after housing costs, at 26% and 27% respectively. The median net income after housing costs increased by £150 to £710 per week, a nominal increase of 27%, which is a 3% real-term increase after adjusting for inflation.

Over the 12-year period from 2009/2010 to 2021/2022, the nominal change in median pre-benefit income, gross cash income, and net income after housing costs ranged from 36% to 39%. The increase for the same period was

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<sup>&</sup>lt;sup>10</sup> Interpolating between the June figures for the Average Earnings Index gives a percentage change for the period December 2009 to March 2022 (the reference periods for each survey) of 35.7%.



slightly lower for net income before housing costs at 32%. Income after housing costs increased by a larger amount (37%), driven by average housing costs for those with a mortgage decreasing over this period<sup>11</sup>. The median net income after housing costs for all households increased by £190 to £710 per week, a nominal increase of 37%, which is a marginal real-term decrease of 1% after adjusting for inflation.

#### Quintiles

Figure 4.3 illustrates the change in mean average income in nominal terms for each quintile from 2014/2015 to 2021/2022. Compared with the overall average changes, only quintile five increased by more than average. As quintile five makes up half (49%) of total household net income (see Figure 2.5), changes experienced by this sector drive the overall change in mean household income. For comparison, the Jersey all items Retail Prices Index (RPI) increased by 22.8% from December 2014 to March 2022, and the Index of Average Earnings increased by 22.6% over this period; mean average household incomes in each quintile increased by more than both of these measures, both before and after housing costs.

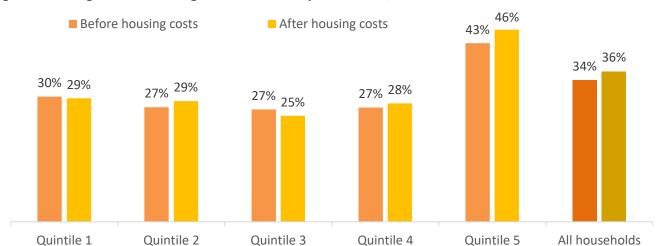


Figure 4.3 Change in mean average income of each quintile, 2014/2015 to 2021/2022

Changes from 2009/2010 to 2021/2022 are similar for most quintiles, with the exceptions of the lowest quintile after housing costs, which increased by 7% in nominal terms and decreased by 23% in real terms; see Figure 4.4.

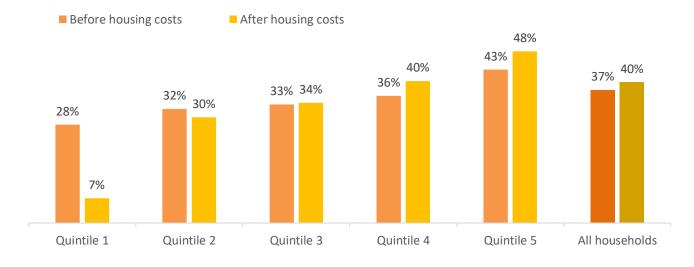


Figure 4.4 Change in mean average income of each quintile, 2009/2010 to 2021/2022

<sup>&</sup>lt;sup>11</sup> The survey ran from October 2021 to November 2022. There were large increases in mortgage interest rates during this period, but prior to this interest rates had been persistently low. Most households with a mortgage were on a fixed rate so many had yet to be impacted by recent increases, which resulted in households with mortgages paying less interest on average in 2021/2022 than in 2009/2010.



Quintiles two and three also decreased in real terms but to a much lesser extent (7% and 4% respectively), while in contrast quintile four saw essentially no real-term change (0%) and quintile five experienced a real-term increase in mean household income (7%).

#### Relative low income

<u>Figure 4.5</u> shows the proportion of households with equivalised net income lower than the relative low income threshold of 60% of the median for all households, from 2009/2010 to 2021/2022. None of the changes in 2021/2022 were statistically significant.

28%
26%
24%
22%
20%
Net income AHC
18%
16%
2009/2010
2014/2015
2019/2020
2021/2022

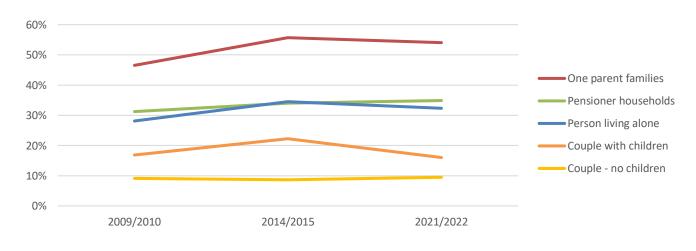
Figure 4.5 Proportion of households in relative low income, 2009/2010 to 2021/2022

Both before and after housing costs, there was a slight decrease (of 1 to 3 percentage points) in the proportion of households falling below the relative low income thresholds from 2019/2020 to 2021/2022.

The proportions before housing costs were similar in 2009/2010 and 2021/2022 (15% and 16% respectively). In contrast, the proportion after housing costs in 2021/2022 was 3 percentage points higher than in 2009/2010.

<u>Figure 4.6</u> shows the proportion of households with equivalised income lower than the relative low income threshold of 60% of the median for all households after housing costs, from 2009/2010 to 2021/2022<sup>12</sup>. None of the changes in 2021/2022 were statistically significant.



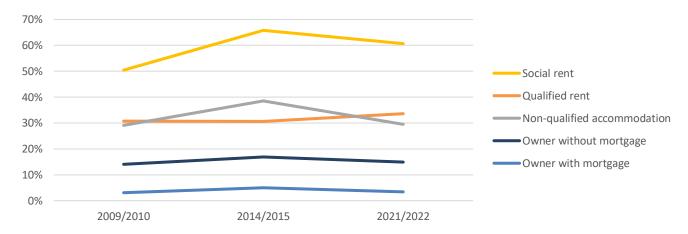


<sup>&</sup>lt;sup>12</sup> The 2019/2020 survey was not included due to the smaller number of responses possible before the in-person survey was halted in March 2020 due to public health measures.



<u>Figure 4.7</u> illustrates households below the relative low income threshold by tenure<sup>13</sup>, after housing costs. None of the changes recorded in 2021/2022 were statistically significant.

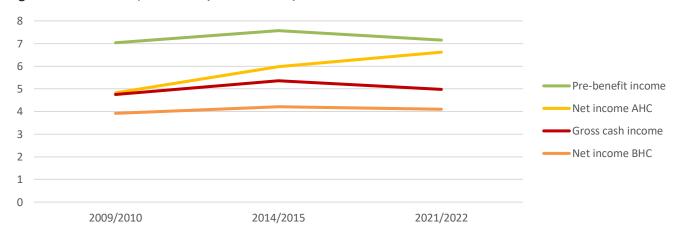
Figure 4.7 Proportion of each tenure in relative low income after housing costs, 2009/2010 to 2021/2022



# Income inequality indicators

<u>Figures 4.8 to 4.10</u> present three measures of income inequality over from 2009/2010 to 2021/2022, for equivalised household income. For each measure, a higher value indicates a higher level of income inequality.

Figure 4.8 90-10 ratio, from 2009/2010 to 2021/2022



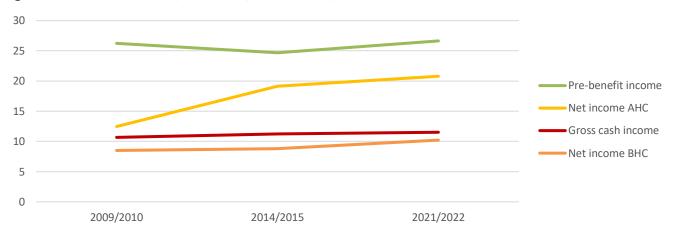
The 90-10 ratio was lower in 2021/2022 in most types of income, with the exception being net income after housing costs where the ratio increased from 6.0 in 2014/2015 to 6.6 in 2021/2022. When comparing with 2009/2010, the 90-10 ratio was higher in 2021/2022 for all types of income, and again income after housing costs saw the largest increase of 1.8, compared to smaller increases of 0.1 to 0.2 in other types of income. This indicates that over these periods, the relative income of the 90th percentile household to the 10th percentile had increased the most in net income after housing costs.

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<sup>&</sup>lt;sup>13</sup> The 2019/2020 survey was not included due to the smaller number of responses possible before the in-person survey was halted in March 2020 due to public health measures.

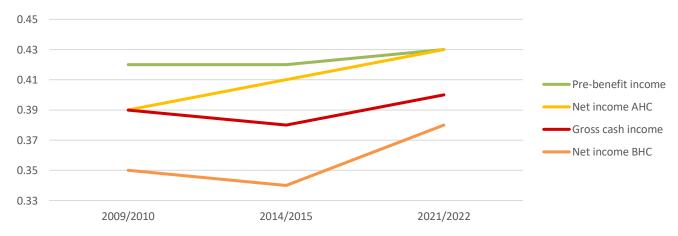


Figure 4.9 90-10 shares ratio, from 2009/2010 to 2021/2022



The 90-10 shares ratio was higher in 2021/2022 for all types of income compared with 2014/2015 and 2009/2010, indicating that the average income of those in the 90<sup>th</sup> percentile increased more than the average incomes for those in the 10<sup>th</sup> percentile. From 2009/2010 to 2021/2022, the largest increase was seen in net income after housing costs, with the 90-10 shares ratio increasing from 12 to 21.

Figure 4.10 Gini coefficient, from 2009/2010 to 2021/2022



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 increases in all types of income since 2014/2015 and 2009/2010. The biggest change was in net income after housing costs from 2009/2010 to 2021/2022, where the Gini coefficient increased from 0.39 to 0.43.

The change in the three indicators imply that income inequality worsened since 2009/10 and since 2014/2015, particularly once housing costs were taken into account. This is partially a result of persistently low interest rates for mortgage holders over the decade since 2009/2010<sup>11</sup>, but also increasing rents for those in rental accommodation. From 2014/2015 to 2021/2022, the biggest contributor to increased housing costs was rising rental payments.



# Comparison with the UK14

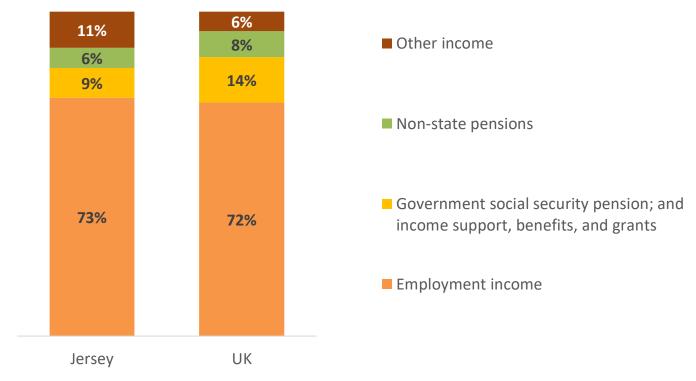
# Composition of income

#### All households

Gross cash household income by source for Jersey compared with the UK (see Figure 4.11) shows that:

- close to three-quarters of total household income originated from employment (including self-employed earnings) in both Jersey and the UK (73% and 72% respectively)
- in Jersey a tenth (11%) was from unearned income sources such as shares or dividends, savings interest, buy to let profits, and income from lodgers, twice the proportion of the UK (6%)
- in Jersey a tenth (9%) of total household income was from a States social security pension, Income Support, benefits or grants, compared to 14% in the UK
- in Jersey 6% of total household income was from non-States pensions, compared to 8% in the UK

Figure 4.11 Composition of household income in Jersey compared with the UK



# Income inequality measures

Comparing 2021/2022 results for Jersey and the UK<sup>15</sup> (<u>Tables 4.5 and 4.6</u>) shows that equivalised median incomes were 51% higher in Jersey than in the UK before housing costs, and 42% higher after housing costs.

Before housing costs, the proportion of individuals in households in relative low income was lower in Jersey (14%) than the UK (17%). After housing costs, the difference was smaller but the proportion of individuals in households in relative low income was marginally lower in Jersey (21%) than the UK (22%).

<sup>&</sup>lt;sup>14</sup> Statistics for the UK are from the UK Department for Work and Pensions report <u>Households below average income: for financial years ending 1995 to 2022</u>.

<sup>&</sup>lt;sup>15</sup> Note that in the interim 2021/2022 income distribution report comparisons were made with UK statistics for 2020/2021, as UK figures for 2021/2022 were not available at the time of that publication.



In previous surveys, there were similar differences between these proportions for Jersey and the UK before housing costs. However in previous surveys, Jersey saw slightly higher proportions of individuals living in households in relative low income after housing costs than in the UK.

Table 4.5 Jersey median equivalised household income compared with the UK, before housing costs

Before housing costs	Median household income	% of individuals below 60% of median	90-10 ratio	Gini coefficient
Jersey 2021/2022	860	14	4.1	0.38
UK 2021/2022	565	17	3.9	0.34
Difference	51%	-3 pp	+0.2	+0.04

Table 4.6 Jersey median equivalised household income compared with the UK, after housing costs

After housing costs	Median household income	% of individuals below 60% of median	90-10 ratio	Gini coefficient
Jersey 2021/2022	710	21	6.6	0.43
UK 2021/2022	500	22	4.9	0.38
Difference	42%	-1 pp	+1.7	+0.05

Jersey had higher income inequality than the UK, particularly after housing costs were accounted for, with a 90-10 ratio of 6.6 compared to 4.9 in the UK. The Gini coefficient was 5 percentage points higher for Jersey than the UK.

Table 4.7 Percentage of individuals living in a household in RLI (below 60% of median) in 2021/2022, before and after housing costs, Jersey compared with the UK

	Before housing costs		After hous	sing costs
	Jersey	UK	Jersey	UK
Children	15	20	24	29
Working-age adults	10	15	18	20
Pensioners	23	18	28	18
All individuals	14	17	21	22

In Jersey in 2021/2022, one in four (24%) children were in RLI after housing costs, a lower proportion than the UK (29%); see <u>Table 4.7</u>. In contrast, more than one in four (28%) pensioners were in RLI, 10 percentages points higher than the proportion in the UK (18%).

Comparing with seven years ago in 2014/2015, 29% of children were in RLI after housing costs in Jersey, marginally more than in the UK (28%). Over a quarter (28%) of pensioners were in RLI after housing costs, twice the proportion of the UK (14%).

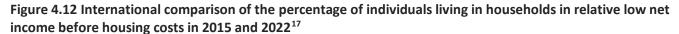


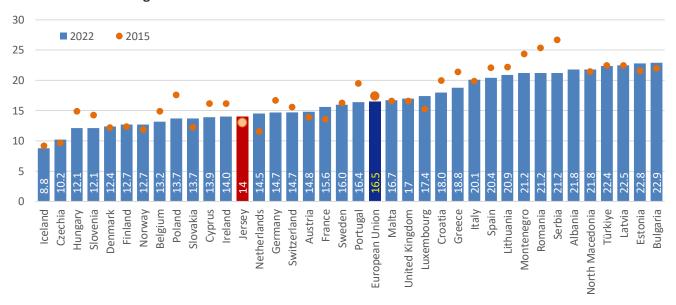
# International comparisons

Net income after housings costs is the headline income measure in this report, as it measures disposable income available to households. However, net income after housings costs is more difficult to measure than other types of income, so when making international comparisons it is less widely available. Therefore in this section comparisons are made with net income before housings costs.

International statistics on equivalised net income before housing costs are available for European countries<sup>16</sup>, and in this section are compared with statistics for Jersey for 2021/2022 and 2014/2015. International statistics presented in this section are for 2022 and 2015, with the exception of some countries where statistics are not available for 2022 and were substituted with the most recent available: Iceland (2018); Albania, North Macedonia, and Norway (2020); and Montenegro, Serbia, Switzerland, and Türkiye (2021).

#### Individuals in relative low income





The proportion of individuals living in households in relative low income before housing costs in Jersey was 14% in 2021/2022. Of the 38 countries and regions compared – Jersey, 36 European countries, and the average for the 27 member states of European Union – Jersey ranked 13<sup>th</sup> in 2021/2022; see <u>Figure 4.12</u>. The proportion for Jersey was the same as Ireland (14.0%), and below the EU average proportion of 16.5% and the UK at 17%. The proportion for Jersey in 2021/2022 (14%) had marginally increased from 13% in 2014/2015.

Statistics Jersey

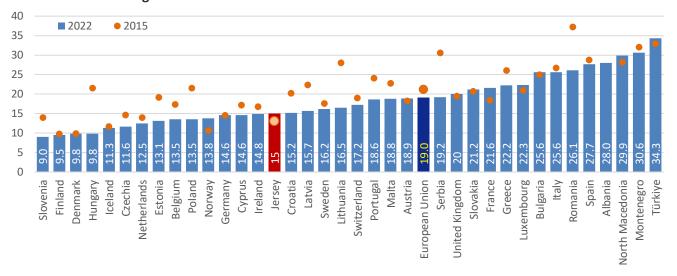
<sup>&</sup>lt;sup>16</sup> Statistics for European countries presented in this section are from the Eurostat report <u>EU Statistics on Income and Living Conditions (EU-SILC)</u>. UK statistics for years since 2018 are not available in EU-SILC, so the 2022 statistics for the UK are from the UK DWP report and from the UK Department for Work and Pensions report <u>Households below average income:</u> for financial years ending 1995 to 2022.

<sup>&</sup>lt;sup>17</sup> European statistics are from EU-SILC dataset <u>"At risk of poverty rate by poverty threshold, age and sex" for individuals of all ages.</u>



#### Children in relative low income

Figure 4.13 International comparison of the percentage of children living in households in relative low net income before housing costs in 2015 and 2022<sup>18</sup>

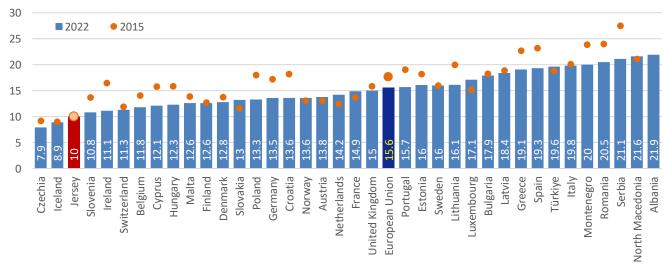


In 2022, 15% of children in Jersey were in relative low income before housing costs, below the EU average of 19.0% and the UK at 20%. Of the 38 values compared, Jersey ranked 15<sup>th</sup>; see Figure 4.13.

The proportion for Jersey in 2021/2022 had increased slightly from 13% in 2014/2015, however in comparison many European countries had reported a reduction in the proportion of children in relative low income, which moved Jersey closer to the EU average.

# Working-age adults in relative low income

Figure 4.14 International comparison of the percentage of working-age adults living in households in relative low net income before housing costs in 2015 and 2022<sup>19</sup>



Of the 38 values compared, Jersey ranked  $3^{rd}$  with 10% of working-age adults living in households in relative low income before housing costs, a proportion below the UK at 15% and EU average of 15.6%; see <u>Figure 4.14</u>. The proportion for Jersey in 2021/2022 was essentially unchanged from 2014/2015 (10%).

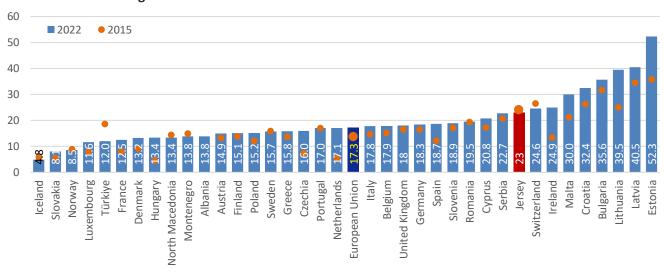
<sup>&</sup>lt;sup>18</sup> European statistics are from EU-SILC dataset <u>"At risk of poverty rate by poverty threshold, age and sex" for children aged under 16.</u>

<sup>&</sup>lt;sup>19</sup> European statistics are from EU-SILC dataset <u>"At risk of poverty rate by poverty threshold, age and sex" for adults aged 16-64.</u>



#### Pensioners in relative low income

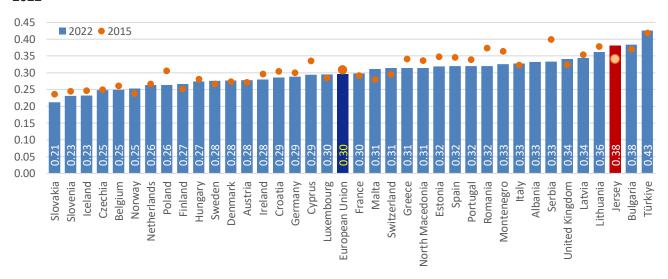
Figure 4.15 International comparison of the percentage of pensioners living in households in relative low net income before housing costs in 2015 and 2022<sup>20</sup>



Of the countries and regions compared, Jersey ranked 30<sup>th</sup> with 23% of pensioners living in households in relative low income before housing costs, above the EU average of 17.3% and the UK at 18%; see <u>Figure 4.15</u>. As noted previously, many pensioners have wealth in the form of owning their home and other assets, affording them a higher standard of living than their income before housing costs implies. In 2021/2022 the proportion for Jersey was marginally lower than in 2014/2015, when it was 24%.

#### Gini coefficient

Figure 4.16 International comparison of the Gini coefficient for net income before housing costs in 2015 and 2022<sup>21</sup>



Of the 38 values compared, Jersey ranked 36<sup>th</sup> with a Gini coeffeicient of 0.38 for net income before housing costs, higher than the EU average of 0.30 and the United Kingdom at 0.34; see <u>Figure 4.16</u>. A higher Gini coefficient indicates a higher level of inequality, meaning that Jersey had a higher level of inequality for net income before housing costs than most European countries. See the <u>Gini coefficient</u> section above for an introduction and the <u>appendix</u> for information on how it is calculated. The Jersey Gini coefficient had increased from 0.34 in 2014/2015.

<sup>&</sup>lt;sup>20</sup> European statistics are from EU-SILC dataset <u>"At risk of poverty rate by poverty threshold, age and sex" for adults aged</u> 65 and over

<sup>&</sup>lt;sup>21</sup> European statistics are from EU-SILC dataset <u>Gini coefficient of equivalised disposable income</u>



# **Appendix**

#### **Definitions**

The **mean income** is the sum of the income of all households, divided by the number of households.

The **median income** is the income of the middle household of the distribution (the 50th percentile, the mid-point between the lowest and highest income households). Half of households will have a lower income than the median, and half will have a higher income than the median.

As the distribution of household incomes tends to be 'skewed' (that is there are fewer 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.

**Equivalisation** is used to enable a fairer comparison between different sized households. For example, a single person living on their own earning £40,000 a year might be considered to have a higher equivalent income compared to an adult couple and three young children with total income £40,000.

Equivalisation was carried out using an internationally recognised equivalence scale: the <u>1998 Eurostat Task Force</u> recommended the use of the Modified OECD equivalence scale for continuity and comparability reasons. In addition, the UK publication <u>Households Below Average Income</u> uses the Modified OECD equivalence scale, with a slight variation introduced for incomes after housing costs. Therefore this report uses the equivalisation scales below in <u>Table A1.1</u>.

Table A1.1 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 to 13 years	0.20	0.20

'Relative low income' has multiple definitions that are used internationally. The <u>1998 Eurostat Task Force</u> recommended the use of the relative low income threshold at **60% of the median** equivalised income value for all households in the population, which is threshold used in this report.

### Stages of incomes:

**Pre-benefit income** was defined on a household level as: all financial flows into the household over the previous 12 months, both earned and unearned, with the exception of government financial assistance: income support, benefits, grants etc. Pre-benefit income 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 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 <u>not</u> included



**Gross cash income** was defined on a household level as pre-benefit income plus government financial assistance. In addition to the items listed for pre-benefit income, this gross cash income also included:

- 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. parental grants and allowances; short-term incapacity allowance, long-term incapacity allowance and other sickness allowances; community costs bonus, Christmas bonus, cold weather payments, TV licence schemes; and other grants and benefits

# **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

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, <u>and</u> share the same living space.

The **Gini coefficient** is an internationally recognised 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). The Gini coefficient is defined mathematically using the Lorenz curve, which plots the proportion of the total income of the population that is cumulatively earned by the bottom x% of the population. The Gini coefficient is the difference in the area under the Lorenz curve and the area formed in the complete equality scenario, where every individual has the same income, so the Lorenz curve would be a straight line and the area beneath it is the right-angled triangle formed by this line, with an area of one. Thus the Gini coefficient ranges from zero when there is complete equality, through to one when there is complete inequality; in the graph, this scenario results in a Lorenz curve that is flat until the very last person, who has all the income, so the area under the curve is zero, so the Gini coefficient is one in this scenario.

The **reference period** for this survey was March 2022. When making comparisons between reports, it is important to note that the reference period for the interim report was December 2021. Results for both reports were time-adjusted to their reference period. The choice of reference point does not affect real-term comparisons with past reports, but it does affect the level of summary statistics for 2021/2022. The reference points of December 2021 and March 2022 were chosen as they were the closest RPI quarter to the middle of the survey period for the respective reports (October 2021 to May 2022, and October 2021 to November 2022).

#### Survey Methodology

#### Sample

Over a 13-month period from October 2021 to November 2022, a *random* sample of around 200 households was approached each month to take part in Jersey's Living Costs and Household Income Survey.

# 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, median income values are accurate <sup>22</sup> to within 9%. For example, an estimated median of £1,000 derived from respondents implies the true population value to be between £910 and £1,090. Winsorised mean incomes are accurate to within 4%.

Any proportions which are reported for all households are accurate to within 3 percentage points<sup>22</sup>. For example, a sample proportion of 50% would indicate the true population value to be within 47% and 53%.

# **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.

# 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 2021 Census.

<u>Table A1.2</u> presents the distribution of tenure for respondents to the 2021/2022 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.

Table A1.2 Household Tenure profile of the un-weighted Income Distribution Survey (IDS) responses

Tenure	% in IDS	% in 2021 Census	Implied weighting factor
Owner-occupied	65	54	0.82
Social rent	13	13	1.04
Qualified private rent	19	24	1.25
Non-qualified accommodation	3	9	2.92
Total	100	100	N/A

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. <u>Table A1.3</u> shows the distribution of household type across this weighted dataset, and demonstrates that no category is particularly over- or under-represented in the set of respondents relative to the 2021 Census distribution of household types.

<sup>&</sup>lt;sup>22</sup> At the 95% confidence interval



Table A1.3 The percent of each household types in the weighted dataset compared to the 2021 Census

Household type	% in 2021 Census	Weighted % in IDS
Pensioner households	22	24
One parent with dependent children	4	5
Couple with dependent children	18	18
Couple with no children	15	16
Working-age adult living alone	19	20
Other	22	18
All households	100	100

#### 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, including 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) was used to determine the proportion of household income spent on such items. In particular, income *before* and *after* housing costs is reported. This 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 1317 households agreed to take part and completed the survey between October 2021 and November 2022. This represents a response rate of 43%. This can be considered a good response rate for a survey of this nature.

# Median employment earnings

The <u>Average Earnings Index</u> (AEI) gives a measure of the annual *change* in the average (mean) full-time equivalent earnings for a matched sample of businesses in Jersey. The AEI shows that the two-year increase in full-time equivalent earnings was 7.0% from December 2019 to December 2021, the seven-year increase was 20.8% from December 2014 to December 2021, and the 12-year increase was 33.7% from December 2009 to December 2021.

AEI 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 AEI). The earnings data were weighted according to industry, to ensure the sample of jobs was representative of employment in Jersey.

Using this methodology, the IDS gives a **median** average employment earnings per full time employee of £730 per week as at March 2022. This is 18% higher than the last survey's figure of £620 for December 2019, and 35% higher than the figure of £540 for December 2014. After adjusting for inflation, this represents a 9% real-term increase since December 2019 and a 10% real-term increase since December 2014.

#### **Data tables**

Data tables can be found on the Statistics Jersey website under <u>earnings and income statistics</u> and on <u>OpenData</u>. Selected data tables are presented below.

Table A2.1 Percent of households with equivalised income below relative low income thresholds, before and after housing costs, 2009/2010, 2014/2015, 2019/2020, and 2021/2022 compared

	% (	% of households with income below <b>60</b> % of median			%		ds with inco		
	2009/10	2014/15	2019/20	2021/22	2009/10	2014/15	2019/20	2021/22	
Before housing costs	15	16	17	16	9	10	9	8	
After housing costs	21	26	27	24	12	18	20	18	

Table A2.2 Percent of each household type with equivalised income below relative low income thresholds, <u>before</u> housing costs, 2009/2010, 2014/2015, and 2021/2022 compared

Household type	% of households with income below <b>60</b> % of median			% of households with income below <b>50</b> % of median		
	2009/10	2014/15	2021/22	2009/10	2014/15	2021/22
Pensioner households	33	28	26	23	20	18
One parent with dependent children	29	19	26	15	14	6
Couple with dependent children	8	11	9	3	7	4
Couple with no children	5	5	9	2	3	6
Working-age adult living alone	12	17	18	7	10	7
Other	10	9	9	7	5	4
All households	15	16	16	9	10	8



Table A2.3 Percent of each household type with equivalised income below relative low income thresholds, <u>after</u> housing costs, 2009/2010, 2014/2015, and 2021/2022 compared

Household type	% of households with income below <b>60</b> % of median			% of households with income below <b>50</b> % of median		
	2009/10	2014/15	2021/22	2009/10	2014/15	2021/22
Pensioner households	31	34	35	16	23	24
One parent with dependent children	47	56	54	28	46	44
Couple with dependent children	17	22	16	7	14	9
Couple with no dependent children	9	9	9	6	7	7
Working-age adult living alone	28	35	32	18	23	27
Other	12	15	15	7	11	10
All households	21	26	24	12	18	18

Table A2.4 Percent of each tenure with equivalised income below relative low income thresholds, <u>before</u> housing costs, 2009/2010, 2014/2015, and 2021/2022 compared

	% of hou	seholds wit	th income	% of households with income below <b>50</b> % of median			
Tenure	belov	w <b>60</b> % of m	edian				
	2009/10	2014/15	2021/22	2009/10	2014/15	2021/22	
Owner with mortgage	2	3	3	1	2	2	
Owner without mortgage	22	21	21	17	16	14	
Qualified rent	16	10	14	8	7	7	
Social rent	29	27	24	14	16	12	
Non-qualified accommodation	11	22	20	5	11	3	
All households	15	16	16	9	10	8	

Table A2.5 Percent of each tenure with equivalised income below relative low income thresholds, <u>after</u> housing costs, 2009/2010, 2014/2015, and 2021/2022 compared

Tenure		seholds wit w <b>60</b> % of m		% of households with income below <b>50</b> % of median			
	2009/10	2014/15	2021/22	2009/10	2014/15	2021/22	
Owner with mortgage	3	5	3	2	4	2	
Owner without mortgage	14	17	15	6	9	9	
Qualified rent	31	31	34	19	20	25	
Social rent	50	66	61	31	50	47	
Non-qualified accommodation	29	39	30	14	29	24	
All households	21	26	24	12	18	18	



Table A2.6 Percent of individuals living in households with equivalised income below relative low income thresholds, before and after housing costs, 2009/2010, 2014/2015, 2019/2020, and 2021/2022 compared

% of individuals living in households with income below **60**% of median

% of individuals living in households with income below **50**% of median

_	2009/10	2014/15	2019/20	2021/22	2009/10	2014/15	2019/20	2021/22
Before housing costs	13	13	13	14	7	8	7	7
After housing costs	19	23	22	21	10	16	16	14

Table A2.7 Percent of children living in households with equivalised income below relative low income thresholds, before and after housing costs, 2009/2010, 2014/2015, 2019/2020, and 2021/2022 compared

% of children living in households with income below **60**% of median

% of children living in households with income below **50**% of median

	2009/10	2014/15	2019/20	2021/22	2009/10	2014/15	2019/20	2021/22
Before housing costs	12	13	11	15	5	8	7	4
After housing costs	22	29	25	24	12	20	18	17

Table A2.8 Percent of working-age adults living in households with equivalised income below relative low income thresholds, before and after housing costs, 2009/2010, 2014/2015, 2019/2020, and 2021/2022 compared

% of working-age adults living in households with income below **60**% of median

% of working-age adults living in households with income below **50**% of median

	2009/10	2014/15	2019/20	2021/22	2009/10	2014/15	2019/20	2021/22
Before housing costs	9	10	10	10	4	6	6	5
After housing costs	16	19	18	18	9	14	14	12

Table A2.9 Percent of pensioners living in households with equivalised income below relative low income thresholds, before and after housing costs, 2009/2010, 2014/2015, 2019/2020, and 2021/2022 compared

% of pensioners living in households with income below **60**% of median

% of pensioners living in households with income below **50**% of median

	2009/10	2014/15	2019/20	2021/22	2009/10	2014/15	2019/20	2021/22
Before housing costs	28	24	25	23	20	17	11	14
After housing costs	25	28	34	28	14	17	20	18



Table A2.10 Income inequality measures at each income stage, by year

90-10 ratio	Pre-benefit income	Gross cash Net incom income BHC				
2009/2010	7.0	4.8	3.9	4.8		
2014/2015	7.6	5.4	4.2	6.0		
2021/2022	7.1	5.0	4.1	6.6		

90-10 shares ratio	Pre-benefit income	Gross cash income		
2009/2010	26	11	9	12
2014/2015	25	11	9	19
2021/2022	27	12	10	21

	Gini coefficient	Pre-benefit income	Gross cash Net income income BHC		Net income AHC
_	2009/2010	0.42	0.39	0.35	0.39
	2014/2015	0.42	0.38	0.34	0.41
_	2021/2022	0.43	0.40	0.38	0.43

# **Further information**

Further information regarding analysis of the information collected is available online on the web page for the <u>Living Costs and Household Income Survey</u>. Statistics Jersey can be contacted by email at <u>statistics@gov.je</u>.