Jersey Income Distribution Study 2002

Introduction

This is the first in a series of reports analysing the Jersey Income Distribution Survey undertaken in mid-2002 by Business Development Research Consultants Ltd (BDRC).

The sample was composed of two parts: a random sample of households drawn from the postal address file, and a smaller supplementary sample of households of particular interest, for example:

- households with members who were disabled or suffering from long-term sickness;
- single parent families;
- households with members studying at university;
- households in receipt of housing subsidies: rent abatement for States tenants or rent rebate for other tenants.

These supplementary households were selected by the States Departments concerned. No identifiable individual information was passed to the Statistics Unit. The random sample was designed so that it could be "grossed-up" to produce statistically valid estimates for the Island as a whole. Whilst the random sample would enable us to estimate how many households have a disabled member, however, it was unlikely to provide sufficient cases to enable detailed analysis of their incomes and expenses as a sub-group. The supplementary sample was therefore designed to provide additional information about such sub-groups.

After a series of validation checks and rounds of imputation for missing or incredible values, a total of 1,499 acceptable responses remained: 1,238 from the random sample and 261 from the supplementary sample. This first report is based solely on the random sample, because only a random sample (or a full census) can be representative of the distribution of incomes in the population of Jersey as a whole.

Initial comparisons of household structures, forms of tenure, types of dwelling, residential qualifications and economic activity in the random sample as compared with expectations from the 2001 Census found significant differences, probably reflecting the ease with which interviewers made contact with the different household types. For example, two-pensioner households, single-parent families, States tenants and purpose-built apartments were substantially over-represented in the sample, while private renters, the self-employed, residentially non-qualified households, those living in detached houses and non-purpose-built apartments were under-represented. A process of "post-stratification" was therefore undertaken, assigning weights to the sample results to achieve estimates better representing the structure of the population in Jersey as a whole, as established in the Census. We are grateful for the advice and assistance of Professor Tim Holt of Southampton University in achieving this.

Thus, in this report, numbers of households total 35,562 and numbers of persons total 84,800 reflecting the numbers of private households and their members measured in the Census. The "average" household, which of course is not a typical household, comprises 2.38 people: 0.39 pensioners[1], 1.57 other adults and 0.43 children[2,3] - 1.15 males and 1.23 females.

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[1] Pensioners have been defined as men 65 and over, women 60 and over.
[2] Children are defined as those aged less than 16.
[3] Components may not add exactly to totals because of rounding. Numbers of people and households are rounded to the nearest 10, weekly sums to the nearest £1 and percentages to the nearest 1%.

The Composition of Household Income

The weekly income of the average household in Jersey in mid-2002 may be broken down as follows:

Table 1 – The Composition of Household Income		£	£	£
Taxable earned income (including pensions)		707	
Taxable unearned income		6	
Total taxable income			713
Non-taxable cash income other than benefits (eg gifts)			25
Pre-benefit income				**738**
Household cash benefits		8	
Personal cash benefits (excluding pensions)		17	
Total cash benefits			24
Gross cash income				**763**
Less Income tax		(64)	
Social security contributions		(13)	
Other deductions (eg pension contributions)		(19)	
Total deductions			(96)
Net cash income				**666**
Plus Income in kind (eg rent abatement)		32	
Net income before housing costs				**698**
Less Mortgage interest		(47)	
Other housing costs (gross rent, rates, etc)		(88)	
Total housing costs			(136)
Net income after housing costs				**562**

From the survey data covering some 1,300 full-time equivalent workers it was estimated that the average pay of a full-time worker was about £480 per week.

Income of Different Types of Household

Though averages (means) give only a summary measure, it is nevertheless informative to see how average incomes vary across different types of household.

Table 2 - Average Weekly Income by Household Structure

	Households in 2001 Census	Pre-benefit £	Gross cash £	Net cash £	Net BHC £	Net AHC £
Person living alone (pensioner)	*4,115*	224	250	240	266	183
Single parent with at least one child < 16	*1,374*	341	416	385	448	286
Person living alone (not pensioner)	*5,713*	448	460	391	417	287
Two or more pensioners	*2,811*	481	496	466	487	426
Single parent with all children > 15	*1,043*	613	648	569	619	448
Two or more unrelated persons	*816*	733	768	655	686	500
Couple one pensioner	*1,056*	748	784	689	711	621
Couple not pensioners	*6,438*	884	904	779	804	660
Couple with at least one child < 16	*7,011*	1,052	1,071	940	980	778
Couple with all children > 15	*2,607*	1,017	1,064	922	945	814
Other[4]	*2,578*	1,505	1,542	1,298	1,350	1,268
All households	*35,562*	**738**	**763**	**666**	**698**	**562**

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[4] The 'Other' category comprises, for example: adult siblings; couples living with an elderly relative; couples with a live-in au-pair or foreign student.

Changes in the ranking of incomes as one moves from left to right in the table give clues to the effects of the taxation and benefit systems. There are no shifts in ranks between the pre-benefit and gross cash columns, suggesting that cash benefits (other than pensions) do not greatly affect the situation of, for example, single parent families. Similarly, the taxation system (the difference between gross and net cash income) does not have sufficient influence on particular household types to alter their relative positions. Benefits in kind (the difference between net cash income and net income before housing costs) temporarily shift the balance making single parents better off, in this somewhat simplistic sense, than non-pensioners living alone, but housing costs reverse that relationship once more. Housing costs also increase the AHC income of couples with children of 16 and over relative to that of couples with younger children. This latter effect may reflect the lower current cost of housing acquired in the more distant past, with a lower mortgage or none at all.

Table 3 - Average Weekly Income by Tenure of Property

	Households in 2001 (estimated[5])	Pre-benefit £	Gross cash £	Net cash £	Net BHC £	Net AHC £
States tenancy	*4,644*	295	341	319	393	250
Parish or housing association tenancy	*401*	350	475	450	455	226
Private tenancy (including lodgers)	*10,674*	584	608	535	547	380
Owner-occupancy without mortgage	*8,512*	776	796	699	708	695
Owner-occupancy with mortgage	*9,488*	1,148	1,162	998	1,029	840
Other[6]	*1,843*	665	674	571	722	537
All households	*35,562*	**738**	**763**	**666**	**698**	**562**

Cash benefits, eg rent rebate, contribute to a £125 per week difference between pre-benefit and gross incomes for Parish and housing association tenants. States tenants on average show a £74 per week increase between net cash income and their net total income before housing costs, reflecting an average subsidy (as found in the survey) of £3,600 a year. This comprises not only rent abatement but other benefits in kind received by States tenants, for example the subsidies on visits to the doctor and prescriptions. The table also highlights the benefit of outright home ownership: owner-occupiers without a mortgage have average weekly housing costs of £13, while those still paying mortgage interest have average weekly housing costs of £189. It should be noted that some respondents had difficulty in distinguishing the interest and repayment elements of their mortgage payments, and so there is probably some overstatement of the interest element. In principle, the repayment element is not included in housing costs as it is regarded as saving or investment rather than expenditure.

Table 4 - Average Weekly Income by Residential Qualification of Head of Household

	Households in 2001 Census	Pre-benefit £	Gross cash £	Net cash £	Net BHC £	Net AHC £
Not qualified	*4,378*	599	610	525	562	413
A to H	*30,303*	730	756	664	692	560
J or K	*881*	1,732	1,737	1,456	1,590	1,368
All households	*35,562*	**738**	**763**	**666**	**698**	**562**

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[5] Not all these forms of tenure were identified in the Census, so these are estimates based on the sample.
[6] For example, accommodation provided rent-free by an employer. In such cases, the estimated value of the accommodation is included in "Benefits in kind" and deducted in "Housing costs."

The most striking feature of Table 4 is the level of income of the J or K[7] category households, which averages more than twice that of other residents at every stage. Also noteworthy is the high level of housing costs of unqualified households, averaging £149 per week, while those of A to H qualified residents averaged rather less, at £132 per week. This is, of course, largely a consequence of the fact that many A to H qualified residents own their homes outright, a possibility not available to the non-qualified.

The Distribution of Income of Jersey Residents

This part of the report examines the variation in incomes across the population and the influence of taxes, benefits and housing costs on that distribution.

To maintain the same standard of living a family of four would clearly need a larger income than a person living alone. In order to take account of this and to compare the spread of incomes through the population it is necessary to adjust the actual income received by the household to take account of its size and structure. This is done by dividing the household income by a factor determined by the number and ages of the members of the household, a process known as "equivalisation", the equivalised income being attributed to each member of the household. There are a number of techniques for doing this, the one normally used in the UK being the McClements scale. Even this has two variants, one being used to equivalise household incomes before housing costs (BHC) and the other to adjust them after housing costs have been deducted. This analysis uses the former scale for the four "before housing costs" totals and the latter for the "after housing costs" (AHC) one. These results can thus readily be compared with corresponding results for the UK. As examples:

- A single person living alone has a McClements BHC equivalisation factor of 0.61;
- A married couple has a factor of 1.00;
- A couple with two pre-school children has a factor of 1.36.

Figure 1 illustrates the spread of pre-benefit incomes in Jersey up to £1,250 per week in £25 bands. It is estimated that some 9,400 persons (11.1%) had pre-benefit incomes in excess of £1,250, spread out over a very long tail.

Figure 1 - Pre-benefit Income Distribution

Before Housing Costs

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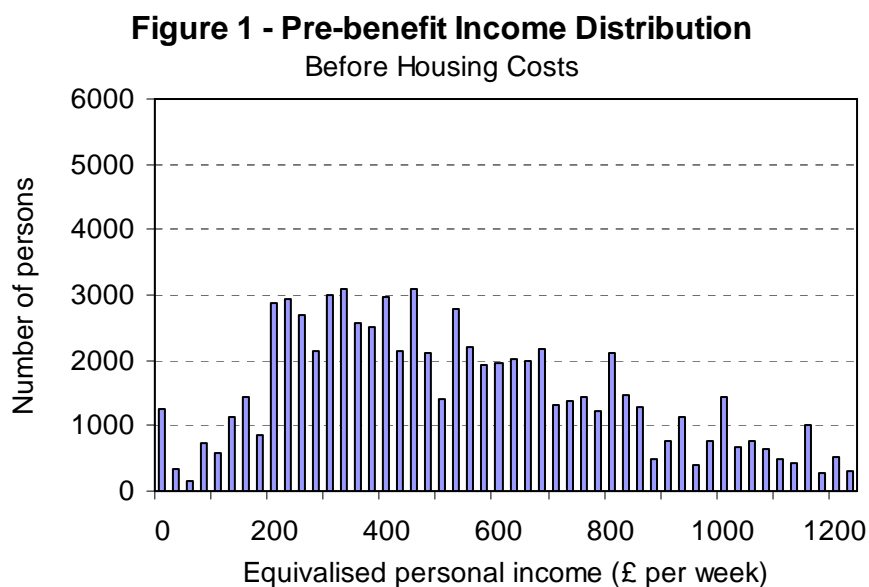
[7] The random sample obtained responses from 32 J/K category households and from their income tax payments it is believed that all of these were in fact J category.

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The median[8] equivalised pre-benefit income was £28,530 per year (£547 per week). This compares with a mean equivalised income of £37,230 per year (£714 per week).

A frequently-used indicator of the <u>spread</u> of the distribution is the ratio of the 90th to the 10th percentile[9]: in this case its value is 5.98. A more comprehensive indicator of inequality is the Gini coefficient, which takes account of the whole shape of the distribution and varies from 0 for a distribution in which everyone has the same income to 1 when all but one person have no income at all. Thus the greater the Gini coefficient the greater the inequality of the distribution. In this case the Gini coefficient is 0.38.

Figure 2 shows the distribution of equivalised gross cash incomes in Jersey up to £1,250 per week in £25 bands. Some 9,500 persons (11.2%) had gross cash weekly incomes in excess of £1,250. These estimates include cash benefits received by households.

Figure 2 - Gross Cash Income Distribution

Before Housing Costs
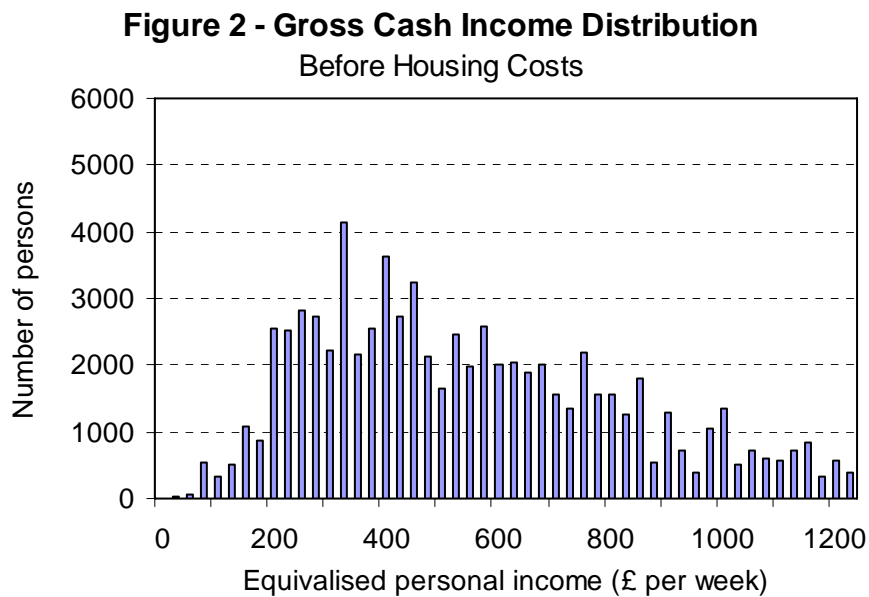
The median equivalised gross cash income was £29,690 per year (£569 per week). This compares with a mean equivalised income of £38,420 per year (£737 per week).

It will be apparent that the bars of figure 2 are more tightly clustered than those of figure 1. For example, there are no longer any households with zero incomes. This is an indication of the extent to which the cash benefits provided by Jersey's social security system help to reduce inequalities in people's incomes. Quantifying this effect, the 90/10 percentile ratio reduces from 5.98 to 5.23, while the Gini coefficient falls from 0.38 to 0.36.
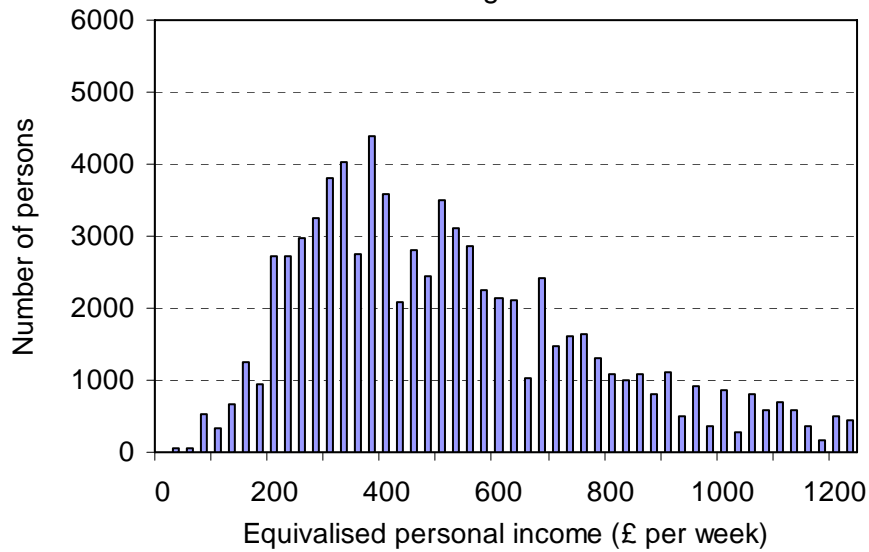
Figure 3 shows the distribution of net cash incomes in Jersey up to £1,250 per week in £25 bands, ie disposable income after deduction of income tax, social security contributions, maintenance payments and occupational or private pension contributions (these latter being regarded as deferred income). Some 5,800 persons (6.8%) had net incomes in excess of this. This concept of income is frequently used for international comparisons.

The median equivalised net cash income was £26,310 per year (£505 per week). This compares with a mean equivalised income of £33,540 per year (£643 per week).

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[8] The level below which 50% of the population fall.
[9] See, for example, "Inequality and Living Standards in Great Britain: Some Facts", Institute for Fiscal Studies, Briefing Note No 19.

Figure 3 - Net Cash Income Distribution
Before Housing Costs

Number of persons vs Equivalised personal income (£ per week)

A further tightening of the clustering of the bars from figure 2 will be apparent. This is an indication of the effects of income tax and social security contributions in reducing income inequalities. Quantifying this effect, the 90/10 percentile ratio reduces from 5.23 to 4.56, while the Gini coefficient falls from 0.36 to 0.34.

Figure 4 shows the distribution of equivalised net total incomes in Jersey up to £1,250 per week in £25 bands. These incomes differ from the net cash incomes shown in Figure 3 in that they include benefits in kind. Such benefits include those provided by the States, like rent abatement for States tenants, subsidies to prescriptions and visits to the doctor, and also those provided by employers, like company cars, subsidised accommodation and food, and medical insurance. This concept of income is considered to be the fairest indicator of relative incomes before housing costs, as it takes into account as many components of income as possible. It has not been possible, however, to complete the picture by allocating all such benefits to households. Services free at the point of delivery such as education and health care are not included because their value to people of different ages is unknown.

Figure 4 - Net Total Income Distribution
Before Housing Costs

Number of persons vs Equivalised personal income (£ per week)

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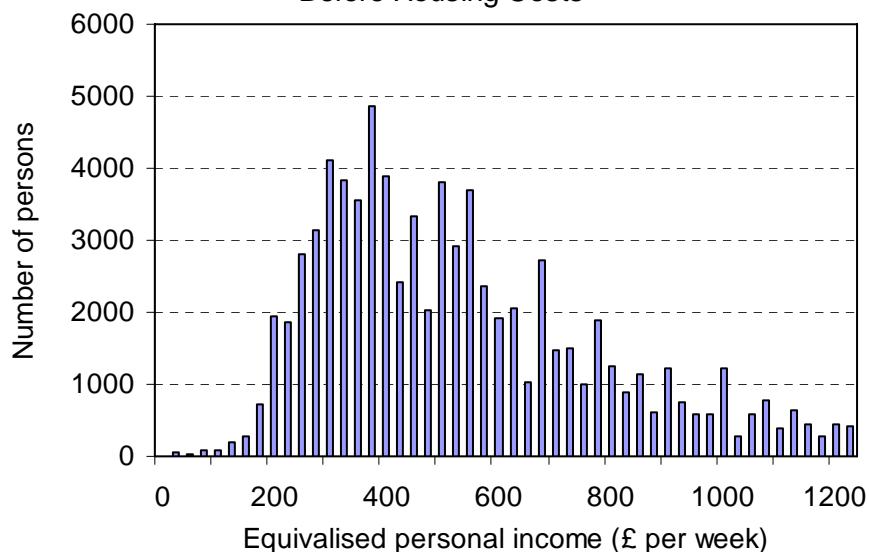
The median equivalised net total income was £27,250 per year (£523 per week). This compares with a mean equivalised net total income of £35,110 per year (£673 per week).

Overall, benefits in kind have a small further effect in reducing income inequalities, the gains from rent abatement, for example, being partially offset by perks for higher income households, like company cars. The 90/10 percentile ratio reduces from 4.56 to 4.07, while the Gini coefficient falls from 0.34 to 0.33.

Finally, we turn to the distribution of household incomes after deducting housing costs. Arguably this most fairly reflects a household's true standard of living. As already mentioned, this uses a slightly different equivalisation formula. Figure 5 shows the distribution of Final Income After Housing Costs.

Figure 5 - Final Income Distribution
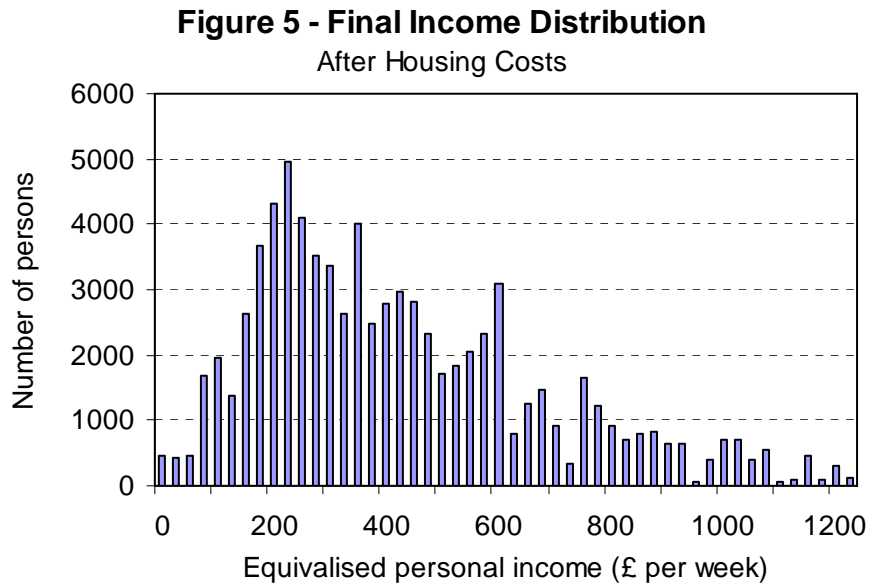
One effect of deducting housing costs from household incomes is to shift the whole distribution to the left, the modal group[10] now being from £225-£250 per week rather than £375 to £400 per week. the median falls to £20,960 per year (£402 per week) and the mean to £28,480 per year (£546 per week). Less obviously, the distribution shows much greater inequality than in the BHC case: the 90/10 percentile ratio rises to 5.78, and the Gini coefficient, at 0.39, is higher than in the original pre-benefit distribution.

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[10] The band in which the highest frequency occurs.

International Comparisons of Income Distribution

As mentioned above, the concept of net income is commonly used for distributional analyses and comparisons. In the UK analysis "Households below average income" the concepts are very similar to the above Net Total Income Before Housing Costs and Final Income After Housing Costs, so direct comparisons are possible:

| | Equivalised Weekly Net Total Income Before Housing Costs | | Equivalised Weekly Final Income After Housing Costs | |
	Jersey 2002	UK 2001/02	Jersey 2002	UK 2001/02
Mean	£673	£384	£546	£338
Median	£523	£311	£401	£274
90/10 percentile ratio	4.07	4.00	5.78	4.76
Gini coefficient	0.33	0.35	0.39	0.38
Bottom quintile	<£334	<£197	<£223	<£157
2nd quintile	£335 - £450	£198 - £271	£224 - £333	£157 - £235
3rd quintile	£451 - £589	£272 - £357	£334 - £481	£236 - £317
4th quintile	£590 - £852	£358 - £495	£482 - £701	£318 - £442
Top quintile	£853+	£496+	£702+	£443+

Thus before housing costs the median Jersey personal income was some 68% higher than its UK equivalent. After housing costs are deducted, however, the Jersey median was 46% higher, reflecting the higher cost of housing. The degree of inequality as measured by the Gini coefficient was slightly lower in Jersey before housing costs and slightly higher after housing costs. The 90/10 percentile ratio was higher in Jersey than the UK both before and after housing costs, but the difference is far greater after housing costs.

A study carried out in Guernsey in 2001[11] by the Townsend Centre for International Poverty Research used another equivalisation scale developed for use on the Poverty and Social Exclusion Survey of Britain. That Guernsey study apparently generated only a few results on a money income basis, being more concerned with indicators of social exclusion. However, results have been calculated for Jersey using the same Townsend equivalisation basis.

| | Townsend Equivalised Weekly Net Total Income Before Housing Costs | |
	Jersey 2002	Guernsey 2001
Mean	£604	£590 approx
Median	£463	£420 approx

The difference in mean is small, suggesting that the Guernsey survey, which was based on a much smaller number of households, may have been influenced by some very high incomes. The difference in median, a more robust measure, suggests a level of incomes some 5% higher in Jersey, after the 1-year timing difference is taken into account[12].

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[11] "The Survey of Guernsey Living Standards," Townsend Centre for International Poverty Research, 2002

[12] The margin of uncertainty on average levels of income in Jersey is of the order of ±8%. In Guernsey, with a smaller sample size, it is likely to have been larger. See the notes for further detail.

Types of person and household in each part of the distribution

The following tables show the proportion of all those persons or households with particular characteristics who are found in each quintile[13] of the distribution. These analyses are presented only for the Net Total Income Before Housing Costs and Final Income After Housing Costs distributions shown in Figures 4 and 5.

Table 5 - Percentage of Persons in Broad Age Groups

	Number of persons	Bottom quintile	Second quintile	Third quintile	Fourth quintile	Top quintile
Before Housing Costs						
Pensioners	*13,800*	35	26	18	12	9
Other adults	*55,690*	14	18	22	23	23
Children	*15,310*	27	20	16	18	19
After Housing Costs						
Pensioners	*13,800*	28	24	20	15	13
Other adults	*55,690*	16	19	21	22	23
Children	*15,310*	29	21	18	16	16

Before housing costs, over a third of pensioners are found in the bottom quintile, and less than one in ten in the top quintile. After taking housing costs into account, however, the pattern is noticeably more uniform though still weighted towards the lower end of the scale. This can be attributed to the number of pensioners who own their homes outright and hence have lower housing costs than the average household. The reverse situation may be observed for children, where more are found in the bottom quintile and fewer in the top one after taking housing costs into account, reflecting the higher housing costs incurred by larger households whose adult members are of working age.

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[13] Quintiles divide the population into 5 equal size groups. Thus the bottom quintile represents the lowest income 20 per cent of the population and the top quintile the highest income 20 per cent.

Table 6 - Percentage of Households by Household Structure

	Number of households	Bottom quintile	Second quintile	Third quintile	Fourth quintile	Top quintile
Before Housing Costs						
Person living alone (pensioner)	*4,115*	36	30	18	11	6
Two or more pensioners	*2,811*	42	23	19	8	8
Single parent with at least one child < 16	*1,374*	38	22	27	6	6
Single parent with all children > 15	*1,043*	24	32	12	17	16
Couple one pensioner	*1,056*	21	22	19	22	17
Couple with at least one child < 16	*7,011*	23	21	16	19	20
Couple with all children > 15	*2,607*	9	20	28	21	22
Person living alone (not pensioner)	*5,713*	7	15	26	29	22
Couple not pensioners	*6,438*	6	13	22	25	34
Two or more unrelated persons	*816*	4	11	23	26	36
Other[14]	*2,578*	10	26	21	26	17
All households	*35,562*	**19**	**20**	**21**	**20**	**20**
After Housing Costs						
Person living alone (pensioner)	*4,115*	36	30	15	11	8
Two or more pensioners	*2,811*	30	26	17	16	11
Single parent with at least one child < 16	*1,374*	45	30	13	6	6
Single parent with all children > 15	*1,043*	34	7	20	24	16
Couple one pensioner	*1,056*	16	17	28	15	25
Couple with at least one child < 16	*7,011*	23	23	19	19	16
Couple with all children > 15	*2,607*	6	31	13	27	22
Person living alone (not pensioner)	*5,713*	16	13	27	24	21
Couple not pensioners	*6,438*	8	10	23	24	34
Two or more unrelated persons	*816*	4	23	29	25	19
Other	*2,578*	10	8	32	24	26
All households	*35,562*	**20**	**20**	**21**	**20**	**20**

This table sheds some further light on the types of household that are to be found in the higher and lower income groups and the changes brought about by housing costs. It has already been observed that pensioners tend to be in the lower quintiles and working adults in the higher ones. Now it can be seen that for pensioners living alone no significant change arises out of taking housing costs into account. For households comprising two or more pensioners the situation before housing costs is particularly difficult, but is substantially improved after housing costs. Housing costs make a hard situation even more difficult for single parent families, especially those with older dependent children. Couples with young children tend slightly towards the lower quintiles, but those with older children or no children at all are to be found more frequently in the higher quintiles both before and after housing costs.

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[14] The 'Other' category comprises, for example: adult siblings; couples living with an elderly relative; couples with a live-in au-pair or foreign student.

Table 7 - Percentage of Households by Tenure of Property

	Number of households	Bottom quintile	Second quintile	Third quintile	Fourth quintile	Top quintile
Before Housing Costs						
States, Parish or housing assn. tenancy[15]	*5,045*	35	34	20	9	2
Private tenancy (including lodgers)	*10,674*	12	24	27	24	14
Owner-occupancy without mortgage	*8,512*	32	16	20	17	15
Owner-occupancy with mortgage	*9,488*	8	13	16	24	40
Other	*1,843*	12	11	24	24	28
After Housing Costs						
States, Parish or housing assn. tenancy	*5,045*	52	24	17	5	2
Private tenancy (including lodgers)	*10,674*	24	21	25	18	12
Owner-occupancy without mortgage	*8,512*	12	19	22	24	22
Owner-occupancy with mortgage	*9,488*	6	14	18	27	34
Other	*1,843*	7	26	18	22	27

States and Parish tenants tend to be found in the lower quintiles before housing costs and even more so after housing costs. It should be remembered that housing costs include *gross* rents, rent rebate and rent abatement being treated as cash and notional income respectively. Before housing costs private tenants are clustered in the middle three quintiles, but after housing costs more are found in the lowest three. Owner occupiers without mortgages tend to be in the lowest three quintiles before housing costs but in the highest three after housing costs. Those with mortgages tend to be found in the higher quintiles both before and after housing costs.

Table 8 - Percentage of Households by Residential Qualification of Head of Household

	Number of households	Bottom quintile	Second quintile	Third quintile	Fourth quintile	Top quintile
Before Housing Costs						
Not qualified	*4,378*	11	21	27	25	16
A-K qualified[16]	*31,184*	20	20	20	19	20
After Housing Costs						
Not qualified	*4,378*	15	19	31	19	17
A-K qualified	*31,184*	21	20	19	20	20

Residentially qualified households are uniformly spread across the quintiles both before and after taking housing costs into account. Unqualified households tend to be found in the middle three quintiles, both before and after housing costs.

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[15] Because of the small number of Parish or housing association tenants in the random sample, it has been necessary to combine them with States tenants in this analysis.

[16] Because of the small number of J or K category households in the sample, it has been necessary to combine them with other residentially qualified households in this analysis.

Table 9 – Composition of Household Weekly Income by Quintile Group

Quintile groups selected _before_ housing costs	Bottom quintile	Second quintile	Third quintile	Fourth quintile	Top quintile
Taxable earned income (including pensions)	234	378	539	796	1,592
Taxable unearned income	5	5	5	6	10
Total taxable income	239	382	544	801	1,602
Non-taxable cash income other than benefits (eg gifts)	2	3	5	12	105
Pre-benefit income	**241**	**386**	**549**	**814**	**1,707**
Household cash benefits	12	12	6	6	2
Personal cash benefits (excluding pensions)	17	19	19	19	9
Total cash benefits	29	31	25	25	11
Gross cash income	**270**	**417**	**573**	**849**	**1,718**
Less Income tax	(4)	(16)	(38)	(74)	(191)
Social security contributions	(5)	(11)	(11)	(18)	(21)
Other deductions (eg pension contributions)	(5)	(8)	(16)	(23)	(41)
Total deductions	(14)	(35)	(66)	(115)	(253)
Net cash income	**257**	**382**	**508**	**724**	**1,465**
Plus Income in kind (eg rent abatement)	26	24	23	19	67
Net income before housing costs	**283**	**405**	**531**	**743**	**1,532**
Less Mortgage interest	(9)	(20)	(30)	(55)	(121)
Other housing costs (gross rent, rates, etc)	(82)	(99)	(95)	(85)	(81)
Total housing costs	(91)	(119)	(126)	(140)	(202)
Net income after housing costs	**192**	**286**	**406**	**603**	**1,330**

Quintile groups selected _after_ housing costs	Bottom quintile	Second quintile	Third quintile	Fourth quintile	Top quintile
Taxable earned income (including pensions)	239	392	541	792	1,591
Taxable unearned income	2	4	6	6	11
Total taxable income	242	396	547	799	1,602
Non-taxable cash income other than benefits (eg gifts)	3	4	3	18	100
Pre-benefit income	**245**	**401**	**550**	**817**	**1,703**
Household cash benefits	23	7	5	2	2
Personal cash benefits (excluding pensions)	20	16	18	20	9
Total cash benefits	42	23	22	22	11
Gross cash income	**287**	**424**	**572**	**839**	**1,714**
Less Income tax	(4)	(18)	(37)	(74)	(192)
Social security contributions	(5)	(10)	(14)	(17)	(20)
Other deductions (eg pension contributions)	(7)	(10)	(15)	(21)	(41)
Total deductions	(16)	(39)	(66)	(112)	(253)
Net cash income	**271**	**385**	**506**	**727**	**1,461**
Plus Income in kind (eg rent abatement)	35	28	16	20	61
Net income before housing costs	**307**	**413**	**522**	**747**	**1,522**
Less Mortgage interest	(14)	(29)	(36)	(61)	(96)
Other housing costs (gross rent, rates, etc)	(139)	(96)	(76)	(67)	(64)
Total housing costs	(153)	(125)	(112)	(129)	(160)
Net income after housing costs	**154**	**288**	**409**	**618**	**1,361**

Whether the quintiles are selected before or after housing costs the pictures are very similar. On an AHC basis:

- the top 20 per cent of households receive 46% of all pre-benefit income, 45% of gross cash income, 44% of net cash income, 43% of net income before housing costs and 48% of net income after housing costs.
- The bottom 20 per cent of households receive 7% of all pre-benefit income, 7% of gross cash income, 8% of net cash income, 9% of net income before housing costs and 5% of net income after housing costs.

Thus the tax and benefits system in Jersey have only a small influence on incomes at the top or the bottom of the scale, and their influence is more than reversed by the effects of housing costs on the distribution of incomes.

Low Income Households

There are no universally accepted measures of low income, either in absolute or relative terms. One absolute measure used by the UN, of an average income of less than a dollar a day, has wide acceptance for developing country use, though it takes no account of inflation and is clearly irrelevant in the developed world.

Most developed countries rely on a combination of indicators of deprivation, and this study has provided data for analysis of a selection of these. This first report, however, concentrates on income measures. Here, too, there are nearly as many measures as there are studies. As a factor in a composite indicator of development, the UN considers the proportion of the population whose income is less than half the median cash disposable income, without going into questions of income in kind or housing costs. The United States uses specific figures for the disposable income for households of different size, updated using their Retail price Index. Canada uses a threshold of 50% of median equivalised income. In Europe generally there seems to be a consensus that the most useful indicator of low income is based on a threshold of 60% of the median equivalised[17] income before housing costs. The UK does not take an absolute position, but provides results based on thresholds at 40%, 50% and 60% of the mean and 50%, 60% and 70% of the median equivalised[18] income both before and after housing costs[19]. In order to facilitate comparisons with the UK, the following analyses use the same selection of thresholds. Table 10 sets out the corresponding weekly household income levels for 5 example household types in Jersey and the UK (UK in brackets).

Table 10 – Relative Low Income Thresholds for Different Household Types (£ per week)

Before Housing Costs

	% of mean			% of median		
	40	50	60	50	60	70
Adult living alone	164(94)	205(117)	246(140)	160(95)	192(114)	223(133)
Married couple	269(154)	336(192)	404(230)	262(156)	314(187)	366(218)
Couple, two pre-school children	366(209)	457(261)	549(313)	356(212)	427(254)	498(296)
Couple, children aged 5 and 11	393(225)	491(280)	590(336)	383(228)	458(273)	534(318)
Single parent, children aged 5 and 11	288(165)	360(206)	432(246)	280(167)	336(200)	392(233)

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[17] Equivalised using the OECD scale.
[18] Equivalised using the appropriate McClements scale.
[19] Though the Institute for Fiscal Studies describes 60% of the median as being the Government's preferred threshold.

After Housing Costs

	% of mean			% of median		
	40	50	60	50	60	70
Adult living alone	120(74)	150(93)	180(112)	111(75)	133(91)	155(106)
Married couple	218(135)	273(169)	328(203)	201(137)	241(165)	281(192)
Couple, two pre-school children	296(184)	371(230)	446(276)	273(186)	328(223)	382(261)
Couple, children aged 5 and 11	320(199)	401(249)	482(299)	295(201)	354(242)	413(282)
Single parent, children aged 5 and 11	222(138)	278(172)	335(207)	205(140)	246(168)	287(196)

Table 11 shows the numbers of people estimated to lie below these thresholds, and what percentage of the population in those age-groups in Jersey they represent. Corresponding percentages for the UK are also shown (in brackets).

Table 11 – People Below Relative Low Income Thresholds

Before Housing Costs

	% of mean			% of median		
Jersey numbers	40	50	60	50	60	70
Children	1,740	4,360	6,370	1,590	3,410	4,940
Pensioners	2,600	4,800	7,050	2,420	4,250	5,850
Other adults	3,270	8,090	14,690	2,880	5,980	10,700
All persons	**7,610**	**17,250**	**28,110**	**6,890**	**13,640**	**21,500**
Jersey (UK) percent of age group						
Children	11(10)	28(23)	41(37)	10(10)	22(21)	32(33)
Pensioners	19(10)	35(24)	52(40)	18(11)	31(22)	43(34)
Other adults	6(8)	15(15)	26(23)	5(8)	11(14)	19(21)
All persons	**9(9)**	**20(19)**	**33(29)**	**8(9)**	**16(17)**	**25(26)**

After Housing Costs

	% of mean			% of median		
Jersey numbers	40	50	60	50	60	70
Children	3,050	6,470	7,620	2,770	5,070	6,650
Pensioners	2,520	5,750	7,050	2,290	4,500	6,050
Other adults	5,820	13,590	18,440	5,410	10,710	14,270
All persons	**11,390**	**25,820**	**33,120**	**10,470**	**20,290**	**26,970**
Jersey (UK) percent of age group						
Children	20(18)	42(32)	49(41)	18(19)	33(30)	43(39)
Pensioners	19(10)	42(25)	52(40)	17(11)	33(22)	44(36)
Other adults	10(13)	24(20)	33(26)	10(14)	19(19)	26(24)
All persons	**13(14)**	**30(23)**	**39(32)**	**12(14)**	**24(22)**	**32(29)**

Whichever threshold is considered, it is apparent that *before* deducting housing costs, a substantially higher proportion of pensioners than of children have incomes below that threshold in Jersey.

After deducting housing costs, the picture changes somewhat. Irrespective of the threshold the proportions of pensioners and of children below the low income thresholds are very similar.

Taking the cost of housing into account, therefore, increases the numbers of each age group below the thresholds, but particularly for children.

Characteristics of Relative Low Income Households

It would be confusing to carry out analyses of the types of person and household with low incomes for every one of the 6 thresholds shown above. As an example, therefore, **the following analyses are based on the 60% of median threshold** favoured by the EU and the UK. That is, a household income for the different example types of household as set out in Table 12.

Table 12 – 60% Median Income Thresholds for Different Household Types (£ per week)

| | Jersey | | UK | |
	BHC	AHC	BHC	AHC
Adult living alone	192	133	114	91
Married couple	314	241	187	165
Couple, two pre-school children	427	328	254	223
Couple, children aged 5 and 11	458	354	273	242
Single parent, children aged 5 and 11	336	246	200	168

In Jersey, as mentioned above, 13,640 people in 5,560 households, representing 16% of the population of both people and households, lie below the before housing costs threshold (UK 17%). 20,290 people in 8,520 households, representing 24% of the population of both people and households, lie below the after housing costs threshold (UK 22%).

Table 13 – People in Relative Low Income Households by Gender:

| | Before housing costs | | After housing costs | |
	Number	% of total	Number	% of total
Males	6,410	16	9,480	23
Females	7,280	17	10,850	25

Females are slightly more likely than males to be living in low income households. This is likely to be the result of two factors:

1. Because women tend to live longer than men, there are more women pensioners than men pensioners.
2. More women than men of working age are not economically active, mainly as a result of family responsibilities.

Looking at households rather than individuals:

Table 14 – Relative Low Income Households by Household Structure

| | Before housing costs | | After housing costs | |
	Number	% of total	Number	% of total
Two or more pensioners	1,130	40	1,020	36
Single parent with at least one child <16	500	37	880	64
Person living alone (pensioner)	1,340	33	1,870	45
Single parent with all children > 15	240	23	380	37
Couple with at least one child < 16	1,210	17	1,910	28
Couple one pensioner	160	15	200	19
Person living alone (not pensioner)	320	6	1,080	19
Couple with all children > 15	100	4	290	11
Couple not pensioners	350	5	590	9
Two or more unrelated persons	30	4	30	4
Other	190	7	270	11
All households	*5,590*	*16*	*8,520*	*24*

While households comprising two or more pensioners are less likely to be below the low income threshold after housing costs are taken into account (probably because a higher proportion of such couples own their home outright), in all other household types the risk of falling below the threshold increases after housing costs. Highest risks, both before and after housing costs, are found in pensioner households, single-parent families and couples with children under 16.

Table 15 – Relative Low Income Households by Tenure of Property

| | Before housing costs | | After housing costs | |
	Number	% of total	Number	% of total
Owner-occupancy without mortgage	2,360	28	1,380	16
Owner-occupancy with mortgage	510	5	870	9
Private tenancy (including lodgers)	1,020	10	2,900	27
States, Parish or housing assn. tenancy	1,630	32	3,240	64
Other	80	4	130	7

As is to be expected, the low housing costs of those who own their property outright, results in the number of such households below the low income threshold falling substantially after those costs are taken into account. In contrast, the housing costs of tenants, particularly States and Parish tenants, result in large numbers of such households falling below the threshold[20].

Table 16 – Relative Low Income Households by Residential Qualification of Head of Household

| | Before housing costs | | After housing costs | |
	Number	% of total	Number	% of total
Unqualified	300	7	810	18
A to K	5,280	17	7,720	26

The residentially qualified are considerably more likely than the unqualified to be living below the thresholds, but both groups are similarly adversely affected by housing costs.

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[20] It should be remembered that housing costs include *gross* rents: rent rebate is treated as a cash benefit and rent abatement as a benefit in kind.

Table 17 – Relative Low Income Households by Whether Working or Not Working

	Before housing costs		After housing costs	
	Number	% of total	Number	% of total
Non-working households	2,920	39	3,550	47
Working households	2,670	10	4,970	18

As might be expected, households in which there are no working members are much more likely to fall below the low income threshold than those where at least one person has a job, even part-time. Again, both groups are similarly affected by housing costs.

Table 18 – Composition of the Average Weekly Income of Relative Low Income Households

Households selected:	Before housing costs £ per week		After housing costs £ per week	
Taxable earned income (including pensions)	212		255	
Taxable unearned income	5		3	
Total taxable income		218		257
Non-taxable cash income other than benefits (eg gifts)		3		3
Pre-benefit income			**220**	**261**
Household cash benefits	11		21	
Personal cash benefits (excluding pensions)	18		20	
Total cash benefits		29		41
Gross cash income			**249**	**302**
Less Income tax	(3)		(5)	
Social security contributions	(4)		(6)	
Other deductions (eg pension contributions)	(5)		(7)	
Total deductions		(11)		(18)
Net cash income			**238**	**284**
Plus Income in kind (eg rent abatement)	28		33	
Net income before housing costs			**266**	**317**
Less Mortgage interest	(9)		(17)	
Other housing costs (gross rent, rates, etc)	(78)		(132)	
Total housing costs		(87)		(148)
Net income after housing costs			**179**	**168**
Total number of households		*5,590*		*8,520*

Further Analysis

As noted in the introduction, this report is based solely on the random sample and concentrates on monetary aspects of income distribution. Further reports are planned which will examine:

- non-monetary indicators of social deprivation and their correlation with monetary ones;
- the situation of particularly deprived groups as indicated by the random and supplementary samples;
- a model of the tax and benefit systems which will enable the influence of changes to that system on income distribution to be examined.

<u>Notes.</u>

Accuracy. On overall income levels, the margin of uncertainty (95% confidence interval) on a particular estimate is about ±8%. On relative income levels, eg the proportion of the population below a particular threshold, the margins of uncertainty are substantially lower: of the order of ±1.5%.

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