Survey of Persons Aged 65 Years and Over

Report of Results Relating to Social Security Benefit Rates

May 1975

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prepared by the Department of Social Welfare

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SECTION 1 INTRODUCTION

In keeping with a promise contained in its 1972 Election Manifesto, the Government has undertaken a nationwide survey of the financial and material circumstances of the population of persons aged 65 or over. The primary purpose of the survey was to find out the extent to which the rates of social security benefits for this group were consistent with the goal of enabling beneficiaries to live in dignity and comfort as set out in the Manifesto.

The survey was designed jointly by the Departments of Statistics and Social Welfare. The Department of Statistics collected and coded the information which was supplied to the Department of Social Welfare in a form which prevented the identification of individuals.

The Departments will issue separate reports. The Department of Statistics will shortly release an initial review of data, followed later in the year by a more comprehensive report. This present report by the Department of Social Welfare provides background to the changes in benefit rates and benefit provisions announced in the 1975 Budget. It sets out in non-technical terms the survey findings which provided the rationale for the new measures. At a later date the Department will publish a research monograph giving a comprehensive technical account of its findings concerning the nature and extent of difficulties encountered by old people.

SECTION 2 COLLECTION OF DATA

The sample used in the survey was drawn from the Department of Social Welfare's records of age and superannuation beneficiaries and those in receipt of war veteran's allowance. Together, these groups represent about 98 percent of all people aged 65 or over. A random sample drawn from these records provided the best available approximation to a national random sample of persons in this age group. It was considered important to have a sample representing the whole population in the age group rather than just those on lower incomes, so that the full range of economic circumstances could be examined.

A total of 3,395 names were selected for the sample. Those living in institutions* and those who had died were excluded, leaving 3,120 valid cases. Of these, 2,303 agreed to take part in the survey. (See Appendix 1.) This represented 74 percent of valid addresses, a response rate which compares favourably with rates for other surveys seeking information on expenditure.

Interviewing began late in November 1973 and ended early in June 1974. Interviewers usually spent a total of two to three hours with each respondent.

The questionnaire used in the survey covered the following topics:

- demographic and employment information,
- housing and housing conditions,
- food,
- mobility and transport,
- work activities,
- social and leisure activities,
- financial and other needs,
- health,
- expenditure,
- income and assets,
- respondents' evaluation of financial circumstances.

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* Those living in institutions such as old people's homes were excluded from the survey on the grounds that they are a special case. They have different needs and requirements and receive special provisions by way of benefits and subsidies.

Interviewers also completed a schedule assessing the respondents' circumstances and the quality of their housing and surroundings. Respondents were asked to complete a diary record of one week's spending.

SECTION 3 REPRESENTATIVENESS OF THE SAMPLE

The main demographic characteristics of the sample were compared with those for the aged population as a whole, to check that the sample was representative. This involved the use of statistical tests of "goodness of fit".

The tests showed a satisfactory "fit" between the sample and the aged population with respect to age and location (by statistical area), but there were small differences with respect to sex, marital status and benefit type. The proportion of males in the total population aged 65 or over was 43 percent whereas the proportion for the sample was 46 percent. In the case of marital status, the proportion of married persons in the population was 52 percent and the proportion in the sample was 56 percent. With respect to type of benefit, the proportion of all beneficiaries who receive age benefit was 48 percent but the proportion for the sample was 50 per cent.

The differences are small. Furthermore, they may not be real in the sense that the sample frame used for the survey was not quite identical with the census and beneficiary populations on which the tests were based. Therefore the tests of fit must be regarded as being only approximate. In view of these considerations it is reasonable to conclude that any biases that are present in the sample are likely to be small and should not substantially affect the conclusions drawn from the results.

SECTION 4 RATIONALE FOR ANALYSIS APPROACH ADOPTED

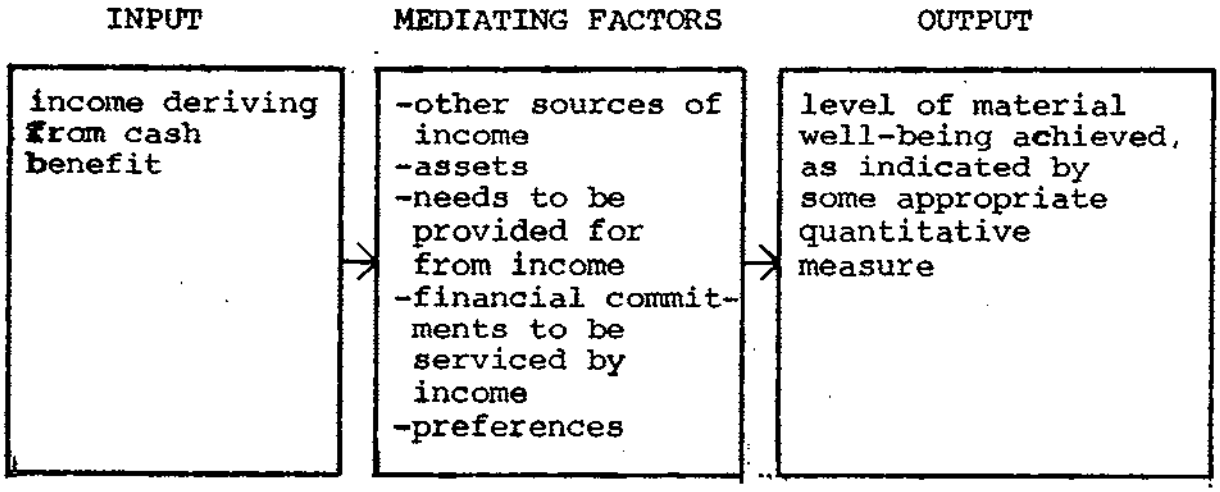
Evaluations of social security benefit schemes, both in New Zealand and overseas, have generally suffered from a lack of data about the actual patterns of material well-being and living circumstances of beneficiaries. Thus, the most commonly used approaches are neither adequate nor the most appropriate in that they are based on statistics which were not designed specifically for evaluation of benefit rates. The present survey was designed to provide data specifically related to the standard of material well-being of a particular section of the population.

Stated in general terms, the objective of a system of social security cash benefits is to enable beneficiaries to achieve a standard of living which is adequate in absolute terms and is equitable in relation to other groups in society. To evaluate quantitatively the extent to which this objective is attained it is necessary to have a measure of the level of material well-being achieved by beneficiaries. Such a measure can be regarded as an indication of the output (or effect) of the benefit system at the personal level. It is not the only possible output measure but it is the one most likely to be sensitive to changes in benefit rates. Problems arising from physical and mental incapacity, psychological difficulties in adjusting to retirement, bereavement, and such like are unlikely to be responsive to modest increases in income. As a consequence the adjustment to benefit rates is not regarded as the primary means by which such problems should be tackled.

The income from cash benefits can be regarded as the input whereby the beneficiaries' level of material well-being can be adjusted. However, it cannot be assumed that an injection of input will have a simple or straightforward effect on material well-being. Its effect is mediated by a wide range of financial, circumstantial and allocative factors, such as levels of income from other sources, the extent of assets which can be drawn upon to contribute to

material standards, the range of goods and services which must be provided from current income, financial commitments which must be serviced from income, preferences and life style. For example, though two beneficiaries receive the same amount of benefit, the material standard which can be achieved by the beneficiary who owns a dwelling in a good state of repair, who is in good health, and who has a substantial bank balance is likely to be superior to that of a disabled beneficiary who rents his accommodation, has chronic poor health requiring frequent medical treatment and has no financial reserves.

The above discussion is summarised diagrammatically in the following schema:



An assessment of the likely effect of a change in level of input would involve at the minimum:

1. the determination of the distribution of the population, according to the various levels of material well-being, before the change is initiated;
2. the indication of the important mediating factors influencing material well-being and the nature of their effect.

In New Zealand and other countries methods which have been used or proposed to evaluate benefit rates have not in the past fulfilled these minimum requirements. These

methods can be grouped into three main categories:

1. Methods deriving from costing a specified "basket of goods"

   In this approach, a "basket of goods" is stipulated which is considered to be a reasonable assessment of the goods and services needed by a beneficiary. The cost of this "basket of goods" is taken to represent the appropriate rate for the benefit. In the simplest application of this approach the items included in the "basket" are postulated on the basis of subjective judgement, in which case the only empirical information which is needed is the current prices of the items. More sophisticated methods for specifying the "basket" may make use of data about actual patterns of consumption and about nutritional and other requirements of beneficiaries.

2. Methods based on the relationship between income and expenditure

   This approach makes use of information about levels of expenditure on various types of commodities for different income groups in the population. In one such method the income/expenditure relationship is used to decide the minimum level of expenditure on a commodity consistent with the appropriate standard of material well-being for beneficiaries. Another method is to confine attention to a category of expenditure, such as food, and accept as a determination of the benefit rate the average income of those whose expenditure on that category provides an acceptable standard for that item. A further variation is to use the income and expenditure data to construct an "Engel curve", which is the curve showing the relationship between income and the proportion of income devoted to some category of expenditure (again, most commonly food). This approach derives from Engel's discovery that the proportion of income spent on food rises as income

falls. It is then necessary to make a value judgement on what proportion on average is consistent with an appropriate standard of well-being for the beneficiary; the income corresponding to that proportion is then taken to specify the appropriate benefit rate.

3. Methods relating benefit rates to incomes or wages
This approach consists of determining a proportion of "average income" (as measured, for example, by the average income of wage and salary earners) which is judged as likely to provide an acceptable standard of well-being. In its most basic form the only data required for this method is a measure of income, with the proportion to be applied to this figure being postulated without direct knowledge of the level of material well-being which will be achieved by beneficiaries.

All these procedures are concerned with establishing a satisfactory base level for a benefit rate. The manner by which the rate might be adjusted from time to time because of changes in prices or other economic factors involves considerations and techniques outside the scope of this report.

The methods just described share, to varying degrees, two fundamental weaknesses. First, they take little or no account of the mediating factors which affect the relationship between benefit rate and material well-being, and second, they do not incorporate satisfactory quantitative measures of material well-being. Thus, they presume that the requirements and circumstances of beneficiaries can be considered to be uniform, and any indication which they provide of the actual level of material well-being achieved by beneficiaries is crude, indirect and inferential.

The approach taken in the present study was an attempt to overcome these weaknesses. The research was designed to provide

an extensive range of information about the material living conditions of beneficiaries from which a satisfactory measure of material well-being could be developed. It was conceived that the measure would be used to examine the degree to which the beneficiaries were experiencing hardship and to seek to identify those factors which were associated with hardship. These topics are examined in subsequent sections of this report.

SECTION 5 DEVELOPING A MEASURE OF MATERIAL WELL-BEING*

From the survey data, 138 items were selected as being possible indicators of material well-being. These included:

1. Items relating to financial restrictions reported by respondents (e.g. restrictions of expenditure, for reasons of cost, on food, medical treatment, new clothing, home heating).

2. Items relating to the nature and condition of accommodation (e.g. whether accommodation contained a separate laundry, whether the lavatory was inside or outside, whether repairs of various types were necessary).

3. Items deriving from the interviewer's assessment of the standard of accommodation (e.g. assessment of whether walls of living room were in satisfactory condition, whether curtains and floor coverings were in satisfactory condition).

4. Items relating to the nature and extent of consumer durables owned by respondent (e.g. refrigerator, television, adequate bedding, kitchen utensils, crockery and cutlery).

The inter-relationships between the selected items were examined by means of a correlational analysis. It was found from this analysis that the items relating to restrictions of expenditure emerged as a distinct cluster, but that these items were not strongly associated with items relating to amenities and standard of accommodation. The reason for this result is not known with any certainty and is still being examined. In part it might arise because the nature and state of housing and the accumulation of consumer durables are largely a

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* A more detailed account of the procedures described in this section is given in Appendix II.

reflection of circumstances and pattern of life prior to retirement, while the items concerning financial restrictions indicate the extent to which current income is adequate to meet current day-to-day living costs. Thus, it is possible that there is a substantial number of old people who are quite well endowed with respect to material possessions but who have some difficulty in coping on a modest level of income.

The items relating to restriction of expenditure which emerged from the correlational analysis as a distinct cluster were used to develop a scale of material well-being. (The cluster contained 35 items, which are given in Appendix III.) A standard method of scale construction was used, by which a "weight" was calculated for each item on a statistical basis. For each respondent a list was compiled of the items corresponding to the forms of hardship reported by the respondent. The weights for these items were then added up to give the respondent's score on the scale. The direction of the scale was such that the lower the score the greater the degree of difficulty indicated.

Because of the nature of the items on which it is based, the scale has been interpreted as a measure of <u>financial hardship</u>. It has been described in this way throughout the remainder of this report and is usually referred to as the "hardship scale".

SECTION 6: DEGREE OF FINANCIAL HARDSHIP EXPERIENCED BY THE AGED POPULATION

To permit an interpretation of the hardship scale, the respondents were placed in order according to their scale scores, ranging from the respondent experiencing the greatest degree of difficulty to the respondent experiencing the least difficulty. The sample, ordered in this way, was then divided into groups each representing 10 percent of the respondents. The first group, called the first decile, thus represented the 10 percent of respondents who were "worst off" with respect to the hardship scale. The second group, called the second decile, represented the second "worst off" 10 percent of respondents, and so on.

Profiles of these groups were then produced using certain items selected from those in the scale. To avoid any implication that the profiles related simply to prudent behaviour not necessarily inappropriate to those of modest means, the items selected were those relating to restrictions which would be regarded as very severe. Thus, the items which were chosen all related to restrictions which were judged to constitute an assault on a person's sense of dignity and self-worth, or to represent a degree of economising likely to cause physical discomfort or damage to health. The items are set out in Table 6.1 below.

Table 6.1 Eight items from the scale considered as key indicators of hardship

Item No.	Item Description
1	Whether, during the previous winter, the respondent had often or sometimes put up with feeling cold to keep down heating costs.
2	Whether, during the previous 12 months, the respondent had done without meat on three or more days per week in order to make ends meet.
3	Whether, during the previous 12 months, the respondent had repaired worn-out clothing because he or she could not afford its replacement.
4	Whether, during the previous 12 months, the respondent had had to wear old or worn clothing when going out or visiting.

Table 6.1 continued

Item No.	Item Description
5	Whether the respondent had to do without, or economise on, visits to friends or relatives.
6	Whether, during the previous 12 months, the respondent had postponed visits to a specialist because of lack of money.
7	Whether, during the previous 12 months, the respondent had worn ill-fitting dentures or no dentures because he or she could not afford replacements.
8	Whether the respondent felt that, over the previous 12 months, the standard of his accommodation had run down because he could not afford the upkeep.

Table 6.2 shows for each of the first five deciles the proportion of respondents reporting each of these key indicators of hardship. Only the first five deciles are considered because the level of endorsement of the items for the remaining deciles is below a level which would warrant their inclusion.

Each form of restriction is displayed by at least a quarter of the respondents in the first decile, and two of the restrictions, items 1 and 3, are displayed by more than half of this group of respondents. It is clear, therefore, that those in the first decile are experiencing substantial difficulty. It is also clear that the level of endorsement of the items declines very rapidly from each decile to the next, so that by the fifth decile a number of the forms of hardship are not experienced at all.

The information provided above indicates the level of endorsement for the key items considered individually. Another approach is to consider the aggregate endorsement of these items. This information is given in Table 6.3 which gives the average number (arithmetic mean) of items endorsed for respondents in each of the first five deciles.

Table 6.2 Proportion endorsing eight key hardship items x Deciles

Decile	Item 1: Putting up with being cold	Item 2: Going without meat	Item 3: Repairing worn-out clothing	Item 4: Having to wear old clothing when visiting	Item 5: Having to cut down on visiting	Item 6: Postponing visits to specialist	Item 7: Wearing ill-fitting dentures	Item 8: Having to let accommodation run down
	%	%	%	%	%	%	%	%
1st decile ("worst off" 10% of sample)	52	28	69	29	40	24	37	27
2nd decile (2nd "worst off" 10% of sample)	36	10	26	4	23	10	16	12
3rd decile (3rd "worst off" 10% of sample)	25	5	8	2	7	4	10	7
4th decile (4th "worst off" 10% of sample)	18	3	1	0	2	1	3	3
5th decile (5th "worst off" 10% of sample)	4	0	0	0	1	0	1	0

Table 6.3 Average number of eight key items endorsed x Decile

Decile	Average number endorsed
1st	3.05
2nd	1.36
3rd	0.68
4th	0.31
5th	0.07

For those in the first decile the average number of items endorsed is just over three. For the second decile the average is still over one, but by the third decile it is substantially less than one and by the fourth decile the average is less than one third of an item.

In interpreting this information it is necessary to keep in mind that endorsement of any of the indicators reflects an unsatisfactory state of affairs. Since all respondents had at least the level of income represented by the benefit, it is unlikely even in situations of extreme privation that all the indicators would be endorsed, because this would imply that virtually none of the respondent's basic needs were being met. If at least one key item is endorsed, then it is apparent that some degree of deprivation or hardship is being experienced.

It is a matter of judgement - essentially of definition - as to what degree of economising and necessary restriction should be taken to constitute an appreciable degree of hardship. However, it is clear that by any reasonable standard, those in the first decile are having considerable difficulty in managing to cope on their present incomes. When Tables 6.2 and 6.3 are taken together they suggest that those in the third and subsequent deciles are experiencing little difficulty, even if the situation of some might not be as comfortable as the

respondent might desire. If, therefore, a demarcation point to identify those clearly in hardship is to be nominated, it is suggested that it would be around the boundary between the second and third deciles. On this basis, the proportion considered to be in hardship can be taken as being of the order of 15 percent to 25 percent.

Confirmatory evidence for this conclusion is provided by data from two other measures of the financial circumstances of the respondents. While both of these are crude and less than satisfactory when considered in isolation, they do have the value of providing an independent check on the results deriving from the scale.

The first of the alternative measures is an assessment made by the interviewers of the extent of the respondents' financial difficulties. The interviewers were required to place respondents in one of four categories. The proportions in the categories are shown in Table 6.4.

Table 6.4 Interviewers' rating of respondents' financial difficulties

Extent of financial difficulties	No.	Proportion in category %
Respondent obviously well off and affluent	263	11.4
Respondent experiencing no known or noticeable difficulty	1,482	64.5
Respondent experiencing some financial difficulty	507	22.1
Respondent experiencing considerable difficulties	47	2.0
Total	2,299	100.0
Not specified	4	
Grand total	2,303	

It can be seen that the proportion of respondents considered by interviewers to be experiencing "some difficulty" or "considerable difficulties"was 24 percent.

The second alternative measure was the respondents' own rating of their financial circumstances. Respondents were asked to indicate which of five categories best described how well they thought their present income satisfied their everyday needs for such things as food, accommodation, transport, medical treatment, social activities and any special needs they might have. The responses are shown in Table 6.5.

Table 6.5 Respondents' rating of how their income satisfies their needs

Extent of satisfaction	No.	Proportion in category
		%
Very well	312	13.5
Well	297	12.9
Satisfactorily	1,281	55.6
Not very well	382	16.6
Badly	31	1.3
Total	2,303	100.0
Not specified	-	
Grand total	2,303	

The proportion who thought their income satisfied their needs "not very well" or "badly" was 18 percent.

The three independent measures* suggest substantially the same conclusion: that, although the majority of the

*As would be expected, there are substantial inter-correlations between the three measures. The product moment correlations between the hardship scale and the interviewer rating, the hardship scale and the respondent rating, and the interviewer rating and the respondent rating were respectively 0.60, 0.52 and 0.54.

respondents were not experiencing undue financial difficulties, a minority of respondents - in the region of 20 percent of the sample - were experiencing some degree of hardship.

For the purposes of subsequent analysis, each of the measures was compacted into a two-category classification of hardship. Respondents were classified as being in hardship on the basis of the hardship scale if they fell within the first two deciles. Similarly, respondents were classified as being in hardship with respect to the interviewer's rating if they had appeared in the categories of "some difficulty" or "considerable difficulties". They were classified as being in hardship with respect to the respondent rating if they themselves, considered their income satisfied their everyday needs either "not very well" or "badly".

SECTION 7 FACTORS ASSOCIATED WITH HARDSHIP

A large number of factors were examined to determine their degree of association with hardship. This section presents information on factors which have policy implications for social security benefits and which were found to be associated with hardship. (The only factor discussed which does not have any significant association with hardship is location. This is presented because it is sometimes suggested that different benefit rates should apply for different parts of New Zealand, reflecting the different cost structure.)

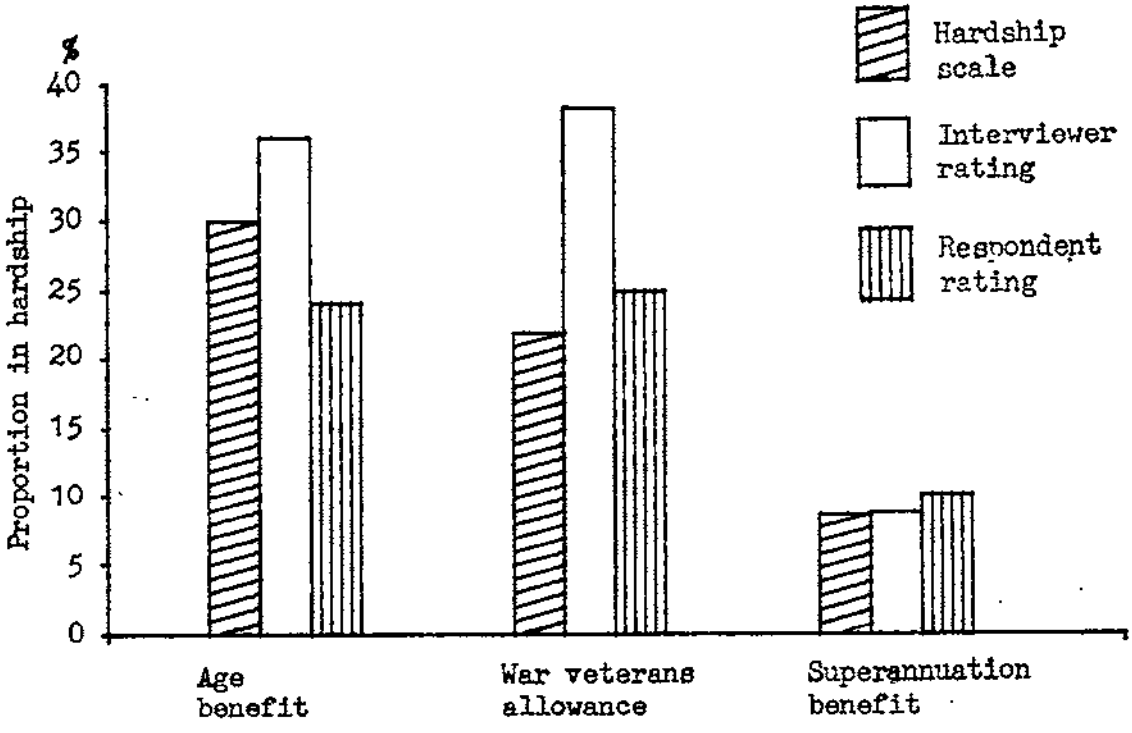
Benefit type

In general one would expect that those persons in receipt of the superannuation benefit would be considerably better off than those on the other (income tested) types of benefit. Table 7.1 shows the proportion of persons in hardship by the type of benefit received by the respondent. This data is also presented graphically in Figure 7.1 below.

Table 7.1 Proportion in hardship as shown by the three measures x Benefit type

Benefit type	No.	Proportion in hardship as measured by: (a) Hardship scale	(b) Interviewer rating	(c) Respondent rating
		%	%	%
Age	1,151	29.9	36.0	24.1
War Veterans	128	21.9	38.3	25.0
Superannuation	1,024	8.7	8.9	10.2
Total	2,303	20.0	24.1	17.9

Figure 7.1 Proportion in hardship as shown by the three measures x Benefit type



It can be seen that there is a much greater tendency for hardship to be experienced by those receiving age benefit or war veteran's allowance than by those receiving superannuation benefit. The three measures show that between a quarter and a third of the first two groups are in hardship, whereas only one tenth of superannuation beneficiaries are in hardship. An implication of this finding is that the major thrust of any attempt to reduce the incidence of hardship amongst the aged population of New Zealand must be directed at increasing the level of well-being of those on income tested benefits. The incidence of hardship in this group is roughly three times greater than for those receiving superannuation benefit.

A substantial proportion of those receiving superannuation benefit reported such low levels of income that they would be financially better off on age benefit. If these beneficiaries were to transfer to age benefit, the incidence of hardship for those remaining on superannuation benefit would be very low indeed.

Income

Table 7.2 shows the proportion of persons in a state of hardship for each of nine income groups. The grouping by income is based on a notional measure of gross per capita income. For an unmarried beneficiary the figure used was simply total gross income from all sources (including benefit), while for a married beneficiary the figure used was 60 percent of the aggregate gross income received by the couple. (This contrasts with the more conventional measure of per capita income, by which the figure for a married beneficiary would be half the couple's aggregate income.) The rationale for adopting this measure is given in Section 9. Gross income was used, because it was felt that to ask for net income would place an undue burden on elderly respondents with several income sources.

Table 7.2 Proportion in hardship as shown by the three measures x Notional gross annual per capita income

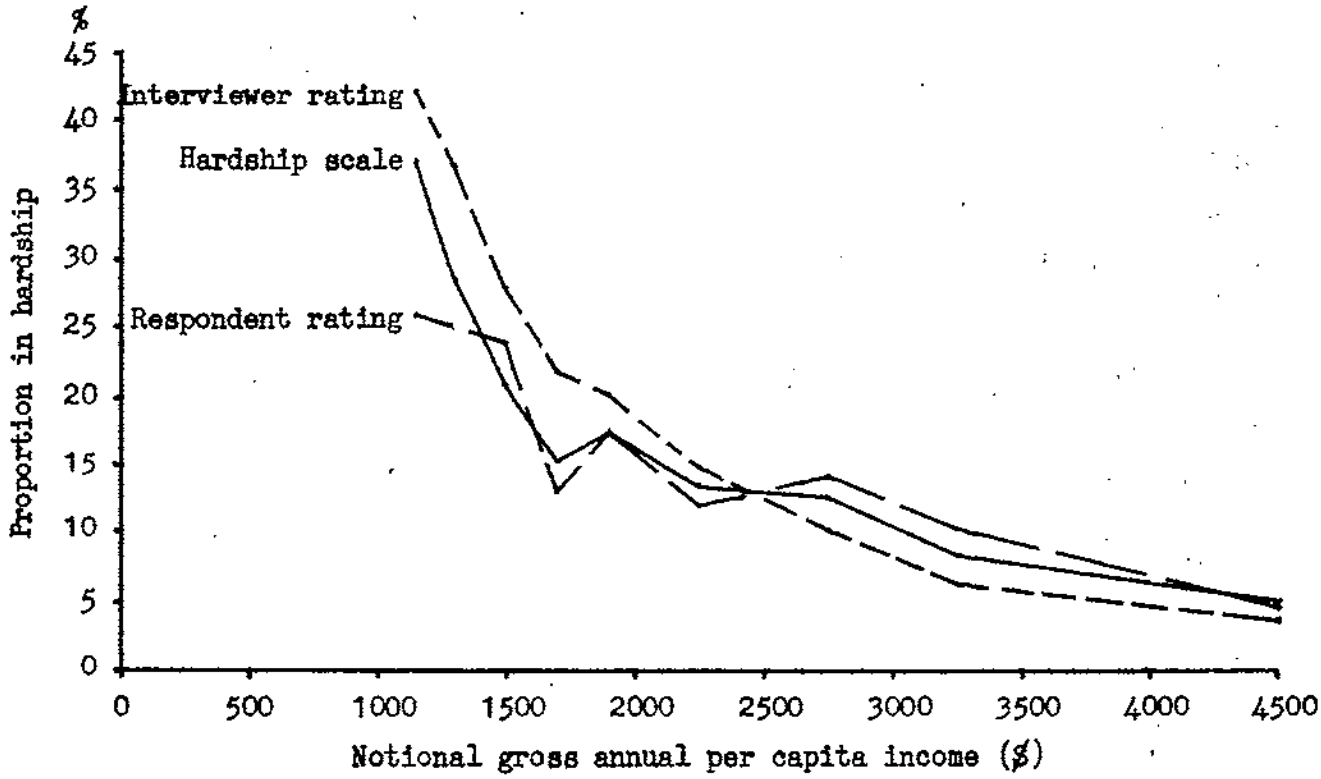
Income (p.a.) *	No.	Proportion in hardship as measured by: (a) Hardship scale	(b) Interviewer rating	(c) Respondent rating
$		%	%	%
Less than 1,200	252	36.9	42.1	25.8
1,200-1,399	663	28.4	36.5	24.9
1,400-1,599	231	20.8	27.7	23.8
1,600-1,799	170	15.3	21.8	12.9
1,800-1,999	114	17.5	20.2	17.5
2,000-2,499	210	13.3	14.8	11.9
2,500-2,999	120	12.5	10.0	14.2
3,000-3,499	99	8.1	6.1	10.1
3,500 +	223	4.9	3.6	4.5
Total	2,082	21.0	25.4	18.7
Income not specified	221			
Grand total	2,303			

The table shows that as income rises the proportion of persons in hardship declines. The graphical presentation in Figure 7.2 shows a plot of the proportion of respondents

* All income, asset and expenditure data used in this report relate to the year preceding the interview date. Interview dates ranged from November 1973 to June 1974.

in hardship for each income group. (The figures used to plot the data are based on the mid-points for the income groups shown in Table 7.2.)

Figure 7.2 Proportion in hardship as shown by the three measures x Notional gross annual per capita income



Two features of these results deserve comment. First, even at the lowest income level a considerable proportion of persons avoid deprivation. This implies that income is not the sole determinant of material well-being and that to provide an adequate description of the impact of income on material well-being it is necessary to take account of various intervening and circumstantial factors which influence a beneficiary's allocation of his income. (See diagram on page 6.)

The second point is that even within the higher income groups there are some people (admittedly a small proportion) who are experiencing hardship. This could arise through some of the respondents with moderately high incomes also having

high commitments. It is likely also to be in part the result of some error in the measures used. This could arise through some respondents with substantial incomes imposing unnecessarily severe restraints on their spending as a result of long-ingrained habit or an extreme notion of frugality. It also could arise through deliberate misrepresentation by some respondents of the restrictions they impose on their spending. Some degree of imprecision is inevitable in the type of measures which have been used.

Assets

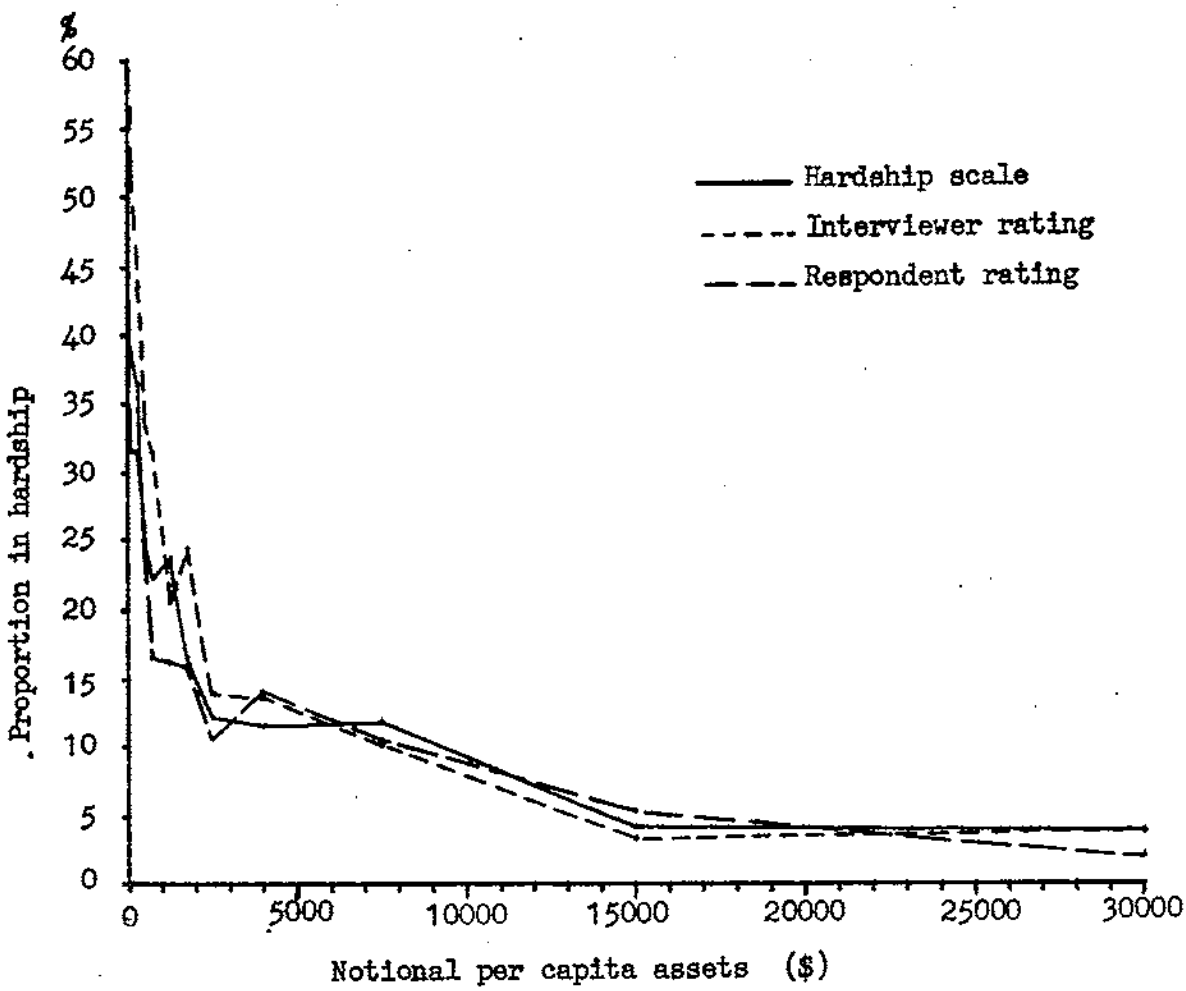
The relationship between the proportions of persons in hardship and the value of financial assets* that are held is shown in Table 7.3. The information is shown graphically in Figure 7.3. (The figures used to plot the data are based on the mid-points for the asset groups shown in Table 7.3.)

Table 7.3 Proportion in hardship as shown by the three measures x Notional per capita assets*

Assets	No.	Proportion in hardship as measured by: (a) Hardship scale	(b) Interviewer rating	(c) Respondent rating
$		%	%	%
No assets	143	49.7	59.4	51.0
Up to 199	189	38.6	51.9	31.7
200-399	124	36.3	43.5	31.5
400-599	160	25.0	33.8	25.0
600-999	203	22.2	31.5	16.7
1,000-1,499	233	23.6	20.6	16.3
1,500-1,999	164	16.5	24.4	15.9
2,000-2,999	207	12.1	14.0	10.6
3,000-4,999	191	11.5	13.6	14.1
5,000-9,999	238	11.8	10.1	10.5
10,000-19,999	261	4.2	3.4	5.4
20,000 +	51	3.9	3.9	2.0
Total	2,164	20.5	24.6	18.4
Assets not specified	139			
Grand total	2,303			

* The figure used for financial assets includes: savings held in bank accounts, as Post Office Bonus Bonds, as National Development Bonds, etc; shares and debentures; any interest the respondent may have in a business or other financial venture; any loan to another person; and any money put into building societies, investment societies, property syndicates, etc. The figure does not include the value of the respondent's house (if he owns it) nor of personal possessions. The calculation of notional per capita assets was made on the same basis as for notional per capita income, i.e., per capita assets for married couples was taken as 60 percent of the full amount.

Figure 7.3 Proportion in hardship as shown by the three measures x Notional per capita assets



The relationship shown in the table has similar features to that shown in the analysis of income. (See Table 7.2). There is a strong tendency for the incidence of hardship to decrease as the value of assets increases. However, quite a large proportion of those reporting little or no assets seem to be experiencing no marked degree of hardship while, on the other hand, there is still some hardship reported among some with quite substantial assets. The points that were raised in relation to income also apply here.

Despite these features, it is clear that the value of assets possessed by a person is an important determinant of the level of his material well-being.

Accommodation

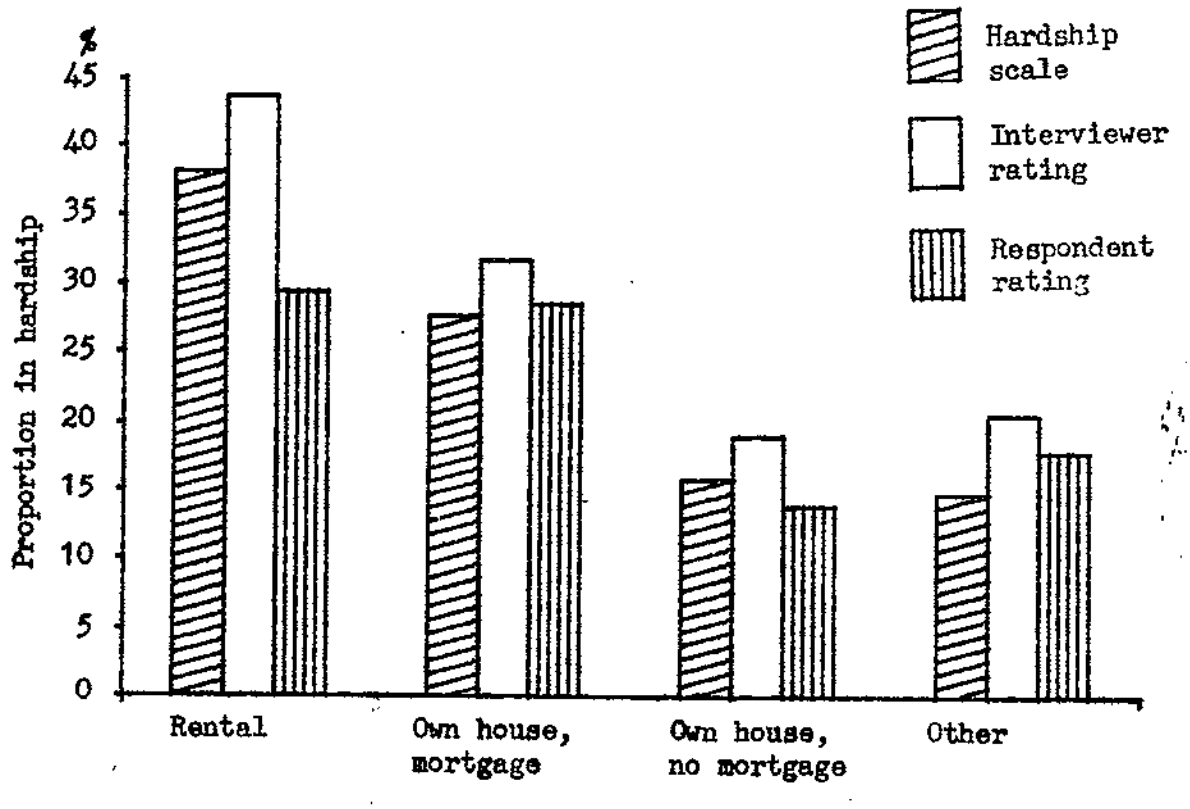
Table 7.4 shows the relationship between type of accommodation and incidence of hardship. This information is

presented graphically in Figure 7.4 below.

Table 7.4 Proportion in hardship as shown by the three measures x Type of accommodation

Accommodation type	No.	Proportion in hardship as shown by: (a) Hardship scale	(b) Interviewer rating	(c) Respondent rating
		%	%	%
Rental	322	38.2	43.7	29.4
Own house and paying mortgage	239	27.6	31.8	28.5
Own house with no mortgage	1,491	15.8	19.1	13.8
Other	251	14.7	20.7	17.9
Total	2,303	20.0	24.1	17.9
Not specified	-			
Grand total	2,303			

Figure 7.4 Proportion in hardship as shown by the three measures x Type of accommodation



All three hardship measures show the same sort of pattern. Those in rented accommodation have the highest incidence of hardship, namely, about one third. The next worst off group comprises those paying mortgages. Those owning their own home free of mortgage and those in the "other" category have a markedly lower incidence of hardship than the first two groups. It is likely that the reason why the "other" group has a relatively low incidence of hardship is that it contains a substantial number of persons living with relatives. The material living standards of such people will, in part, depend on the nature of the home in which they are residing.

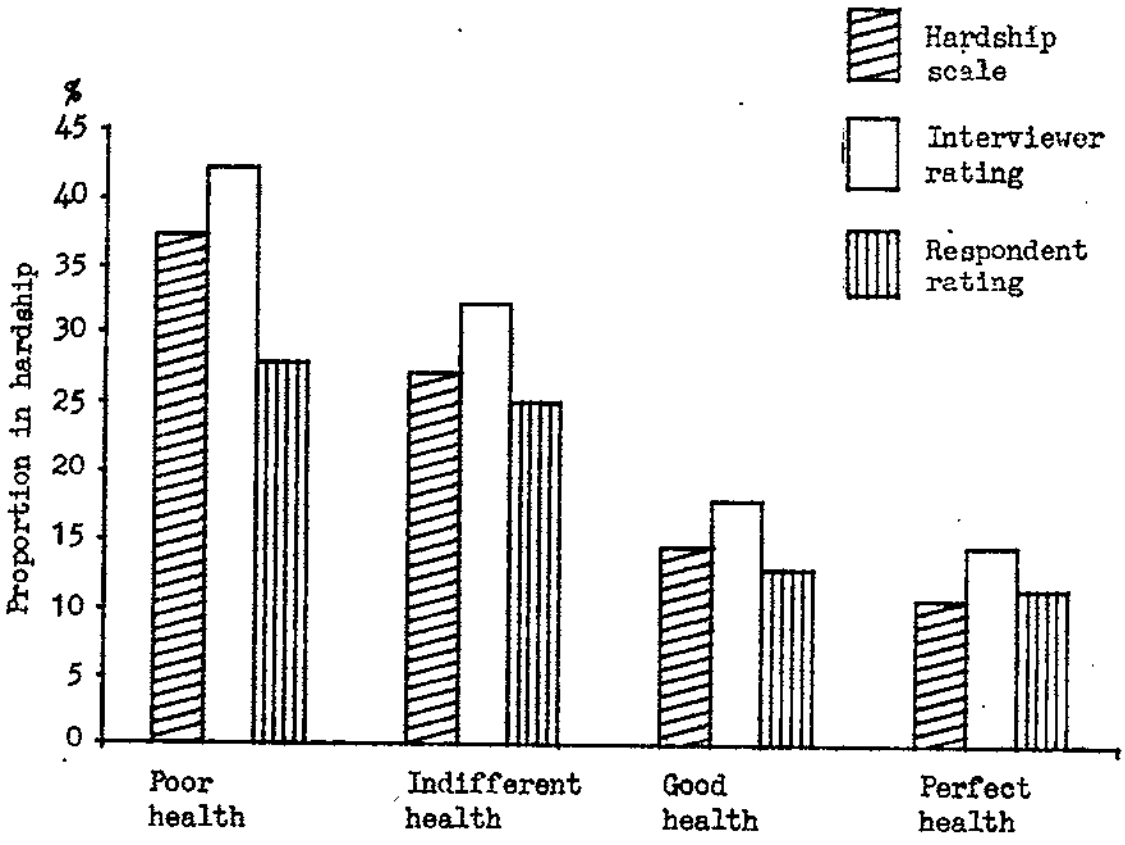
State of health

Two types of data were obtained about the respondents' health: a rating by respondents of their state of health, and information about amount of time spent in bed because of ill health over the previous 12 months. While these measures obviously give no more than a crude indication of the respondents' state of health, they do serve to give a broad indication of the nature of the relationship between health and the incidence of hardship. Both measures show the same trend with respect to hardship, so data is presented in relation to only one of them, i.e., the respondent's rating of his or her state of health. The results are also shown diagrammatically in Figure 7.5 on the following page.

Table 7.5 Proportion in hardship as shown by the three measures x Respondents' rating of state of health

Respondents' rating of state of health	No.	Proportion in hardship as shown by: (a) Hardship scale	(b) Interviewer rating	(c) Respondent rating
		%	%	%
Poor health	187	37.4	42.2	27.8
Indifferent health	738	27.1	32.1	25.1
Good health	1,119	14.6	17.9	13.0
Perfect health	259	10.8	14.7	11.6
Total	2,303	20.0	24.1	17.9
Not specified	-			
Grand total	2,303			

Figure 7.5 Proportion in hardship as shown by the three measures x Respondents' rating of state of health



Again the trends in the data are quite marked. The pattern of the relationship between health and hardship is the same for all three hardship measures although it is more distinct for the scale and interviewer measures. All three show that the poorer the state of health, the greater the incidence of hardship. The incidence of hardship for those reporting "poor health" is about three times as great as that for those claiming "perfect health".

The reasons for this relationship could not be ascertained with any certainty from the data provided by the survey. Examination of expenditure information suggested that the direct financial cost of medical treatment is low in most cases and would explain only a small part of the relationship. It is possible that ill health has its major impact on the incidence of hardship by creating a number of additional expenses for ill people. Some examples might be expenses relating to the maintenance of the person's dwelling and its grounds, assistance

in housework and other domestic activities, additional expenses for transport, and so on. Another way in which poor health could affect hardship is by reducing the person's ability to earn additional income by means of employment.

Location

Table 7.6 shows the incidence of hardship for nine location categories. (A breakdown into finer categories would have resulted in sample numbers becoming too small to permit useful comparisons.)

Table 7.6 Proportion in hardship as shown by the three measures x Location

Location	No.	Proportion in hardship as measured by: (a) Hardship scale	(b) Interviewer rating	(c) Respondent rating
		%	%	%
Auckland	533	22.7	25.9	22.1
Hamilton	53	15.1	17.0	17.0
Wellington	213	16.4	17.8	15.5
Christchurch	268	19.4	29.1	16.0
Dunedin	118	18.6	23.7	17.8
Centres with population over 5,000 - North Island	486	18.9	20.2	15.8
Centres with population over 5,000 - South Island	214	18.7	23.8	16.4
Remainder - North Island	284	22.9	26.8	16.5
Remainder - South Island	134	19.4	28.4	22.4
Total	2,303	20.0	24.1	17.9

For two measures - the hardship scale and the respondent rating - the differences in the incidence of hardship between various locations are small and do not display a consistent pattern. The differences are not statistically significant for either measure; i.e., they could have arisen through

chance variation.* The interviewer rating produced somewhat larger differences, but the pattern of differences does not correspond to that displayed by either of the other measures. It is likely that part of the variation is a result of interviewers in different districts applying somewhat differing standards when making the ratings.

It has been claimed that some population centres - Wellington, for example - are extremely expensive places in which to live, and on this basis it might seem surprising that the hardship measures failed to show consistent and substantial differences. It is possible that the absence of a clear relationship between hardship and location is a result of aged people to some extent re-distributing themselves geographically in accordance with what they can afford. For example, it is possible that those who have most difficulty coping in a high-cost area like Wellington tend to move to some other area where they will be better off. This would serve to explain why differences between localities in the cost of living are not reflected to any great extent in corresponding differences in the incidence of hardship.

In summary, it was found that those in hardship were more likely to be on age benefit or war veteran's allowance than on superannuation benefit; were likely to have little or no income additional to the benefit; were likely to have only a low level of financial assets; were likely to be renting their accommodation or to be making mortgage repayments; and were likely to be in poor health. There did not appear to be any clear relationship between geographic location and incidence of hardship.

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*The test of statistical significance used was Chi-square. Differences between locations were not significant at the .05 level for either the hardship scale or the respondent rating, but were significant at this level for the interviewer rating.

SECTION 8 SUPPLEMENTARY ASSISTANCE: THE RELATIONSHIP TO THE HARDSHIP MEASURES AND THE EXTENT OF TAKE-UP

Supplementary assistance is that part of the social security benefit system which is explicitly designed to supplement the basic benefit on a selective basis for those beneficiaries who appear to be experiencing financial difficulties. It may be provided in several forms. A regular payment (continuing grant) may be made, a lump sum may be granted, or special services such as home help may be provided. The most common form is the continuing grant, which is the one considered here.

Eligibility for supplementary assistance is determined by a formula which takes into account a wide variety of circumstances. In essence, the formula provides an estimate of what a person requires to satisfy his regular weekly needs and commitments. This estimate incorporates a number of elements, which include the following:

1. a predetermined flat rate assessed for everyday living costs;
2. the person's actual accommodation costs;
3. certain other regular commitments (if any).

The difference between this estimate of weekly requirements and actual weekly income is used as the basis for granting supplementary assistance.

Numbers of respondents receiving supplementary assistance

Only 83 (3.6 percent) of the respondents were found to be in receipt of supplementary assistance. It is clear, therefore, that the supplementary assistance scheme is providing financial relief to only a small proportion of those experiencing some degree of hardship (indicated by the survey to be of the order of 20 percent of the aged population).

A question which may be asked is whether those receiving supplementary assistance receive sufficient assistance to be shifted out of hardship? Table 8.1 shows the proportion in hardship, according to each of the hardship measures, for those who had received any form of supplementary assistance during

the twelve months prior to interview.

Table 8.1 Proportion in hardship as shown by the three measures x Supplementary assistance

	No.	Proportion in hardship as measured by: (a) Hardship scale	(b) Interviewer rating	(c) Respondent rating
		%	%	%
Receiving supplementary assistance	83	54.2	62.7	47.0
Not receiving supplementary assistance	2,217	18.7	22.6	16.8
Total	2,300	20.0	24.1	17.9
Not specified	3			
Grand total	2,303			

If supplementary assistance were entirely effective in alleviating hardship as defined by the survey, it would be found that no-one receiving it would be in hardship. In fact, about half or more of the recipients were shown to be still in hardship.

The extent of take-up of supplementary assistance

The question arises as to what proportion of those eligible for supplementary assistance actually apply for and receive it. It was possible to examine this matter in relation to continuing grants for a part of the sample, namely beneficiaries living alone, or with a spouse only, in accommodation which they either owned or rented.* This group comprised 1,724 respondents, of whom 226 supplied insufficient financial data for their eligibility to be determined. The sub-group for whom eligibility could be determined thus comprised 1,498 respondents, or 65.0

* For these beneficiaries eligibility for supplementary assistance is determined by a comparatively straightforward set of conditions and can be ascertained from data obtained through the survey. This could not be done for more complex cases such as beneficiaries who were living with relatives, or beneficiaries who had taken in boarders.

percent of the total sample. Table 8.2 shows the number of these beneficiaries who were eligible for a supplementary assistance continuing grant and, of those eligible, the number actually receiving such a grant. In applying the formula, it was not possible to identify the less common forms of expenditure which may have come within the eligibility criteria. As a result, the figure given for those eligible for supplementary assistance may slightly underestimate the position.

Table 8.2 Eligibility for supplementary assistance, continuing grant, for a sub-group of the sample

	Receiving grant	Not receiving grant	Total
Fulfilling eligibility conditions for grant (or already receiving grant)	67	234	301
Not fulfilling eligibility conditions for grant	-	1,197	1,197
Total	67	1,431	1,498

Of the sub-group of 1,498 respondents which could be examined, 301 (20.1 percent) fulfilled the eligibility conditions for a supplementary assistance continuing grant. Only 67 (22 percent) of the 301 eligible were actually receiving the grant.

Further analysis of the sub-group of 1,498 respondents showed that, of those who were indicated as being in hardship by the hardship scale, only 38 percent would have fulfilled the eligibility conditions for a supplementary assistance continuing grant. The corresponding figures for classifications of hardship based on the interviewer rating and the respondent rating were 35 percent and 38 percent respectively. Thus, even with a complete take-up, the current supplementary assistance continuing grants scheme would have provided some additional assistance to less than 40 percent of those in hardship. Because the hardship measures can be presumed to contain some degree of error, it is unlikely that any scheme for providing assistance on a selective basis could achieve complete coverage

of those classified as being in hardship; however, a coverage of less than 40 percent can be considered as unsatisfactory.

To summarise the findings on supplementary assistance, only four percent of the respondents were receiving a supplementary assistance continuing grant. This proportion is very low compared with the proportion in hardship (20 percent) found in the sample as a whole. The respondents receiving a grant represented only about a fifth of those who fulfilled the eligibility criteria. More than half of the recipients were still in hardship. Even if there had been a full take-up of continuing grants the coverage of those in hardship would still have been less than 40 percent.

SECTION 9 DIFFERENTIAL BETWEEN MARRIED AND UNMARRIED BENEFIT RATES

Currently the rate of benefit for an unmarried beneficiary is 0.6 (or 60 percent) of that for a married couple.

The reason for the married couple rate being less than twice the rate for an unmarried person is a presumption that some economies of scale are achieved when two people are living together rather than separately. This section provides an examination of whether the differential of 0.6 is appropriate.

If the current differential were not appropriate then it might be expected that the incidence of hardship for married beneficiaries would be different from that for unmarried beneficiaries. This is examined in Table 9.1

Table 9.1 Proportion of beneficiaries in hardship as shown by the three measures x Marital status

Marital status	No.	Proportion in hardship as shown by: (a) Hardship scale	(b) Interviewer rating	(c) Respondent rating
		%	%	%
Married	1,294	18.7	21.6	18.0
Unmarried	1,009	21.7	27.2	17.8
Total	2,303	20.0	24.1	17.9

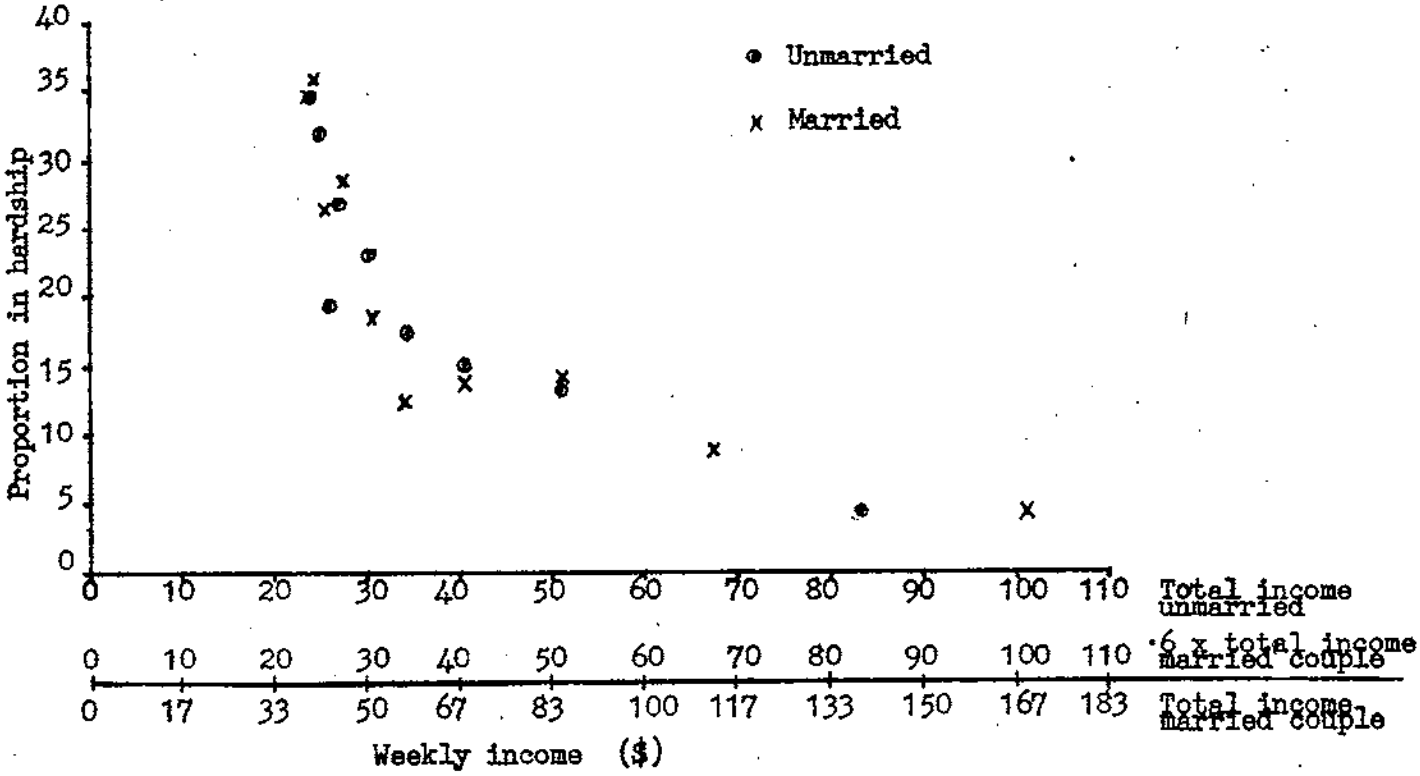
While the interviewer rating shows the incidence of hardship for unmarried beneficiaries as 5 percent higher than for married beneficiaries, the differences shown by the other two measures are small and are in different directions (i.e., one shows a higher incidence for marrieds and the other a higher incidence for unmarrieds). Although the result is slightly confused, it suggests that probably there is no very marked difference between the incidence of hardship for the married and unmarried groups.

The approach adopted above has the weakness of failing to take account of the possibility that married and unmarried beneficiaries may have different levels of income additional to their benefit. A comparison, therefore, was made between the married and unmarried groups at various levels of income. If the present differential between the married and unmarried rates is appropriate, it would be expected that the incidence of hardship amongst married couples, at any particular level of income, would be approximately the same as the incidence amongst unmarried beneficiaries with 60 percent of that income. The comparisons are shown graphically on Figure 9.1 using the scale as the measure of hardship. The crosses indicate the proportions of married beneficiaries at various income levels who are experiencing hardship; the circles represent the corresponding proportions for unmarried beneficiaries. The scale against which the points for married beneficiaries have been plotted has been reduced by a factor of 0.6 in relation to the scale for unmarried beneficiaries.

The appropriateness of the present differential can be evaluated by mentally constructing a smooth curve passing through as many of the crosses as possible, and similarly imagining a second curve through the circles. If the two curves coincided this would indicate that the differential was correct. However, if the curve through the crosses was to the left of the curve through the circles, this would indicate that unmarried beneficiaries required <u>more</u> than 0.6 of the income of a married couple to achieve a comparable level of material well-being. The reverse would be indicated if the curve through the crosses was to the right of the curve through the circles.

It can be seen from the graph that curves through the crosses and the circles would lie almost exactly on top of one another. This result suggests that the present differential between the married and unmarried rates is of the correct order of magnitude.

Figure 9.1 Comparison between total income for unmarried persons and 0.6 of total income for married couples in relation to hardship (scale measure)



The above result provides the rationale for the notional measure of gross per capita income defined and used in Section 7. In particular, the analysis suggests that, in relation to the effect on the material living standards of beneficiaries, $1 of income to a married couple can be roughly equated to 60 cents of income to a single person. The procedure adopted in Section 7 incorporated this relativity in the definition of a composite income measure, making it possible to perform the income analysis without differentiating between married and unmarried beneficiaries. If such an income measure had not been used, it would have been necessary to make separate analyses for married and single beneficiaries, thus complicating presentation of data and discussion of results.

SECTION 10 POLICIES TO REDUCE HARDSHIP AMONGST BENEFICIARIES

In Section 7 the relationship between income and the incidence of hardship was examined. Results presented in that section (see Table 7.2 and Figure 7.2) show that the incidence of hardship declines only slowly as income increases and that a low level of hardship is reached only at fairly high income levels.

This result appears to be a consequence of the incidence of hardship being influenced by a number of factors, of which income is only one. For example, two respondents with the same income could have quite different likelihoods of being in hardship if their other circumstances differed. On the other hand, two respondents with substantially different incomes could have the same likelihood of being in hardship if the one with the higher income was in a less satisfactory position than the other respondent with respect to other circumstances. Thus, the relationship between income and the incidence of hardship is comparatively weak when it is examined in isolation from other factors associated with hardship.

An implication of this is that any across the board increase in the basic social security rate would need to be very considerable to have a substantial impact on the incidence of hardship. For example, it is estimated from the information on the relationship between income and the incidence of hardship that an increase of $5 a week in the benefit rate would reduce the incidence of hardship by only about a quarter, while an increase of $10 a week would reduce it by about a third.

Increases of this order of magnitude are very expensive. The extent of such costs is indicated in Table 10.1 which shows the cost of increasing the unmarried rate of benefit in steps of $1 per week with corresponding steps for a married beneficiary of $0.83 (i.e., $1.66 for the couple). This retains the current relativity between married and unmarried benefit rates.

Two costs are shown in the table: the cost of the increase for all beneficiaries, and the cost of the increase for only the aged (i.e., those receiving age and superannuation benefit, or war veterans allowance). Subsequent discussion is mainly centred on costs for the aged because this is the group for which information on hardship is available. However, it can be seen from the table that most of the cost of an increase is with respect to the aged.

Table 10.1 The cost of an across the board increase in benefit rates for the aged and for the beneficiary population as a whole

Increase per week	Estimated annual cost of increase	
	(a) For aged	(b) For all beneficiaries
$	$m	$m
0	0	0
1	14.9	19.2
2	29.9	38.5
3	44.8	57.7
4	59.7	77.0
5	74.6	96.2
6	89.6	115.5
7	104.5	134.7
8	119.4	154.0
9	134.3	173.2
10	149.3	192.5

The table shows that an increase of $5 a week in the benefit rate would cost $96.2 million a year; an increase of $10 a week would cost $192.5 million. An across the board increase in the benefit rate would therefore represent an extremely expensive approach to assisting those shown to be in need. The reason is clear: and an increase would disperse the available funds without regard to who was or was not in need. The effect of this would be that only approximately 20 percent of the money paid out in the increase would go towards assisting persons in manifest need, while 80 percent would be distributed to persons who were not in need.

Efficient use of additional benefit funds implies selective procedures by which extra assistance can be directed specifically to those who need it most. The previous supplementary assistance

scheme was devised to do just this; however, the survey results demonstrated that - for the aged population at least - the scheme failed to reach a sizeable proportion of those in hardship and the amount of additional income it provided was not sufficient to lift many of the recipients above the level of hardship used in this report.

Two possible approaches could have been adopted in seeking to remedy the deficiencies of the existing supplementary assistance scheme: either (1) to retain the scheme in essentially its present form except for modifications to the conditions which determine eligibility for assistance and the level of assistance provided; or (2) to replace it with some other set of administrative provisions for directing extra assistance to those in need.

A number of alternative schemes were developed based on these two approaches and were evaluated by means of analysis of the survey data. With respect to the first approach, the evaluations indicated that it would be possible to devise a new supplementary assistance "formula" which would substantially increase the scheme's potential coverage of those in hardship and would provide higher levels of pay-out to many of those who would receive the assistance. In practical terms, however, the scheme could only make a substantial impact on the incidence of hardship amongst the aged if there were a high level of take-up by those eligible. The survey results had indicated that, in spite of the Department's efforts to bring the scheme to the attention of potential recipients amongst the aged, only about one in five who were eligible were receiving assistance.

It seemed likely that, although further publicity and public relations activity might result in some improvement, part of the reason for the low take-up was intrinsic to the nature of the scheme.

It had often been suggested that many potential applicants had been put off because of the stigma of charity associated with supplementary assistance. This, no doubt, was due to the

fact that the eligibility formula was not made public. Consequently there was a lack of understanding about how the scheme worked. Although it had the advantage of being tailored to the individual needs of beneficiaries, the beneficiaries themselves were unable to judge whether their circumstances would entitle them to additional benefit. Furthermore, if they were to apply they did not know what information they would be required to supply.

There seemed little prospect that these difficulties could be resolved within the framework of the existing supplementary assistance scheme. Publication of the formula would only partially resolve them and could create new problems because the procedures for assessing eligibility were such as to invite misunderstanding and misinterpretation. Furthermore, the connotations of charity attaching to the scheme were probably too pervasive and widely accepted to be overcome, even if the original cause of them were eliminated.

In considering possible alternatives to supplementary assistance, five criteria were adopted:

1. The scheme should incorporate survey findings on factors associated with hardship, to ensure a satisfactory coverage of beneficiaries in hardship.

2. The scheme should provide a level of assistance sufficient to remove the recipient from hardship.

3. Conditions for eligibility should be as simple as possible (within the requirement that they provide for the effective selection of those in need) and should be publicly made known so that potential recipients would be able to work out for themselves whether they would be eligible for assistance.

4. The amount of information required from applicants should be kept to the minimum necessary for the

effective administration of the scheme.

5. The scheme should be administratively simple with respect to the procedures of the Department of Social Welfare for processing applications and making pay-outs under the scheme.

Of the various alternatives examined, the scheme decided upon was the one considered to represent the best compromise between the requirements of simplicity and selective efficiency. These requirements are intrinisically in conflict. For the scheme to remain simple the number of factors which are taken into account must be kept small. By contrast, selective efficiency will be improved by incorporating a progressively wider range of factors.

The scheme adopted, which is known as the "additional benefit" scheme, was announced in the Government's 1975 budget statement. A detailed description has been provided elsewhere and will not be repeated here. However, it is helpful at this point to briefly review the main provisions.

The additional benefit scheme has three main elements: a payment made in addition to the basic benefit for those on low incomes and assets, a payment for this group if they have accommodation costs above certain specific levels, and a payment if they have other special regular commitments. The basis for the first two elements was the survey finding that income, assets and accommodation expenses were all strongly associated with incidence of hardship; of all the factors found to be associated with hardship these were the ones which most conveniently could be used as criteria for selective benefit provisions. The third element makes provision for beneficiaries in unusual circumstances whose requirements might not be adequately provided for by the first two types of assistance.

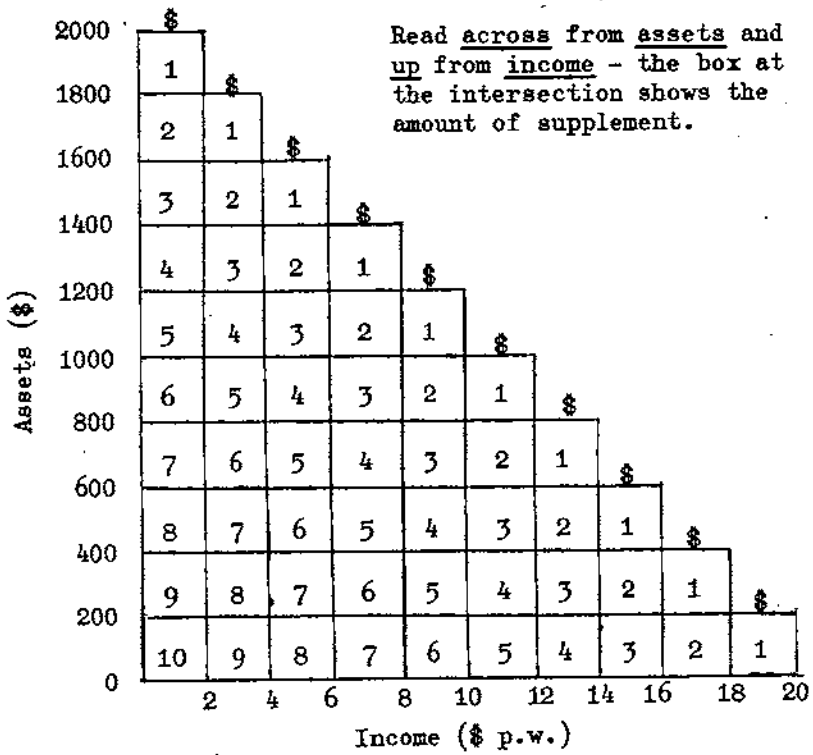
With respect to the first two elements, it is possible to use the survey data to examine the coverage of the scheme amongst the aged population. This cannot be done for the third element because each case needs to be assessed on the special circumstances relating to it.

To be eligible for any assistance under the scheme a beneficiary must have income and assets within the limits shown in Figure 10.1. An examination of the income and assets declared by respondents in the survey indicates that 31 percent would be eligible for the supplement based on income and assets.

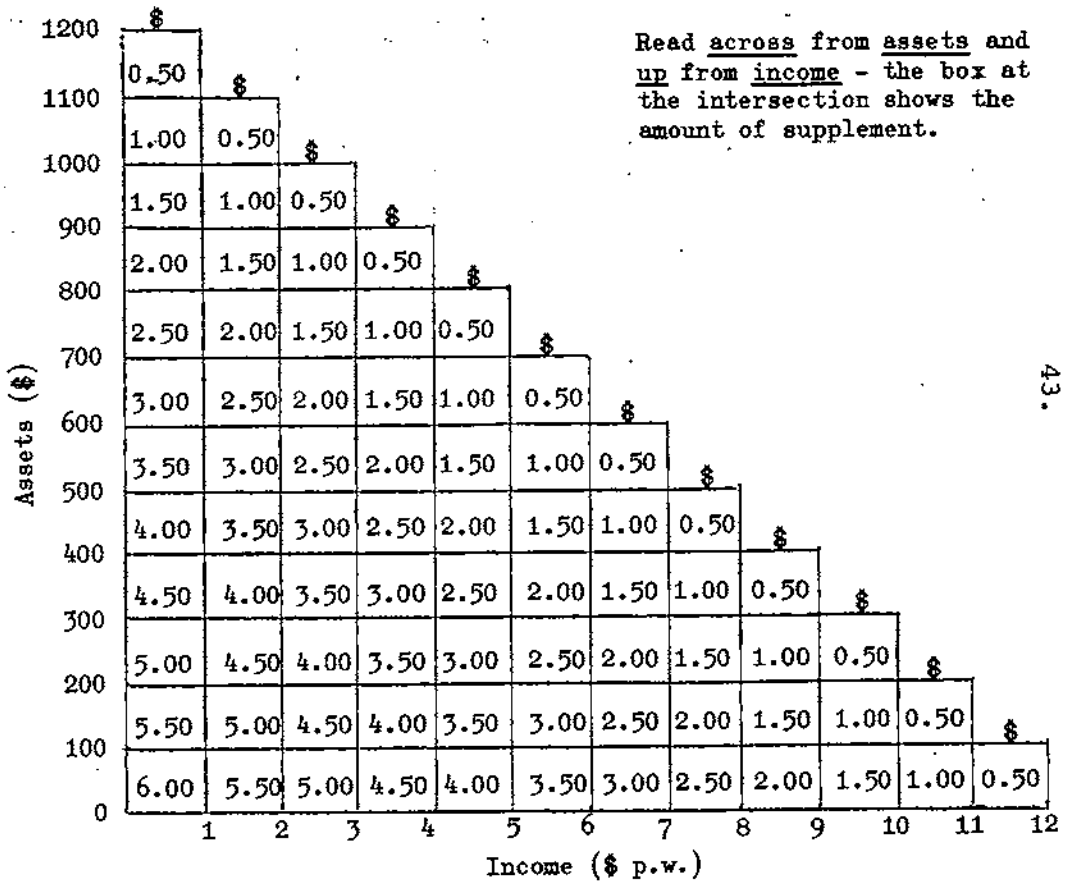
It can be seen from Figure 10.1 that the amount of additional benefit paid on the basis of low income and/or assets would vary according to the actual level of income and assets of each beneficiary. For example, an unmarried beneficiary with other income of $1 a week or less, and assets of $100 or less would receive the maximum rate of $6 a week. If income and/or assets were higher, then the amount would be less. Using information collected in the survey on the income and assets of the aged, it has been estimated that the average amount paid to married couples receiving the supplement would be about $6.40 a week and for unmarried beneficiaries about $4.50. The annual cost of the supplement for the aged population would be about $16 million. The total cost for all types of beneficiaries would be about $22 million.

Figure 10.1 Chart showing amounts for the income and assets element of the additional benefit scheme

MARRIED COUPLE



UNMARRIED PERSON



NOTES:

1. If an income or assets figure is exactly on the boundaries between two categories, it is taken to be in the lower category. E.g. for a married couple, an income of $4 per week would fall in the "2-4" category (not the "4-6" category). For a single person, assets of $600 would fall in the "500-600" category (not the "600-700" category).

2. Assets do not include the value of the person's or couple's home or personal possessions.

3. Income is income in addition to social security benefit.

4. For a married couple, income and assets refer to combined income and combined assets of husband and wife.

SAMPLE CALCULATIONS:

1. A married couple with income of $7 per week and assets of $500 would receive $5 per week in supplement.

2. A single person with income of $3 per week and assets of $800 would receive $1.50 per week in supplement.

An accommodation supplement would be paid to those who meet the income and asset test and who have accommodation costs exceeding $6 a week (or, in the case of those boarding, $15 for unmarried beneficiaries and $25 for married couples). Fifty percent of the costs exceeding these limits would be paid with the maximum amount payable being $6 a week. It is estimated from the survey data that about 11 percent of those who would be eligible for the income and asset supplement would also be eligible for an accommodation supplement. This represents about three percent of the total aged population on benefit. The average amount paid to married couples would be about $2.50 per week and about $1.70 to unmarried beneficiaries. The annual cost for the aged population would be about $1 million. It is anticipated that the cost of accommodation payments to other beneficiaries would exceed this figure, because their accommodation expenses would probably be higher than for the aged. The total cost of the payments for accommodation to all beneficiaries is estimated to be about $4 million.

For the income and asset supplement and the accommodation supplement combined, it has been possible to estimate the proportions of beneficiaries eligible for various levels of payment. These are shown in Table 10.2 on the following page.

For the two supplements combined, the average payment to married couples would be about $6.70 a week and for unmarried beneficiaries about $4.70 a week. The annual cost would be about $17 million for the aged population and about $26 million for all types of beneficiaries.*

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* The net additional cost of the scheme would be $22 million after making an adjustment for the estimated $4 million which otherwise would have been spent on supplementary assistance.

Table 10.2 Proportion of respondents eligible for additional benefit x Amount of income and asset supplement plus accommodation supplement

Marital status	Amount paid * (per week)	Percentage of those eligible
	$	%
Married couples	1-2	10.4
	3-5	23.5
	6	11.1
	7	11.4
	8	11.7
	9	8.4
	10	17.4
	11	2.7
	12-16	3.4
		100.0 (No. = 298)
Unmarried beneficiaries	1	3.4
	2	11.8
	3	12.5
	4	12.1
	5	15.0
	6	41.4
	7	1.6
	8-12	2.2
		100.0 (No.= 321)

To recapitulate, the survey findings indicated that only a minority of approximately one fifth of the aged population were in substantial need of financial assistance and that an across the board increase in the benefit rate would not be the most efficient method of providing assistance to this group. A selective approach therefore was adopted, and the additional benefit scheme has been designed to channel assistance specifically to those most in need. The scheme has three elements. It provides for additional payments to beneficiaries on the basis of:

* It was necessary to show some of the rates of payment as ranges because of the ranges used in coding asset information.

1. low income and low level of assets;
2. costs associated with accommodation;
3. other special regular commitments.

It is not possible to devise procedures which will identify all those in need while not including some who are not in need, unless the administration of a selective scheme is made extremely complex. However, the scheme which has been developed will cover, by means of a relatively simple and easily understood set of criteria, a high proportion of those requiring assistance. For those in need, the scheme will provide a much greater degree of assistance than would have been possible with an across the board increase. Thus, by concentrating assistance in the areas of need, the scheme ensures that those who are not enjoying a dignified and comfortable standard of living will do so.

SECTION 11 CONCLUDING COMMENTS

In seeking to ensure that social security benefit rates maintain a level of income which will enable beneficiaries to live in dignity and comfort, there are two principal alternatives that can be considered:

1. increase the basic benefit rate "across the board";
2. direct additional income to those beneficiaries specifically selected as not coping on the basic benefit.

Where the ideal balance lies between these alternatives is largely a matter of judgement. It is certain that, whatever the rate of the basic benefit, it will not meet all cases and that as a result additional selective measures will be necessary for some beneficiaries.

The survey showed that a relatively small proportion of the aged were experiencing hardship but that in at least some of these cases large injections of additional income would be necessary to alleviate their difficulties. Because of this, it was concluded that a selective approach, aimed directly at those in hardship, was the most appropriate way of dealing with the situation.

However, it will be important to ensure that the basic benefit rates maintain their value. If this were not done the incidence of hardship amongst those receiving only the basic benefit rate would increase, and it would become necessary to have more and more recourse to the selective means of alleviating this hardship. This would undermine the principle that the basic benefit rates should be adequate to enable most beneficiaries to live in dignity and comfort.

Further surveys will be conducted from time to time to evaluate the adequacy of the benefit rates and the effectiveness of the additional benefit scheme.

APPENDIX I

SAMPLE SPECIFICATION AND ACCOUNTING

Sample specification

The sample frame used in the survey was defined as all those persons aged 65 years or over who were in receipt of an age or superannuation benefit or a war veteran's allowance but were not residing in an institution.

Those in institutions were not included because such persons' living circumstances would tend to be atypical of the aged population as a whole and would relate to income in an atypical way.

Initially, consideration was given to including age beneficiaries under the age of 65 years in the sample frame. This idea was rejected, however, because age beneficiaries aged 60-64 years comprise less than a third of all persons in that age range, and their inclusion would have produced a sample which did not relate to any coherently specifiable section of the population. It was considered unlikely that the absence of these beneficiaries would result in any loss of generality of the survey findings because it seemed plausible that the factors which affect the level of well-being of people aged 60-64 years would be essentially the same as those affecting persons aged 65 and over.

Sample accounting

The sample comprised a total of 3,395 persons aged 65 years or over. Of this total, 275 respondents were removed from the sample either because they were dead by the time of the interviewers' visit or because they were in institutions and were thus not eligible sample members. Appendix table 1.1 shows the action taken on the 3,395 persons.

Appendix table 1.1 Account of the sample

Sample members	No.	%
Valid members		
Person contacted and interviewed	2,303	74
Person contacted but declined interview	410	13
Interviewer judged respondent to be unsuitable for interview on grounds of health, deafness, senility etc.	223	7
Person not traced	110	4
Person away from home for survey period	74	2
Subtotal valid members	3,120	100
Invalid members		
Person in institution	213	77
Person deceased	62	23
Subtotal invalid members	275	100
Grand total	3,395	-

It can be seen from the above table that of the 3,120 valid sample members (i.e. those not dead or in an institution) a total of 2,303 were successfully interviewed. Thus, the gross response rate achieved by the survey was 74 percent which was a good response rate by overseas standards for surveys of this nature.

Department of Social Welfare beneficiary records were used as the basis of the sampling frame because 98 percent of persons aged 65 years and over were in receipt of an age benefit or a superannuation benefit or a war veteran's allowance. The Department's records therefore provided an up-to-date computer listing of practically the whole of the designated section of the population. The alternative sampling frame was the 1971 census records, but this was already out of date and the sample would have had to be extracted manually, which would have been cumbersome and time-consuming.

The sample was obtained by extracting from the Department of Social Welfare's computer records the names and addresses of every 75th beneficiary aged 65 years or over who was in receipt of either an age or superannuation benefit or a war veteran's allowance. It was not possible to include war pensioners aged 65 or over because the age of these pensioners is not routinely included in the computer records. The exclusion of the war pensioners from the sample is unlikely to have any marked effect on the results of the survey as they represent only an extremely small proportion of the population aged 65 or over.

The sample was drawn early in November 1973 for all Social Welfare districts except Auckland, Wellington and Christchurch. For these districts only half the required names (i.e. every 150th record) were selected. The balance of the sample for Auckland, Wellington and Christchurch was drawn late in January 1974. These were the areas where, due to the larger numbers, interviewing would take the longest. The two stage sampling procedure was used to ensure that the sample procedure was as up-to-date as possible.

The complete sample drawn comprised 3,395 beneficiaries, which is 1.34 percent of the population aged 65 years or over.

APPENDIX II

SELECTION OF ITEMS AND SCALING PROCEDURES USED

Item selection

Items were initially selected on the a priori grounds that they had some degree of face validity and/or had been used traditionally as indicators of economic well-being. In this way, 138 items were obtained.

It was necessary to reduce this item pool to a size that could both be conceptually handled more easily and could be processed by means of the available computer facilities. The procedure adopted was to correlate all the items with four "criterion" variables. These were variables which were obviously very closely related to standard of living, and with which an item, therefore, should have some degree of statistical association if it were itself to be of any use as an indicator of standard of living. The criterion variables chosen for this purpose were:

1. the interviewers' ratings of the respondents' level of living;
2. the interviewers' ratings of the extent to which the respondents were facing financial difficulties;
3. the respondents' ratings of how well their present incomes satisfied their everyday needs; and
4. the respondents' gross annual incomes.

The ratings and the 138 items were scored in such a way that a higher score indicated a higher standard of living.

Product-moment correlations were computed between the 138 items and the four criterion variables. Two rules for the selection of items were then applied:

1. The correlation had to be in the expected direction for all the criterion variables: that is, a high score on an item (indicating a

high standard of living) had to be related to a high score on the criterion variable. (A striking and pleasing feature of the exercise was that, of the 552 correlations so computed, not one showed a deviation from the expected sign. This indicates, if nothing else, that all variables were tapping, to a greater or lesser extent, some underlying dimension or set of dimensions related to the concept of standard of living.)

2. Each item had to have a correlation of at least 0.20 with any one of the criterion variables. This corresponds to accounting for at least four percent of the total variation of the criterion variable.

After this selection had been carried out, it was found that there was a slight preponderance of housing items, due largely to the fact that the questionnaire coverage of housing was more extensive than for some other areas and also to the fact that some of the 138 items were virtually tautologous. After detailed examination of the housing items, nine were dropped, reducing the balance of housing items to a more appropriate level.

The total number of items selected by the above procedure was 74. Since the computer limitation on the number of variables that could be handled in the analyses envisaged was 80, a further six variables were selected from the remaining candidates.

Correlation matrix and clustering

The 80 items selected were correlated with each other, using the Pearson product-moment formula. The first clustering technique used was a somewhat heuristic one where the matrix was searched by eye for groups of items that correlated highly with each other. As is usual with this technique, the matrix was rearranged so that the items fell into clusters of closely related (and therefore highly correlated) items. The

predominant cluster to emerge consisted of items that, by and large, related to deprivation and to restriction of expenditure on relatively essential goods and services; briefly, it could be described as a hardship cluster. Further clusters which emerged were related to housing and to use or possession of consumer durables. These subsequent clusters were found to overlap considerably more with one another than with the first hardship cluster. It appeared that the matrix could best be grouped into two or perhaps three clusters.

The second clustering technique used was a more sophisticated one which involved the computation of a distance measure between all pairs of items. This measure was then searched for the least distance. The two closest items formed the first cluster. This first cluster was then treated as a single item, and the distances between all items again searched for the smallest. This process was iterated until the whole 80 items had been assigned to some cluster or other. The results obtained by this method were virtually identical with those obtained by the first clustering technique involving the search for best association by eye. (The second clustering was performed by Dr John Darwin of the Applied Mathematics Division of the Department of Scientific and Industrial Research. The Department is extremely grateful to him and to Mr Gary Dickinson of the Department of Scientific and Industrial Research for the assistance they provided.)

Factor analyses

The 80 variable correlation matrix was submitted to factor analytic procedures, specifically principal components analysis followed by orthogonal rotation to simple structure (Varimax method) and also oblique rotation (Oblimin, with delta=0).

The orthogonal and oblique rotations produced virtually identical results. Of the various factor solutions examined, the most satisfactory appeared to be either a two factor or a three factor solution. In each case, the factor accounting for the largest portion of the variance produced large loadings

with respect to the financial restriction variables which had emerged as a cluster in the two cluster analyses. (The other factor produced by the two factor solution related both to housing items and consumer durables items; in the three factor solution a separate housing factor and a durables factor emerged.)

Determining scale scores for the hardship scale

From the results of the cluster analyses and the factor analysis a set of 35 items was selected as the basis for a scale measure of hardship. This set comprised the common core of items which had emerged together in all of the analyses. The items were all dichotomous and for the purpose of computing correlations had been assigned the numerical values of 0 or 1, with 0 indicating the less satisfactory state of affairs. The variable values were then transformed to "normal form" (calculated as variable value minus mean for the variable, with the difference divided by the standard deviation for the variable). The scale score was defined as the sum of normalised variable values for the 35 items, which are listed in Appendix III. The reliability for the scale, as indicated by the Kuder-Richardson KR21 formula, was 0.92.

APPENDIX III

THE 35 ITEMS OF THE HARDSHIP SCALE

Variable number *	Variable description
1	Whether the respondent considered total cost of present accommodation was causing him financial difficulties.
2	Whether the respondent felt that, over the previous 12 months, the standard of his accommodation had run down because he could not afford the upkeep.
3	Whether during the previous winter the respondent had stayed in bed longer or had gone to bed early to reduce heating costs.
4	Whether during the previous winter the respondent had often or sometimes had to put up with feeling cold because of trying to keep the heating bill down.
5	Whether during the previous 12 months the respondent had had to buy the cheaper grades of meat, in order to make ends meet, three or more times a week.
6	Whether during the previous 12 months the respondent had had to do without meat entirely, in order to make ends meet, on three or more days a week.
7	Whether during the previous 12 months the respondent had had to buy the cheaper kinds of fruit and vegetables, in order to make ends meet, three or more times a week.
8	Whether during the previous 12 months the respondent had failed to buy items of clothing when he needed them, because of lack of money.
9	Whether during the previous 12 months the respondent had bought cheaper quality clothing because he could not afford better.
10	Whether during the previous 12 months the respondent had put off buying small items of clothing for as long as possible because of lack of money.
11	Whether during the previous 12 months the respondent had failed to buy a pair of shoes when needed, because of lack of money.

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* The eight items designated in Section 6 of this report as key indicators of hardship were for convenience simply numbered from 1 to 8 in that section. The corresponding item numbers in the present list are, respectively: 4, 6, 12, 13, 21, 31, 33, 2.

Variable number	Variable description
12	Whether during the previous 12 months the respondent had repaired worn-out clothing because he could not afford its replacement cost.
13	Whether during the previous 12 months, because of lack of money, the respondent had had to wear old or worn-out clothing when going out or visiting.
14	Whether during the previous 12 months, because of lack of money, the respondent had relied on gifts from relatives or others for replacement clothing.
15	Whether during the previous 12 months the respondent had bought second-hand clothing, because of lack of money.
16	Whether during the previous 12 months the respondent had bought second-hand shoes, because of lack of money.
17	Whether the respondent had a pair of good water-tight shoes suitable for winter.
18	Whether, because of the costs involved, the respondent had to do without or economise on hobby, knitting or sewing materials.
19	Whether, because of the costs involved, the respondent had to do without or economise on tobacco or cigarettes.
20	Whether, because of the costs involved, the respondent had to do without or economise on going to the hairdresser/barber.
21	Whether, because of the costs involved, the respondent had to do without or economise on visits to friends or relatives.
22	Whether, because of the costs involved, the respondent had to do without or economise on entertaining friends or relatives.
23	Whether, because of the costs involved, the respondent had to do without or economise on books and magazines.
24	Whether, because of the costs involved, the respondent had to do without or economise on holidays away from home.
25	Whether, because of the costs involved, the respondent had to do without or economise on running or owning a car.
26	Whether, because of the costs involved, the respondent had to do without or economise on the use of taxis.
27	Whether, because of the costs involved, the respondent had to do without or economise on paid help in the garden.

Variable number	Variable description
28	Whether the respondent had to budget very carefully to make ends meet.
29	Whether, because of the expense, the respondent had to cut down on luxuries he used to enjoy and would still like to have.
30	Whether, if the respondent required a minor operation including a week of hospital treatment, he could afford to go to a private hospital. (It would have cost about $250.00.)
31	Whether during the previous 12 months the respondent had postponed visits to a specialist because of lack of money.
32	Whether during the previous 12 months the respondent had worn unsuitable glasses or no glasses because he could not afford replacements.
33	Whether during the previous 12 months the respondent had worn ill-fitting or no dentures because he could not afford replacements.
34	Whether during the previous 12 months the respondent had postponed visits to the dentist because of lack of money.
35	Whether during the previous 12 months the respondent (or spouse) had often had to draw on savings to meet weekly living expenses such as food, clothing and other everyday expenses.