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Non-Cash Benefits and Poverty in Ireland

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Brian Nolan is a Research Professor and Helen Russell is a Research Officer at The Economic and Social Research Institute. The paper has been accepted for publication by the Institute, which is not responsible for either the content or the views expressed therein.
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CONTENTS

GENERAL SUMMARY

The "Free Schemes" and Medical Card

In addition to cash social welfare transfers, some households benefit from a range of State schemes providing free electricity/ gas, TV licence and telephone rental, and free travel – often known collectively as the "free schemes". In addition, free medical care is made available by the State to all those below an income threshold. These schemes have grown in importance in Ireland in recent years, and this raises major issues in terms of their impact. This study focuses on the distribution of benefits from these schemes and their impact on poverty.

Valuing the Benefits

Complex issues arise in estimating the value of these types of non-cash provision, since unlike cash the beneficiaries cannot decide what to "spend" them on. Here beneficiaries are first identified using information obtained in the 1997 Living in Ireland Survey. Average values for the benefit from each scheme are estimated on the basis of the cost of provision to the State – a necessarily crude approach. In the case of health care, this takes into account the fact that the use of the health services varies a great deal by age, so higher values are attributed to the elderly. The estimated benefits are then assigned to households in the survey.

Who Benefits?

Benefits from the free schemes and the medical card scheme are found to be heavily concentrated towards the bottom of the income distribution: in 1997, 61 per cent of medical card spending and 65 per cent of benefits from the free schemes went to households in the bottom 30 per cent of the distribution. In terms of effectiveness in reaching those most in need, these non-cash benefits are slightly more concentrated towards the bottom of the income distribution than social welfare cash transfers in aggregate – though the latter are of course much greater in scale and thus much more important to low-income households.

Benefits from the free schemes and medical card scheme are also found to be much more effective in assisting some low-income households than others. The elderly population benefit to a much greater extent than the working poor, the unemployed and large families. This reflects the eligibility criteria for the free schemes, and the fact that a higher value for the medical card is attributed to older age groups to reflect their greater utilisation of health services.

The Impact on Poverty

The impact of incorporating estimated benefits from the free schemes and medical card directly into the measurement of poverty depend on how one measures poverty. Simply adding imputed values for the "free schemes" and medical card entitlement to cash income and recalculating

relative income poverty rates substantially reduces relative income poverty rates. This reduction is most pronounced among the elderly, and the elderly would on that basis be a much less important group among the poor. However, income has serious limitations as the sole measure of a household's access to resources.

The contrast is much less marked when the comparison is with the poverty measure developed at the ESRI incorporating both low income and experience of basic deprivation – the approach currently adopted in the National Anti-Poverty Strategy's global poverty reduction target. With this "consistent poverty" measure, poverty rates are already significantly lower than those shown by relative income lines, and the elderly already comprise a significantly smaller proportion of the poor. This reflects the fact that the deprivation element of the measure helps to capture influences on a household's command over resources beyond current income, of which the free schemes and medical card entitlement are one. Broadening the income element of the consistent poverty measure to include estimated values for benefits under the free schemes and medical card scheme results in a modest reduction in the percentage of households both below relative income lines and experiencing basic deprivation.

Other Non-Cash Benefits

Many other aspects of the State's spending affect the living standards of households, such as free education or subsidies to housing, but even more complex issues beyond the scope of this study arise in trying to capture their impact on poverty. Non-cash benefits provided by employers rather than the state could also be important, and are briefly considered here. Including estimated values for employer benefits such as free or subsidised health insurance, sports/leisure facilities, childcare, and accommodation are found to have relatively little effect on relative income poverty rates. The contributions employers make to occupational pension schemes could have a more significant impact, but there are serious problems in estimating their current value to employees.

Implications

Non-cash benefits are not the same as cash income, and assessing their impact on poverty will thus never be straightforward. This is particularly true in the case of free health care, where it can be misleading to look at the distribution of benefits without taking into account underlying differences in needs. This study suggests that the broad picture of poverty revealed by research to date which has itself gone beyond household income is not substantially altered by directly taking benefits from the free schemes into account. None the less, it demonstrates that analysis of the distribution and scale of these types of provision can complement previous research and enhance our understanding of the effectiveness of different anti-poverty policies.

1. INTRODUCTION

Analyses of poverty and of the role of social transfers in poverty alleviation often concentrate on cash incomes as the measure of resources available to households. However, provision of support in kind rather than in cash to social welfare recipients or low-income households has grown in importance in Ireland in recent years. Under what can be collectively called the "free schemes", free TV licence, telephone rental, fuel, and public transport are made available to certain households. Some of these schemes were originally intended to benefit older people in receipt of a social welfare payment and living alone but have been extended to some other social welfare recipients. Free travel, on the other hand, has applied since introduction to all elderly people irrespective of income or social welfare recipiency. As discussed in depth in the recent study by Quinn (2000), the extension of the scope of such schemes raises major issues not only in terms of administration and complexity for recipients, but also in terms of their rationale and effectiveness in alleviating poverty and social exclusion.

This study focuses on the impact of these "free schemes" on poverty, using data from the 1997 Living in Ireland Survey. It analyses the value of the non-cash benefits under these schemes to Irish households, and which groups and types of household benefit. Distinct from the free schemes, in the Irish case free health care from the state is also available to all those below an income threshold – who qualify for a "medical card". While very particular problems arise in assigning a value to this entitlement, we also look at its potential scale and who benefits.

Having established the scale of these non-cash benefits and who is affected, the key question we seek to address is whether taking them explicitly into account affects our understanding of the extent and nature of poverty in Ireland. If poverty were measured by focusing simply on cash income, not taking such targeted non-cash benefits into account could lead to an under-estimation of the resources available to some low-income households and an over-estimation of the extent of their poverty. Since only certain types of low-income households receive these benefits, the profile of low-income households could also be misleading as to which households are poor. Poverty measures developed at the ESRI and incorporated into the National Anti-Poverty Strategy do not in fact rely on household cash income, but also take into account levels of deprivation as reflected in a range of indicators. These indicators are themselves intended to capture a range of factors influencing the resources available to different households, of which non-cash benefits would be just one. The question to be asked is whether explicitly taking non-cash benefits into account in relative income poverty measures, and in the combined income and deprivation measure, would give a very different picture to the one

with which we have become familiar (as presented in, for example, Callan *et al.,* 1996[b], 1999, Layte *et al.*, 2000).

We therefore proceed by first estimating the value that the benefits provided under the free schemes and the medical card system may have to recipients. We then look at which households in our 1997 sample benefit and where they are located in the income distribution. We then assess the impact of incorporating the estimated value of non-cash benefits into conventional relative income poverty measures, and contrast the results with those produced by the combined income and deprivation measure of poverty. We also look at the impact of incorporating the expanded relative income measure into the combined income and deprivation measure itself.

The free schemes and medical card are of course not the only free or subsidised services and benefits provided by the state to households, with for example the state making free education available to all. In addition, employers provide non-cash benefits in various forms to some employees. While in principle taking all these non-cash benefits into account would give a more comprehensive picture than cash income of the relativities between households in terms of command over resources, in practice it is extremely difficult to do so in a satisfactory manner. While some of the issues involved are discussed in Chapter 2, we confine ourselves in the present study to a brief examination of non-cash benefits from employers – since these are concentrated in precisely those parts of the income distribution which do not benefit from the free schemes or medical card entitlement on which we are focusing here.

We begin by outlining in Chapter 2 the issues that arise in seeking to include non-cash benefits directly in the assessment of living standards and poverty. We then describe in Chapter 3 the specific State non-cash benefits currently available to Irish households that are the focus of this study. Chapter 4 discusses the general issues that arise in seeking to attribute cash values to the beneficiaries, then describes the data employed in this study and the way they are used to attribute valuations for the different State benefits or schemes to households in the 1997 Living in Ireland Survey. Chapter 5 analyses which households – in terms of position in the income distribution and household composition – benefited most from these State schemes in that year. Chapter 6 examines the implications of these State non-cash benefits for measured poverty, looking at the impact including imputed values have on relative income poverty and teasing out the relationship between these results and our measures of "consistent" poverty, based on combining relative income with manifest deprivation as reflected in non-monetary indicators. Chapter 7 looks briefly at non-cash benefits provided by employers rather than the State, describing the main areas involved and where the beneficiaries are located in the income distribution. Finally, Chapter 8 summarises the conclusions and highlights their implications.

2. NON-CASH BENEFITS AND POVERTY

2.1 Introduction

This study has a specific and limited objective. It focuses on targeted non-cash benefits-in-kind provided by the State to specific groups, namely the various free schemes mostly aimed at the elderly and some other social welfare recipients, and free health care provided though the medical card system to the bottom third of the population. The main question addressed is whether failure to take these benefits into account seriously distorts measures of the extent of poverty, who is affected by poverty, and the effectiveness of the social protection system. In this chapter we discuss the methodological issues that arise in trying to answer this question, which are intimately linked with the way poverty itself is measured.

2.2 Non-Cash Benefits and the Measurement of Poverty

In the USA, the treatment of in-kind benefits has probably been the issue giving rise to the biggest debate among poverty researchers in recent years. This reflects the fact that in the USA, in-kind benefits such as health care and food vouchers targeted specifically on the poor are very important. It also matters in this context how the poverty standard is derived. The official US poverty line is derived by costing a food budget, and multiplying that cost by a factor intended to reflect other needs. Since this is intended to be an inclusive measure of needs, it may then be very important in measuring who falls below that standard to have an equally inclusive measure of household resources, including for example food stamps, school lunches and Medicaid.

When the poverty standard is derived as a purely relative income line, as is now quite common practice, the situation is more complex. The intention of this procedure is to base the poverty standard on the average or ordinary living standards available to the general population. If a State service is available to everyone and affects both those around the middle and those towards the bottom similarly – for example, universal entitlement to free health care – including it both in deriving the poverty line and measuring the resources of the poor would not make much difference. Non-cash benefits targeted specifically towards those on low incomes are a different matter, however, since they affect the resources available to those around the poverty line but have little or no impact on the location of that line.[1]

[1] A relative income poverty line derived as a proportion of median income will not be affected at all by inclusion of benefits going exclusively to those below the median; lines

This is one important reason for concentrating in the Irish context on the free schemes and medical card entitlement, which are targeted towards specific (and mostly as we shall see, low-income) groups. Of course, Irish households benefit from a wide range of other services provided free or in a subsidised manner from the State in areas such as education, health care, public amenities, and housing. The distributional impact of this spending has been analysed by Rottman and Reidy (1988) and Murphy (1984), using data from special redistributive analyses carried out by the Central Statistics Office based on the Household Budget Surveys for 1973 and 1980.[2] When allocated among households on the basis of utilisation and valued at the cost of provision, these State services improved the relative position of those on low incomes, though their contribution was much less than that of cash transfers. Similar studies of the redistributive impact of state spending have been available for many years in the UK, carried out by the UK Central Statistics Office, and reveal a broadly similar picture. Measuring the overall redistributive impact of State spending in this way is important, but difficulties in valuing the benefit to the households involved and in taking into account differences in needs as well as resources make it highly problematic to seek to incorporate these benefits directly into a poverty measure.

In this context housing is both particularly important and particular complex to analyse. Households paying below market rents in local authority housing are receiving an implicit subsidy from the state, improving their purchasing power on a given cash income. Valuing this subsidy is problematic, however, and a household owning its own house is also in a very different position to one with a very large mortgage. One analytical approach to taking this into account, common in UK research, is to look at income poverty both gross and net of housing costs. Since housing costs include an element of choice, income net of housing costs is best regarded as a complement to, rather than a substitute for, disposable income. This is an area which we regard as of the highest priority for in-depth research in the Irish context, given the explosion in housing costs in recent years, but is beyond the scope of the present study.

We concentrate therefore on the "free schemes" and free health care provided though the medical card system, and the main question addressed is whether failure to take them explicitly into account in measuring poverty has seriously distorted our understanding of the extent of poverty and who is affected. However, as well as the State, employers also provides a range of benefits to those at work, notably free or subsidised accommodation, health insurance, childcare or other facilities, remuneration in the form of a company car and share options, and employer pension contributions. Since these mostly affect living standards higher up the income distribution, there is the danger that ignoring them while seeking to incorporate State non-cash benefits targeted on lower incomes could produce a misleading picture. We therefore look briefly at

derived as proportions of the mean will be affected, but much less than the incomes of the beneficiaries.

[2] This special redistributive analysis has been implemented by the Central Statistics Office with the 1973, 1980 and 1987 Household Budget Surveys (CSO 1980, 1984, 1995), but not so far with the 1994 HBS.

who receives these employer-provided benefits and illustrate their potential importance.

2.3 Conclusions

This study focuses on targeted non-cash benefits-in-kind provided by the State to specific groups, namely the various free schemes mostly aimed at the elderly and some other social welfare recipients, and free health care provided though the medical card system to the bottom third of the population. The main question to be addressed is whether failure to take these benefits into account seriously distorts measures of the extent of poverty, who is affected by poverty, and the effectiveness of the social protection system. The answer to this question will depend on how poverty itself is being measured. Poverty measures developed at the ESRI and incorporated into the National Anti-Poverty Strategy are based on household cash income and indicators of deprivation, and these indicators may capture a range of factors influencing the resources available to different households, including non-cash benefits would be just one. The key question is whether explicitly taking non-cash benefits into account in measuring poverty would give a very different picture.

3. THE "FREE SCHEMES" AND MEDICAL CARD ENTITLEMENT

3.1 Introduction

This study covers two distinct types of targeted non-cash benefit provided by the state to households. The first comprises schemes providing free electricity/gas, free TV licence, free travel and free telephone rental, and are known collectively as the Free Schemes. (We also include butter vouchers, now discontinued, and cash fuel allowances which have not heretofore been included in income). The second is the entitlement to free public health care under the medical card system of those falling below an income threshold. In this chapter we provide a brief description of each of these schemes, including eligibility requirements and entitlements.

3.2 The "Free Schemes"

FREE ELECTRICITY/FREE NATURAL GAS/FREE BOTTLED GAS ALLOWANCE

One of these three allowances is generally available to people living in the State aged 66 and over, who are in receipt of a social welfare type payment or who satisfy a means test (see DSFCA, 1998 for details). They are also available to carers and people with disabilities under the age of 66 who are in receipt of certain welfare type payments. In addition, widow and widowers aged from 60 to 64 whose late spouses had been in receipt of the "Free Schemes" retain that entitlement.

Eligible recipients must be living alone or only with a qualified adult, dependent children, a person with a disability or full-time carer. Since October 2000 these residency requirements have been relaxed for those aged over 75 and for carers in receipt of the Carers Allowance (and the 2001 Budget extended this to those aged over 70). These groups will qualify for all Free Schemes regardless of income or household composition.

The Electricity Allowance covers normal standing charges and 1,500 units of electricity each year. The Natural Gas and Bottled Gas Allowances confer equivalent values. Only one allowance is granted per household.

FREE TELEVISION LICENCE

Those who qualify for free electricity, free natural gas or free bottled gas are also entitled to a free television licence.

FREE TELEPHONE RENTAL

This benefit is available to all pensioners aged 66 and over who live alone or only with dependants and those aged 65 or under who are in receipt of disability or invalidity allowances. In addition to covering the line rental the allowance also covers 20 free call units in each 2 month billing period.

FREE TRAVEL

This benefit-in-kind is available to all those resident in the state aged 66 years or over and to all carers in receipt of the Carer's Allowance. Those aged under 66 receiving benefits for disability or invalidity or who are blind or severely visually impaired also qualify for free travel passes. The holders are entitled to free travel on all suburban bus and rail services and national rail and coach services. Restrictions to peak-time travel apply on city bus services. The travel pass also allows a partner or spouse to travel free if he/she is travelling with the holder. A *Companion Free Travel Pass* is available for certain categories of individuals who are unable to travel alone (see Guide to Social Welfare Services for further details) which allows the holder to have any one person aged 16 or over accompany him/her free of charge when travelling.

BUTTER VOUCHERS

Until recently, anyone who received social assistance payments was entitled to butter vouchers. In 1997 recipients were entitled to one voucher for themselves and one voucher for each dependant per month. Each voucher was worth 48p towards the cost of butter. The value of the butter vouchers has been decreasing since the early 1990s and the scheme was discontinued at the end of 1999.

FUEL ALLOWANCE (+ SMOKELESS FUEL ALLOWANCE)

This benefit is available to households dependent on social welfare benefits, including contributory pensions. To qualify the household must satisfy a means test. Only one allowance is paid per household and the allowance is paid for 26 weeks from mid-October to mid-April. Those living in areas where there is a requirement to use smokeless fuel receive an extra supplement to cover this expense. While this allowance is earmarked for fuel costs, beneficiaries receive the allowance in the form of a cash addition to their welfare payment, which they can allocate in any way they chose. However, these benefits have not been counted in household income (because receipt depends on the time of year the household is surveyed) and are included here to give as complete a picture as possible of the extra support provided to households.

3.3 Medical Card Entitlement

Medical Cards are issued to those considered by the regional Health Board to be unable to afford health care for themselves and their dependants without undue hardship. Entitlement to a medical card is based on a means test, but a person whose income exceeds the guidelines may still receive a medical card where the Health Board considers his or her circumstances to warrant it. The card covers the holder, his/her spouse and any dependent children. In 1997 the scheme covered approximately 34 per cent of the population (GMS, 1998a). Those in possession of a medical card are entitled to free GP services, prescribed drugs/medicines, in-patient services, out-patient hospital services, dental, ophthalmic and aural services and appliances.

The Budget for 2001 recently announced that medical cards will be made available to all those aged over 70 regardless of their income. This is a major change in eligibility requirements and will result in significant increases in coverage and costs, it is also likely to have a important consequences for the distribution of medical card expenditure.

These non-cash benefits play a significant part in the State's social expenditure. Table 3.1 shows that in 1997 spending on these non-cash benefits including the medical card amounted to 11 per cent of total welfare expenditure, up from 10 per cent in 1994. The extensions in the coverage of the Free Schemes during 2000 and 2001 will further increase expenditure in this area.

Table 3.1: Expenditure on Cash and Non-Cash Benefits, 1997

	1997 £'000
Expenditure on cash welfare	4,368,557
Expenditure on Free Schemes + Fuel Allow[a]	155,825
Expenditure on Medical Card[b]	388,604
Total Expenditure	4,912,986
Total Non-Cash	544,428
Non-Cash/Total	11.0%

Source: Department of Social Community and Family Affairs (1998).

[a] Does not include butter vouchers, which are funded by Department of Agriculture. Administrative costs are divided proportionately between cash and non-cash schemes.

[b] GMS spending only: does not include expenditure on hospital services.

Callan, Nolan and Whelan (1996), in reviewing the Commission on Social Welfare's minimum adequate income recommendations, looked at the importance of both additional cash payments – over and above basic weekly social welfare payments – and non-cash benefits to different types of beneficiaries. (As well as the non-cash benefits we have just described, Local Authority Differential Rents were included in their discussion.) They showed that in 1996, these extra benefits could add as much as 15-20 per cent to the basic weekly payment for some beneficiaries, notably the elderly or families depending long-term on Unemployment Assistance. Their illustrative examples bring out both that these extra benefits - including the non-cash elements with which we are concerned here – are quantitatively important, and that their impact varies widely across different groups of social welfare beneficiaries. Such conclusions clearly require assumptions about valuation of the non-cash benefits, the knotty issue to which we turn in the next chapter.

4. IMPUTING VALUES FOR THE FREE SCHEMES AND MEDICAL CARD ENTITLEMENT

4.1 Introduction

Estimating the cash value of non-cash benefits is not a straightforward matter, it is an exercise that involves facing both conceptual and data-related challenges. In this chapter we discuss the nature of these challenges and the approaches taken in studies elsewhere, and describe the way in which values for the State non-cash benefits covered in this study are derived and attributed to households in the 1997 Living in Ireland Survey.

4.2 Valuing Non-Cash Benefits

Difficulties in estimating the value to recipients of non-cash benefits arise first of all because we do not know whether households would have bought the same amount of the goods or services in question if they were not provided free or at a subsidised rate. Microeconomic theory suggests that, in general, recipients will place a value on non-cash benefits that is less than the market price of the good or service, because the recipient has no choice in its allocation. Efforts in the USA to estimate the value placed by recipients on in-kind transfers show that this may in some instances be considerably below market price, but this value is very difficult to estimate satisfactorily. However, a study of food stamps in the US suggests that where the item is a basic necessity and the in-kind transfer is smaller than the amount the household would normally spend on that good, the value to the recipient may be very close to the market price (Moffitt, 1989).

Research on the beneficiaries of the Free Schemes in Ireland suggests that individuals' expressed preferences are not always for cash over in-kind benefits (Quinn, 2000). Asked whether they would prefer to keep the non-cash payment or receive the cash equivalent, 79 per cent of survey respondents said they would prefer to keep the electricity allowance, 88 per cent said they would prefer to keep the free TV licence, 48 per cent would prefer to keep the free travel pass and 85 per cent favoured the free telephone allowance.[3] Quinn's study also highlighted a number of reasons

[3] The total percentages included those who expressed no preference, the proportion that favoured a cash payment was 13 per cent in the case of the electricity allowance, 3 per cent for the TV licence, 36 per cent for free travel and 5 per cent for the telephone allowance.

why people would chose the benefit-in-kind rather than cash, these included avoiding the problem of budgeting for large bills, a view that these benefits faced less risk of being taxed, and the belief that the value of benefits in the form of an entitlement to a particular service or good was not as susceptible to inflation as cash payments.

Quinn's research did not address the issue of the medical card but here too recipients may have good reason to prefer the non-cash benefit to a cash payment based on the average costs of running the service. Unlike the other non-cash benefits (except the travel pass), recipients' spending on the medical card is not limited, therefore if recipients believe that their medical costs might exceed the average, they are likely to prefer the medical card to a cash payment. This risk assessment is also likely to be one of the reasons why individuals buy private health insurance. Medical card recipients often emphasise the importance of the *security* it provides, which may add to its perceived value but is difficult to put a price on (Russell and Corcoran, 2000). The absence of the ceiling on health spending on the medical card raises issues about whether this benefit leads to over-consumption; there is evidence that GP visiting rates for those with medical card cover are higher than for the rest of the population, but it is difficult to discern how much this simply reflects the greater incidence of ill-health among the elderly and those on low incomes (see Nolan, 1993).

The second general issue arises where the non-cash benefit covers something like health care, which is required to meet a specific contingency facing some households. In those circumstances, if we simply add the cost of the free or subsidised services supplied by the State to the household income of the people using those services on the basis of usage, it would imply that sick people are richer than the healthy at any cash income level. A more attractive approach is to seek to attribute to all those eligible for State provision extra income equal to the insurance premium they would have to pay to obtain the same level of cover in the market. Even assuming the cost of this cover can be established satisfactorily, a serious problem remains however. As Smeeding (1982) points out, entitlement to State health care for an elderly individual in the USA represents in effect an insurance policy worth almost enough by itself to bring that person above the official US poverty line. Such an individual could clearly still have insufficient cash income to buy enough food, clothing or shelter, which brings us back to the point that the in-kind transfer does not represent command over resources in the same way that cash income does. Since these problems loom particularly large in the case of health care, it is interesting to note current official US practice in this regard. Official poverty measures there now estimate the value of State-provided health care cover, but continue to look separately at cash incomes and at a resource measure including health cover.

Finally, the level of information available is also likely to pose problems in valuing non-cash benefits and attributing those values to households. A service which is in principle provided free to everyone, for example, may actually be readily available only in certain areas or to certain groups, and is in any case likely to be taken up to a varying degree by different people. For example, free travel may be of little use to those living in rural areas without public transport services, and even where it is

available it will be used more heavily by some people than by others. The level of information required to assess actual use patterns, much less the value placed on the entitlement by different people, may simply not be available.

Looking at the value of non-cash benefits for a set of hypothetical illustrative households, as in Callan, Nolan and Whelan (1996), has value but cannot hope to reflect the complexities of actual households in the population. Here we seek to estimate the value of non-cash benefits for a representative sample of actual rather than hypothetical households, taken from the 1997 Living in Ireland Survey. This was the fourth wave of the Living in Ireland panel survey, and sought to interview all members of households first interviewed in 1994. There was sizeable attrition between Waves 1 and 4: of the original 14,585 sample individuals, only 63 per cent (9,208) were still in completed Wave 4 households, with another 805 individuals having joined the sample at some point in the intervening years. The main reason for household non-response was refusal (ranging from 9 per cent of the eligible sample in Wave 2 to 6 per cent in Wave 4), while difficulties in obtaining forwarding addresses for those who moved also contributed to the non-response rate. The 1997 sample was weighted along a number of dimensions to account for attrition among the original sample and the addition of new individuals and households (where households in the original sample split or join new households) in the period between 1994 and 1997. Detailed validation suggested that attrition was not, however, associated with characteristics such as income or deprivation levels or social welfare recipiency, and appeared not to have a significant impact on the structure of the sample. The survey, and the extent and nature of poverty in the sample using cash income and non-monetary deprivation indicators, have been described in detail in Callan *et al.* (1999).

4.3 Imputing Values for the Free Schemes to Households in the 1997 Living in Ireland Survey

We now describe the way in which values for the State non-cash benefits covered in this study are derived and attributed to the households in the survey, focusing in this section on the free schemes and in the next section on medical card entitlement. For the most part, we know from the survey which households have benefited from the different non-cash benefits. In general terms, the value of most of these non-cash benefits is estimated as the average cost of provision per recipient, derived using published figures on total expenditure by the State and number of recipients per scheme. These values are then attributed to the households identified in the survey as beneficiaries of the scheme in question. We now discuss this procedure in detail scheme by scheme.

Average cost to the Department of Social, Community and Family Affairs of the free TV licence scheme works out at a value of £69 per household in 1997, marginally below the market price of £70. The difference between the cost and market price is not due to any price reduction to the Department from RTE but is due to claim-load turnover in the scheme, for example, individuals becoming eligible part way

through the year. We have decided to attribute the cost price of the benefits on the basis that claim turnover will also occur within our sample, and that attributing everyone the full price would overstate the amount of benefit in the system. Because the size of the difference between the cost and market price is so small this decision will have little effect on the results.

Households in the survey stating that they had benefited from this scheme in 1997 are each attributed an extra £69.21 per annum. Attributing this value to beneficiaries assumes that they would want a television even if the licence were not provided free. Ninety-seven per cent of Irish households had a colour television in 1997, therefore, this seems a reasonable assumption, although not all TV owners buy a licence.

The annual value of free telephone rental (plus the free call units) based on expenditure per recipient was £164 in 1997. Households in the survey stating that they had benefited from the free telephone rental scheme in 1997 are each attributed this figure. Once again, it is close but not equal to the market price for this service, which amounts to £159.[4] Possession of a telephone is not as common as TV ownership: in 1997, 86 per cent of Irish households had a telephone. Therefore, a certain percentage of recipients might not choose to buy this commodity if it was not provided free of charge.

The electricity, natural gas and bottled gas allowances have somewhat different costs per recipient, with the bottled gas refill allowance costing the State more per recipient than the other two schemes. Therefore, although these allowances are functionally equivalent, i.e. they supply free power in the form chosen by the household, they are attributed a different value. However, the costs of these goods also differ for private purchasers. Furthermore, because power is a basic necessity and for many households the amount provided free of charge is likely to be less than total usage, the value of these allowances is likely to be close to their face value. Recent research on electricity expenditure in Ireland (Conniffe, 2000) addresses the question of whether some households in receipt of the free electricity allowance would consume less than 1,500 units if this were not granted free. Conniffe (p. 181) estimates that across all recipient households, the *upper boundary* of welfare loss is in the region of 7 per cent of expenditure, that is if households had been given a cash transfer instead, in aggregate they would have spent 7 per cent less on electricity. As the author points out, this figure should be taken as an *upper bound* to the loss because it assumes there is no benefit from electricity consumption above the preferred level (p. 180). Those who introduced the benefit argued that the allowance provides for a minimum standard of heat and light, which recipients might deprive themselves if they were given a monetary benefit, and therefore, believed consumption above the preferred level up to this minimum should be encouraged (see Quinn, 2000; p. 70).

The Fuel Allowance is given directly to the consumer rather than deducted from utility bills. The regular fuel allowance is worth £5 per week and the smokeless fuel allowance is worth £3 per week. These

[4] The market price is based on a line rental charge of £10 per month, a unit charge of 9.5p and VAT at 21 per cent.

allowances are available for only 26 weeks per year, so 50 per cent of this weekly value is attributed as the average weekly value to households in the survey who report that they benefited from these schemes.[5]

Butter vouchers are given an imputed value equivalent to their face value, which stood at £0.48 per person per month in 1997. This assumes that all the vouchers were redeemed and that the recipients did not place a lower value on the vouchers because of the lack of choice on how to allocate this benefit.[6] Figures supplied by the Department of Social, Community and Family Affairs show that in 1994, 83 per cent of butter vouchers were redeemed, which suggests that our valuation is on the high side. There is no available evidence on whether this non take-up is evenly spread across recipients or concentrated among a limited percentage of households who do not redeem any of their vouchers. The Living in Ireland Survey identifies households benefiting from the scheme, but the number of butter vouchers received by the household is determined by the number of dependants, so the imputed value of this benefit for each household is the average per person multiplied by the number of eligible persons.

The provision of free travel cost the State an average of £64 for each beneficiary in 1997.[7] The unevenness of service provision across the country means that free travel passes will be of less value in rural areas than in urban areas with more public transport.[8] Furthermore, use of public transport is likely to vary depending on car ownership within the household, physical health and proximity of friends and relatives. However, because of lack of information on respondents' use of public transport we have attributed the average value to each beneficiary, irrespective of location and other factors. Information on free travel was collected at the household level in the survey, but where the household reported receiving this benefit, the average value was attributed to each member aged 66 and over.

Table 4.1 brings together the values attributed for these different schemes. Taken together, they can clearly represent a significant addition to the resources available to beneficiaries, of up to about £10 per week.

Table 4.1: Imputed Values of State Non-Cash Benefits in 1997

	Yearly Value*	Weekly Value*
	£	£
Free TV Licence	69.21	1.33
Free Telephone Rental	164.08	3.16
Free Travel	64.23	1.24
Free Electricity Allowance	137.63	2.65
Free Natural Gas	115.00	2.21

[5] The 2001 Budget has increased the duration of these benefits.

[6] Anecdotal evidence suggests that some retailers accept these vouchers in lieu of other goods, which might increase their value.

[7] The number of beneficiaries shown in the official statistics is higher than the number in the relevant age group in the population, because few travel passes are returned when the holder dies. This means that the average value calculated in this way is biased downward.

[8] The 1994-1995 Household Budget Survey shows that on average households spent £2.98 on bus and train fares per week. However, this figure varied from £5.75 in Dublin to £1.36 in the Midlands.

Free Bottled Gas	163.37	3.14
Fuel Allowance	130.00	2.50
Smokeless Fuel	78.00	1.50
Butter Vouchers (p.p)	5.75	.11

*Calculated on basis that there are 52.14 weeks per year and 4.34 weeks per month on average.

4.4 Imputing Values for Medical Card Entitlement to Households in the 1997 Living in Ireland Survey

Finally, we turn to free health care through the medical card scheme. Placing a monetary value on this benefit faces particularly severe conceptual and methodological problems as highlighted above. The medical card scheme is administered by the General Medical Services Board, which provides yearly accounts on the costs of running the service. In 1997, 1.22 million people in Ireland (approx. 34 per cent of the population) were eligible for a medical card under the GMS scheme. The average cost of delivering the service to each eligible person was £228 (General Medical Services Board, 1998a). However, this does not necessarily represent the value of the medical cards for those receiving it.

First, given that levels of health and illness, and consultation behaviour vary very substantially within the population, people do not make equal use of the health services. At one extreme, if an individual experiences no illness throughout the year the use value of the medical card would be close to zero, while someone with a chronic or serious illness will have much higher health costs and therefore, the medical card will have a much higher use value. However, as already noted, simply attributing a value on the basis of each individual's use of the health services would have the effect of making sicker people look richer.

An alternative strategy is to make adjustments for a broader group of individuals on the basis of average health needs. For example, health and health service usage varies with age, with the elderly having by far the greatest heath needs. Therefore, the "potential" value of the medical card can be adjusted according to the age group of the holder. The GMS provides figures showing spending on pharmacy services broken down by age group. In the following analysis these figures are used to calculate the estimated value of the medical card for individuals of different ages.

A second problem is the absence of a clear link between the cost to the State of delivering this service and its market value. The scheme is administered through a set of agreements with doctors and pharmacists. The majority of GPs are paid an annual capitation fee for each eligible patient regardless how often the patient avails of services. It is therefore possible that the cost of delivering the GP service is lower than the market cost. Fees paid to pharmacists and dentists under the scheme are also likely to be lower than those charged to private patients. Furthermore, the cost of the extra State subsidy for hospital services to those with medical card cover versus the rest of the population – because the latter pay some charges but the former do not – is not included in the calculation of total GMS expenditure under the medical card scheme.

One approach, implemented as noted above in some US studies, would be to estimate the insurance premium that a household would have to pay to obtain the same level of cover. However, health insurance schemes in Ireland have been designed mainly to cover in-patient services and in general have not covered the costs of GP visits, dental care or drug costs. More recently, schemes have been introduced to cover some

elements of out-patient care. These schemes offer a subsidy rather than a full refund for GP visits and also impose a high excess on claims for out-patient services.[9] Furthermore the schemes provide no subsidy for prescription costs and little or no coverage for routine dental costs. This coverage falls far short of the services supplied by the medical card, therefore, it would be unrealistic to take the price of such schemes as the market value of the medical card. A further problem in estimating a market price is that the GMS plays such a significant role in the Irish health care system that its presence is likely to influence pricing within the system more generally. A full market system would probably lead to different prices.

As well as the out-patient services provided through the GMS, those with medical card cover effectively receive an additional subsidy on hospital care, compared with the rest of the population. Those without medical card cover are obliged to pay a nightly Hospital In-Patient Charge. In 1997, the year to which our data refer this charge stood at £20 per night up to a maximum of £200 per year.[10] Although this charge is itself highly subsidised, it represents the cost of public hospital care to those without medical cards. Once again, though, the *ex post* value of this extra subsidy to a particular individual or household in a particular year will vary with the extent of use of the service.

We therefore value the medical card by estimating age-specific average costs of providing the service. For GMS services we base the age weights on the pattern of spending on pharmacy services across the age groups. A set of figures weighting for sex and age were also calculated, but the differences between the sexes within each age group were very small therefore we used age alone. For hospital services we use the average number of nights spent in hospital by those with medical card cover from the 1987 ESRI Household Survey. On average, medical card holders were found to have a higher incidence of hospital stays than non-holders (1.7 nights per year compared to 0.9 nights). The weights and the imputed value of the medical card for individuals based on these adjustments are presented in Table 4.2.

The average imputed value for individual medical card holders is £262, which works out at £5.03 per person per week. The estimated value of the card ranged from £1.23 per week for children aged between five and fifteen to £9.80 per week for individuals aged 65 and over.[11]

[9] In the 1999/2000 period the minimum excess per adult member for out-patient coverage from the VHI and BUPA was £175, and in both cases the maximum subsidy per GP visit was £15.

[10] The in-patient charge stayed the same between 1994 and 1997 but in 1998 was increased to £25 per night up to a maximum of £250.

[11] Our average imputed value is somewhat higher than the estimates produced by Goodbody Consultants (1998, p.58). Using a Survey of Health Service Usage among 260 unemployed individuals they estimate that the average monthly cost of GP visits and prescription drugs would be £15.50 per person (based on a estimated cost of £15 per GP visit and £20 per prescription), which is £3.57 per week. Part of the reason for the difference in estimates is likely to be the lack of adjustment for hospital costs in the Goodbody calculations. It should also be noted that Goodbody's use an even lower imputed value of £1.35 per week when calculating replacement rates (1998, Appendix A4). This figure is based on two GP visits and two prescriptions per person per year.

Table 4.2: Imputed Individual Value for Medical Card by Age, 1997

	% of National Average[a]	Mean Number of Hospital Nights[b]	GMS Value	Hospital Value	Total Yearly Value	Weekly Value
Under 5	23.4	0.98	£53.35	£19.54	£72.89	£1.40
5-15yrs	19.3	1.00	£44.01	£20.08	£64.09	£1.23
16-44yrs	63.6	1.43	£145.01	£28.70	£173.71	£3.33
45-64yrs	144.7	1.81	£329.93	£36.20	£366.13	£7.02
65 plus	195.6	3.24	£445.99	£64.80	£510.79	£9.80
All	100.0	1.72	£228.01	£34.42	£262.43	£5.03

[a] Figures based on the percentage of pharmaceutical costs spent on each age group (GMS, 1998b).

[b] Figures taken from 1987 Survey of Lifestyle and Usage of State Services.

In the 1997 Living in Ireland Survey, information on medical card coverage was collected for every member of the household, including children. The majority (56 per cent) of households in the sample had no medical card holders. Amongst households with at least one holder, the mean number of beneficiaries was 2.6. The value of the medical card for each household was then calculated by summing the estimates for individual members. As shown in Table 4.3, the mean imputed value of the medical card per household in 1997 was £600 per year and the median value was £511 per year.

Table 4.3: Imputed Yearly Value of Medical Card to Recipient Households, 1997

	Yearly £	Weekly £
Mean	600	11.52
Median	511	9.80
Mode	511	9.80
Minimum	64	1.23
Maximum	2,056	39.44

4.5 Conclusions

This chapter has discussed approaches to estimating the cash value of non-cash benefits, and described the way in which values for the State non-cash benefits covered in this study are derived and attributed to households in the 1997 Living in Ireland Survey. Essentially, these values are based on the average cost per beneficiary to the State of providing the benefit in question, and beneficiaries are identified on the basis of information obtained in the survey. For entitlement to free health care under the medical card scheme, the average cost of providing the service differentiated by age group is used in imputing values to households. These valuations, while crude, will allow the broad scale and pattern of benefit to be studied.

5. WHO BENEFITS FROM THE FREE SCHEMES AND MEDICAL CARD ENTITLEMENT?

5.1 Introduction

In this chapter we look at the distribution of the estimated benefits under the free schemes and medical card system described in the previous chapter, and seek to establish how well these benefits are targeted at the most needy. We also examine how the pattern of their distribution compares to income from other sources. This analysis is carried out by analysing the distribution of these imputed values among the households responding to the 1997 Living in Ireland Survey.

5.2 The Pattern of Benefits by Income

We look first at the allocation of these non-cash benefits across the income distribution. The initial step in this analysis is to divide the sample of households into deciles on the basis of their equivalised cash income (excluding benefits-in-kind). We then look at the proportion of total income of different types going to each of these decile groups. The first column in Table 5.1 shows that the poorest 10 per cent of households receive only 4 per cent of total cash income, while the top 10 per cent of households receive 22 per cent of total income. When household size is taken into account (i.e. using equivalised income), the share held by the bottom 10per cent of households declines slightly to 3.6 per cent, while the share held by top 10 per cent rises to a quarter of the total.

We now examine the distribution of spending on the free schemes (+ fuel allowances) and the medical card. We see that both types of non-cash benefits are strongly concentrated at the bottom end of the income distribution. Looking at the bottom decile the medical card appears to be somewhat more redistributive than the free schemes, as 18 per cent of medical card spending goes to this group compared to 11 per cent of expenditure on free schemes and fuel allowances. However, if we look at the bottom 30 per cent of the income distribution we see little difference: 61 per cent of medical card spending and 65 per cent of other State non-cash benefits go to these households

Taking the different types of non-cash benefits together, the poorest 30 per cent of households receive 62 per cent of these non-cash transfers, whereas the richest 30 per cent receive only 4 per cent. It is worth noting that households in the second and third deciles receive a greater

proportion than the bottom income group: very low current income is however not always a good indicator of sustained low command over resources, which as we shall see has major implications in the context of assessing the anti-poverty effectiveness of these schemes.

Table 5.1: Distribution of Cash and Non-Cash Across Equivalised Income Deciles, 1997

Decile (Equiv. Cash income)	% of Non-Equiv. Income	% of Equivalised Income	% Free Schemes & Fuel Allowance	% of Medical Card Benefit	% of State Non-Cash Income	% of Cash Transfers
	%	%	%	%	%	%
1	3.8	3.6	11.3	17.7	15.9	15.5
2	3.7	4.6	28.7	19.6	22.2	15.7
3	5.0	5.2	24.8	23.2	23.7	20.6
4	6.5	6.1	13.8	15.3	14.9	13.7
5	9.1	7.5	7.5	9.8	9.1	11.8
6	10.3	9.0	4.0	6.3	5.6	7.6
7	12.2	10.7	3.6	5.2	4.7	6.9
8	12.8	12.9	4.7	1.6	2.5	3.9
9	14.9	16.0	1.1	0.6	0.7	2.6
10	21.7	24.5	0.4	0.7	0.6	1.8

It is particularly relevant to compare the distribution of State non-cash and cash transfers. Table 5.1 also shows this comparison, and we see that the non-cash benefits provided by the State, taken together, are in fact more concentrated towards the bottom of the income distribution than total cash transfers. For example, the poorest 30 per cent of households receive 52 per cent of cash transfers from the State, compared with 62 per cent of total non-cash transfers. Similarly, the wealthiest 30 per cent of households get 8 per cent of cash payments but only 4 per cent of non-cash transfers. However, given the difference in the scale of total spending on these two types of benefits, cash transfers are much more important in terms of overall impact on income redistribution and poverty.

5.3 The Pattern of Benefits by Labour Force Status

It is also interesting to explore the distribution of different income types by the nature of the labour force participation of the household, which will determine the sources from which household income come. Table 5.2 looks at the distribution in terms of the labour market status of the household reference person who is defined as the owner or tenant of the accommodation, or if a couple are jointly responsible the older of the two. We see that over one-third of non-cash benefits go to retired households, while a further 29 per cent goes to households where the reference person is working full-time in the home (this group includes both elderly and younger single parent households).[12] This distribution is hardly surprising given the eligibility rules for the free schemes and the higher value that we have given to medical cards held by those aged over 65. Households

[12] Forty-six per cent of household reference persons who describe their employment status as home duties are aged 65 or over, and 98 per cent are female.

headed by someone who is unemployed or ill/disabled also receive a greater share of non-cash than their proportion in the population would suggest.

Table 5.2: Distribution of Cash and Non-Cash by Labour Market Status of Household Reference Person, 1997

	House-hold Income	Equiv-alised HH Income	Free Schemes (& FA)	Medical Card	Total State Non-Cash Income	Cash Transfers	% in Pop.
	%	%	%	%	%	%	%
Employee	51.4	52.1	1.4	10.3	7.8	13.2	40.7
Self-Employed	12.3	11.3	1.5	2.8	2.5	2.1	7.9
Farmer	7.4	6.3	4.6	7.2	6.4	6.1	6.7
Unemployed	4.7	4.3	6.2	15.3	12.7	14.7	7.6
Ill/Disabled	2.0	1.8	4.7	6.6	6.1	7.1	3.3
Retired	12.4	13.5	45.4	30.8	34.9	28.5	16.8
Home Duties	9.1	10.0	35.9	26.1	28.9	27.3	16.2

Comparing non-cash and cash transfers from the State, households where the reference person is retired or in home duties receive a greater share of total non-cash than cash transfers. This difference arises from the distribution of spending on the free schemes rather than the medical card. The distribution of medical card spending across labour force status categories is very similar to that of cash transfers, whereas the other non-cash benefits are rather more concentrated among the retired and home duties categories than cash benefits, and are much less likely to go to employees.

5.4 The Pattern of Benefits by Age

Table 5.3 shows the share of different income types going to households in the three different age categories. As anticipated households with an elderly reference person receive over half of all non-cash income: they receive 45 per cent of medical card income and 78 per cent of other non-cash benefits. Cash-transfers are more evenly distributed across the age groups, however the over 65s still receive a substantial share compared to their percentage in the population.

Table 5.3: Distribution of Cash and Non-Cash by Age of Household Reference Person, 1997

	Household Income	Equivalised HH Income	Free Schemes (& FA)	Medical Card	Total State Non-Cash	Cash Transfers	% in Pop.
	%	%	%	%	%	%	%
< 45	45.2	47.7	20.4	9.0	17.2	27.1	42.0
45-64	40.4	35.0	34.2	13.0	28.1	32.5	34.5
65 plus	14.4	17.3	45.4	78.0	54.7	40.4	23.5
	100.0	100.0	100.0	100.0	100.0	100.0	100.0

5.5 The Pattern of Benefits by Household Composition

Finally, Table 5.4 examines the distribution of different income sources by household composition. In this classification we define children as all those under the age of 18 (this differs from the age cut-off used in the equivalence scales described below). This analysis reveals that non-cash income goes disproportionately to adult-only households especially one adult and two adult households. These categories are likely to include most of the elderly population. The concentration in adult-only households is strongest for the free-schemes plus fuel allowances but is also noticeable for medical card expenditure. Households with children obtain very little of the expenditure on non-cash benefits: as a whole they receive 30 per cent of non-cash "income" even though they represent 43 per cent of households. This means that these benefits can play little role in reducing the high poverty levels among large families and lone parent families, as we shall see in the following chapter.

Table 5.4: Distribution of Cash and Non-Cash by Household Composition, 1997

	Household Income	Equiv. HH Income	Free Schemes (& FA)	Medical Card	Total State Non-Cash	Cash Transfers	% of HHs
	%	%	%	%	%	%	%
1 adult	20.8	10.0	49.9	20.7	29.0	20.2	22.6
2 adults	25.3	20.2	29.7	24.6	26.0	22.3	21.6
3 or more adults	14.6	18.8	7.2	17.5	14.6	16.4	12.8
2 adults 1 child	8.3	8.2	2.0	3.9	3.4	5.4	7.6
2 adults 2 children	11.0	12.9	0.7	3.8	2.9	4.2	10.4
2 adults 3 children	6.7	9.1	1.8	3.7	3.1	5.0	6.6
2 adults >3 children	1.8	2.8	1.1	3.2	2.6	2.9	2.7
1 adult + children	2.6	2.0	2.2	3.6	3.2	6.0	3.9
Others with Children	9.0	16.0	5.4	19.0	15.1	17.5	11.7

5.6 Conclusions

In this chapter we have examined the distribution of the estimated benefits under the free schemes and medical card system among households in the 1997 Living in Ireland Survey, and compared this with income from other sources. We found that benefits from the free schemes and the medical card scheme were strongly concentrated at the bottom end of the income distribution: 61 per cent of medical card spending and 65 per cent of other State non-cash benefits go to households in the bottom 30 per cent of the distribution. This was slightly more concentrated towards the bottom of the income distribution than total cash transfers. However, the non-cash benefits were much more targeted at assisting some low-income households rather than others, with the working poor, the unemployed and large families not benefiting nearly as much as the elderly. We explore in the next chapter the implications of this distributional pattern for the impact of these benefits on household poverty.

6. THE FREE SCHEMES, MEDICAL CARD ENTITLEMENT AND POVERTY

6.1 Introduction

Having described the imputation of cash values for the state non-cash benefits on which the study focuses and the profile of the households that benefit from them, we now go on to assess the impact of taking these benefits into account on our understanding of the extent and nature of poverty in Ireland. We do this by looking at the impact of attributing these imputed values to sample households on the extent and composition of poverty in the 1997 Living in Ireland Survey.

The results of such an analysis will of course depend on how one is measuring poverty in the first place, as brought out in the discussion in Section 6.2. We employ the approach described in detail in previous ESRI studies (see for example Callan *et al.,* 1996; 1999), complementing relative income with non-monetary indicators of deprivation in measuring poverty. Low income on its own will not always be a reliable indicator of exclusion due to lack of resources, for a variety of reasons, and it is exclusion due to lack of resources which constitutes poverty as generally understood and as defined in, for example, the National Anti- Poverty Strategy. Thus we look here at the implications of non-cash benefits for both relative income poverty and for "consistent poverty", the latter being measured in terms of a combination of low income and deprivation.

6.2 Measuring Poverty

Previous publications have described in detail the derivation of relative income poverty lines, taken as proportions of average disposable equivalised income, and the pattern of relative income poverty these reveal with alternative poverty lines and equivalence scales for the 1994 and 1997 Living in Ireland Survey sample (see Callan *et al*., 1996; Layte *et al*., 2000). Here we once again use 40, 50 and 60 per cent of mean income as poverty lines, and for simplicity concentrate in the text on one equivalence scale, applying a value of one to the first adult in the household, 0.66 for additional adults and 0.33 for each child (under 14 years).

Previous studies based on ESRI Household Surveys have shown that low income can usefully be complemented by measures incorporating in addition direct indicators of deprivation. A measure of poverty employing both relatively low income and basic deprivation, which has proved

particularly useful, is described in detail in Callan, Nolan and Whelan (1993) and Nolan and Whelan (1996). The National Anti-Poverty Strategy (NAPS) has framed its global poverty reduction target in terms of this combined measure of what it terms "consistent" poverty. It is therefore particularly important to be able to assess how explicitly taking non-cash benefits into account affects this measure of poverty.

This measure identifies as poor those falling below relative income poverty thresholds and experiencing generalised deprivation. Up to the present, the indicators of generalised deprivation employed for this purpose relate to the enforced lack of a number of basic items, set out in Table 6.1. (For most of the items, households doing without the item are asked directly whether this is because they cannot afford it.) Households reporting deprivation of one or more of these items due to lack of resources and with cash income below the different relative income poverty lines may then be identified as poor. The levels of poverty produced by this combined poverty measure are significantly lower than those based on relative income poverty lines alone, with that gap widening from 1994 to 1997. The set of indicators used to capture generalised deprivation will need to expand over time in order to continue to reflect societal views about minimum standards: the issues which arise is seeking to do so have been discussed in Callan *et al.* (1999).

Table 6.1: Indicators of Basic Deprivation in the Living in Ireland Surveys

New Not Second-hand Clothes
A Meal With Meat, Fish or Chicken Every Second Day
A Warm Waterproof Overcoat
Two Pairs of Strong Shoes
A Roast or its Equivalent Once a Week
Had Day in the Last 2 weeks Without a Substantial Meal
Had To Go Without Heating During the Last Year Through Lack of Money
Experienced Debt Problems Arising from Ordinary Living Expenses or Availed of Charity

6.3 State Non-Cash Benefits and the Extent of Measured Poverty

When we adjust household incomes to include the estimated value of the free schemes and medical card entitlement using the imputed values outlined above, mean equivalised income and the relative poverty lines can then be re-calculated. Table 6.2 shows first that adding imputed cash values for the "free schemes" (but not the medical card) to household income leads to a reduction in the proportion of households falling below each of the relative income lines. This reduction is slight with both the 40 per cent and 60 per cent relative lines, but the percentage falling below the 50 per cent poverty line falls by 5 percentage points.

Table 6.2: Percentage of Households Below Relative Income Poverty Lines Excluding and Including State Non-Cash Benefits, and Percentage in "Consistent Poverty", 1997

Percentage of Mean Equivalised Income	Cash Income	Income + Free Schemes*	Income + Free Schemes + Medical Card	Cash Income Plus Experiencing Basic Deprivation
	Percentage Households Below Line			
40 per cent line	6.3	6.1	4.8	3.1
50 per cent line	22.4	17.5	14.4	6.7
60 per cent line	34.3	33.9	29.8	9.7

*In all the tables in this chapter "free schemes" includes butter vouchers and fuel allowances.

When the imputed value of the medical card is included along with other non-cash benefits, the table then shows that the impact on household poverty levels is more substantial. The incidence of household poverty decreases considerably with all three poverty lines. The percentage below the 40 per cent line falls least, by about 1 percentage point, but the percentage below half average income falls by a further 3 percentage points while with the 60 per cent line the decline is about 4 percentage points. Overall, including both the free schemes and the medical card leads to a reduction of between one-sixth and one-third in the proportion of households below relative income poverty lines, with the greatest impact at the 50 per cent line.

However, when we turn to the extent of poverty as reflected in the measure combining both low (relative) income and basic deprivation, the contrast is very different. "Consistent poverty", in this sense, is already much lower than relative income poverty; indeed, it is a good deal lower than the proportions falling below the relative income lines even when the imputed values for state non-cash benefits have been added to cash incomes. To bring out the difference, half average income is often the relative income line on which attention is focused, and about one in five households are below that line in cash terms. Adding imputed valuations for both free schemes and medical card entitlement brings this figure down to one in seven. However, the number in consistent poverty using 60 per cent of average equivalised cash income and the basic deprivation indicators listed in Table 6.1, on which most emphasis has been placed in previous work, is one in ten. Taking non-cash benefits into account by simply adding imputed values to cash incomes would not thus reduce the measured extent of poverty below that indicated by the combination of low cash income and basic deprivation.

This is the case because that combination of non-monetary indicators with income is itself intended to compensate for some of the limitations of cash income and capture broader command over resources. One of those limitations is precisely that the role of non-cash benefits is missed by cash income alone, but one might then expect the extent of measured deprivation to reflect *inter alia* the impact of the free schemes and health services entitlements. Cash income at a point in time also fails to reflect the impact on current command over resources of the way assets have been accumulated and eroded over time, so its limitations, and the contribution made by incorporating deprivation indicators into the consistent poverty measure, are broader.

6.4 State Non-Cash Benefits and the Profile of Poverty

We can now turn from the extent of poverty to its composition: would taking the state non-cash benefits being studied here directly into account change our understanding of who is most vulnerable to poverty? To answer this question we look at how relative income poverty rates for different types of household are affected by the addition to income of imputed values state non-cash transfers, and compare the results with the profile of those in consistent poverty.

We focus first on households categorised by the employment status of the household reference person. Table 6.3 shows the poverty rate for each category, first based on relative income poverty lines using cash income, then relative lines adding imputed values for the free schemes, then relative lines adding imputed values for those schemes and medical card entitlement, and finally the poverty rates when the 60 per cent relative income line for cash incomes is combined with experience of basic deprivation. We see first that including valuations for the free schemes in income, but not the medical card, produces lower poverty rates than cash income alone for households headed by someone who is retired or working full-time in the home. When values for the medical card are then added the income poverty rates for these groups decline further, and there is now also some reduction for the unemployed. This reflects the pattern we saw in the previous section in terms of the types of household benefiting from those transfers. The scale of the decline is pronounced for these groups: for the retired, the percentage below the 50 per cent line goes from 23 per cent with cash income to 13 per cent including free schemes and 8 per cent also including the medical card.

Table 6.3: Risk of Poverty Using Different Measures of Poverty by Labour Force Status of Household Reference Person

	Cash Incomes			Plus Free Schemes			Plus Free Schemes and Medical Card			Consistent Poverty
	40%	50%	60%	40%	50%	60%	40%	50%	60%	
		%			%			%		%
Employed	1.0	4.0	8.3	1.1	4.0	8.4	1.1	4.1	8.3	2.6
Self-employed	8.3	17.1	23.4	9.2	15.6	24.8	9.2	14.8	24.9	3.4
Farmer	6.7	16.3	31.6	6.7	16.0	30.6	4.0	14.2	24.9	2.3
Unemployed	30.1	54.9	71.0	30.1	55.1	71.5	21.6	48.1	66.4	35.7
Ill/disabled	17.9	60.4	79.0	14.3	61.1	78.8	13.0	54.3	72.9	32.6
Retired	2.0	23.3	45.4	1.9	13.2	42.2	1.4	7.6	30.4	7.7
Home duties	7.0	48.6	67.2	6.0	28.5	66.9	4.7	20.9	60.2	17.2
All	6.2	22.3	34.2	6.0	17.3	33.7	4.8	14.2	29.6	9.4

Once again, though, the table also shows that the poverty rates for these groups using the consistent poverty measure were already much lower than those based on cash income alone. For the retired, the consistent poverty rate using the 60 per cent cash line and basic deprivation was in fact 8 per cent, identical to that produced by the addition of imputed values to cash income. Likewise for the "home duties" category, the addition of imputed non-cash values brings the relative income poverty rate at the 50 per cent line down from almost 50 per cent to 20 per cent, but the consistent poverty rate is 18 per cent. For households with an unemployed or ill/disabled reference person, the inclusion of non-cash benefits also reduces relative income poverty rates, but consistent poverty rates are considerably lower. For households where

the reference person is self-employed or a farmer, where the inclusion of non-cash benefits makes little difference, consistent poverty rates are also considerably lower than relative income rates.

The relatively large effects among households headed by those who are retired or ill/disabled can be accounted for by the qualification rules for non-cash benefits outlined earlier. For many of these benefits, eligibility is based on old age or receipt of disability or invalidity benefits. This explanation is also likely to apply to the "full-time home duties" category, which includes many elderly female-headed households. Despite these substantial changes in the income poverty rates, it is worth noting that very large differences in the poverty risks of different household types remain.

The impact on the composition of the poor of incorporating imputed non-cash values into the income measure, compared with the consistent poverty measure, is brought out by looking at the incidence rather than risk of poverty by labour force status in Table 6.4. We see for example that the retired and home duties categories account for more than half the households below half average cash income. When imputed income for State non-cash benefits is added to cash income, this falls to only one-third. By contrast, these two groups account for 44 per cent of those below the 60 per cent cash relative line and experiencing basic deprivation.

Table 6.4: Composition of Households Below Different Poverty Thresholds by Labour Force Status of Household Reference Person

	Cash Income			Cash Plus State Non-Cash Benefits			Consistent Poverty
Poverty Line	**40%**	**50%**	**60%**	**40%**	**50%**	**60%**	**< 60% Cash + Basic Deprivation**
		%			**%**		**%**
Employed	11.4	7.2	9.9	9.5	11.8	11.4	11.6
Self-employed	6.7	6.1	5.4	15.1	8.3	6.7	2.8
Farmer	5.6	4.9	6.2	5.6	6.7	5.6	1.6
Unemployed	17.0	18.6	15.7	34.0	25.6	17.0	28.3
Ill/disabled	8.2	9.0	7.7	8.9	12.7	8.2	10.3
Retired	17.3	17.6	22.4	4.9	9.0	17.3	13.8
Home duties	32.9	35.2	31.8	15.7	23.8	32.9	29.7
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Very much the same picture appears when we focus directly on age. Table 6.5 looks at poverty rates by the age of the household reference

person, using the different poverty standards. This shows that adding state non-cash benefits has little impact on the relative income poverty rates of households headed by someone aged under 65. In contrast, we see substantial reductions in relative income poverty rates among households headed by someone aged 65 or over with the 50 per cent line. The proportion of these households below half average income falls from 35 per cent to 14 per cent when we take into account non-cash benefits other than the medical card, and down to 7 per cent when imputed values for medical card entitlement are also included. With the 60 per cent relative income line the reduction in the poverty rate for the elderly is much less dramatic, with the inclusion of imputed values for the free schemes making little difference so the percentage below the line still remains as high as 55 per cent. Adding in imputed values for medical card entitlement does have a significant impact, however, bringing the percentage of elderly households falling below the 60 per cent line down to 40 per cent.

Table 6.5: Risk of Poverty Using Different Measures of Poverty by Age of Household Reference Person

	Cash Income Only			Plus Free Schemes			Plus Free Schemes and Medical Card			Consistent Poverty
	40%	50%	60%	40%	50%	60%	40%	50%	60%	
		%			%			%		%
< 45	8.2	16.8	23.0	8.0	16.8	23.2	6.5	16.0	23.1	9.6
45-64	6.4	20.9	32.6	6.5	20.6	32.8	4.8	17.3	30.9	10.0
65 plus	2.8	34.7	57.1	2.2	14.0	54.5	1.8	7.2	40.3	9.5
All	6.3	22.4	34.3	6.1	17.5	33.9	4.8	14.4	29.8	9.7

Note: Due to a strong clustering of incomes around state pension levels, poverty rates among the elderly can be very sensitive to the placement of the poverty line. If a poverty line is just above pension levels a small increase in income will lead to a big change in the proportion of households below the poverty line.

While the extent of measured poverty is much lower with the consistent poverty measure, the pattern across the age groups is more like the "cash plus free schemes" results than either the cash alone or the cash plus free schemes plus medical card entitlement results. In other words, the consistent poverty measure suggests that the poverty rate for the elderly is about average, and that there is not in fact much variation across the age ranges in poverty. This is quite different to either the cash-based relative lines – which show poverty rates for the elderly as well above average – or those including both free schemes and medical card entitlement, which show poverty rates for the elderly as well below average.

This is reflected in the differing profiles of the poor by age of household reference person, shown in Table 6.6. Whereas elderly households comprise over one-third of those below half average cash income, they account for only 12 per cent of those below that relative line when both free schemes and the imputed values for the medical card are included. This contrasts with about one-fifth of those below the 50 per cent line when free schemes only are included, and about one-quarter of those in consistent poverty.

Table 6.6: Composition of Households Below Different Poverty Thresholds by Age of Household Reference Person

	Cash Income Only	Plus Free Schemes	Plus Fee Schemes and Medical Card	Consistent Poverty

	40%	50%	60%	40%	50%	60%	40%	50%	60%	
		%			%			%		%
< 45	54.5	31.6	28.2	54.8	40.5	28.8	56.5	46.8	32.6	41.8
45-64	34.9	32.1	32.8	36.6	40.6	33.4	34.5	41.5	35.7	35.4
65 plus	10.6	36.3	39.0	8.6	18.8	37.8	9.0	11.7	31.7	22.9
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Turning to household composition, Table 6.7 shows that in terms of cash incomes the rates of relative income poverty are highest among households comprising one adult living alone, single parent households, and couples with 4 or more children. With the 50 per cent relative income line, adding in values for the free schemes has most impact on single adult households, where the poverty rate falls from 40 per cent to 20 per cent. This group includes many elderly households, so this effect once again reflects the age-targeted nature of the benefits.[13] It is worth noting, however, that at the 60 per cent line there is virtually no change in the pattern of poverty rates, even for this group. Addition of imputed values for the medical card reduces poverty rates for both one-adult and two-adult households, at both the 50 per cent and 60 per cent relative lines.

Table 6.7: Poverty Rates with Different Poverty Thresholds by Household Type

	Cash Income			Plus Free Schemes			Plus Medical Card			Consistent Poverty
	40%	50%	60%	40%	50%	60%	40%	50%	60%	
		%			%			%		%
1 adult	3.4	40.1	51.7	2.8	20.3	50.8	3.4	14.3	41.9	12.4
2 adults	3.6	12.5	30.8	3.2	9.8	29.2	1.1	6.1	21.5	6.2
3 or more adults	3.0	8.4	19.5	3.0	8.6	19.1	2.9	7.0	17.6	4.9
2 adults 1 child	5.8	17.9	23.0	5.8	17.9	23.0	5.1	16.7	21.6	6.9
2 adults 2 children	6.2	12.0	16.6	6.2	12.0	16.9	4.7	10.8	16.9	3.9
2 adults 3 children	13.9	24.4	33.3	13.8	24.4	33.5	6.6	22.1	33.3	16.7
2 adults 4+ children	26.3	44.0	59.9	26.3	43.7	59.9	20.2	38.7	60.0	32.8
1adult + kids	22.4	42.9	48.9	22.4	42.9	48.9	20.4	42.8	48.9	14.4
Others with kids	6.6	21.2	36.6	7.2	21.9	37.2	6.6	20.2	36.7	12.9
	6.3	22.4	34.3	6.1	17.5	33.9	4.8	14.4	29.8	9.7

The impact this has on the profile of the type of households identified as poor by the different measures is shown in Table 6.8. We see that the major impact of including imputed values for non-cash benefits is to reduce the importance of single-adult households among the poor. The table also shows that this is the impact of moving from cash-based relative income lines to the consistent poverty measure incorporating non-monetary deprivation indicators.

Table 6.8: Composition of Households Under Poverty Thresholds by Household Type

[13] Half of all single person households in the sample consist of a respondent aged over 64.

	Cash Income			Plus State Non-Cash Benefits			Consistent
	40%	50%	60%	40%	50%	60%	Poverty
		%			%		%
1 adult	12.2	40.5	34.1	16.0	22.5	31.8	28.2
2 adults	12.3	12.1	19.4	5.0	9.2	15.6	14.0
3 or more adults	6.2	4.8	7.3	7.6	6.2	7.5	6.6
2 adults 1 child	7.1	6.1	5.1	8.2	8.8	5.5	5.5
2 adults 2 children	10.3	5.6	5.0	10.3	7.8	5.9	4.2
2 adults 3 children	14.5	7.2	6.4	9.1	10.1	7.4	11.4
2 adults 4+ children	11.2	5.2	4.7	11.2	7.2	5.4	9.3
1adult + kids	13.9	7.5	5.6	16.6	11.7	6.4	5.5
Others with kids	12.3	11.1	12.5	16.0	16.5	14.4	15.4
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0

To summarise, then, our understanding of the types of households most affected by poverty – and thus of the key processes at work – would be quite different if we simply replaced cash-based relative income poverty lines with the corresponding relative lines incorporating imputed values for the free state schemes and medical card entitlement. Poverty rates for the elderly, in particular, would be much lower and the elderly would comprise a much smaller proportion of the poor. However, the measure of consistent poverty which relies on both cash income and non-monetary indicators of deprivation has already provided quite a different picture to the cash-based lines in terms of composition. That combined measure already served to reduce poverty rates for the elderly in particular below those shown by cash-based relative income lines, because they add to the information being used to measure the resources available to households to avoid exclusion. This brings out the importance of a central point made across a variety of ESRI studies over the past decade or more, that current (cash) income is a partial and incomplete measure of resources and thus not on its own a satisfactory indicator of living standards and poverty.

The profile of poverty across labour force status categories, age and household composition shown by the consistent poverty measure still differs in some important respects from that produced by relative income poverty lines after the addition of imputed values for the free schemes and medical card entitlement. This is hardly surprising, given that these imputed values are estimates subject to a variety of qualifications outlined earlier, and that the consistent poverty measure is in any case seeking to capture an even broader range of influences on the resources available to households, notably savings and assets accumulated over time. These qualifications about the imputed values used in this exercise are most pronounced in the case of medical card entitlement. Indeed, as we pointed out earlier, the fact that we are imputing higher values to types of household who utilise the health services more heavily, without being able to adjust for their greater needs, points a fundamental problem in the analysis of health care provision which has bedevilled research in this area. This undoubtedly imparts a downward bias to estimates of relative income poverty rates for the elderly, for example. Imputing values for the free schemes is more straightforward, though not entirely unproblematic, and adding these values but not medical card entitlement to cash incomes produces a profile of the poor closer to the consistent poverty measure.

6.5 Expanding the Income Element of the Consistent Poverty Measure

Finally, relative income forms one element in the combined low income and deprivation consistent poverty measure, and this could be expanded to incorporate the imputed values for State non-cash benefits. When we do so – in other words combine the expanded income measure with the basic deprivation indicators – the numbers then identified as being on low income and experiencing basic deprivation are shown in Table 6.9. When compared with the corresponding results using cash income and basic deprivation, we see that including both sets of State non-cash benefits leads to a modest reduction in the percentage of households both falling below the relative lines and experiencing basic deprivation. If only the free schemes are taken into account – and the particular problems with adding imputed values for medical card entitlement have been emphasised – then the percentage below the 60 per cent line and experiencing basic deprivation falls only from 9.7 to 9.1 per cent.

Table 6.9: Percentage of Households Below Relative Income Lines and Experiencing Basic Deprivation Excluding and Including State Non-Cash Benefits, 1997

% of Mean Equivalised Income	Cash Income	Income + Free Schemes	Income + Free Schemes + Medical Card
	% of Households Below Line and Experiencing Basic Deprivation		
50 per cent line	6.7	5.7	5.5
60 per cent line	9.7	9.1	8.3

6.6 Conclusions

This chapter has assessed the impact of incorporating benefits from the free schemes and medical card directly into the measurement of poverty on our understanding of the extent and nature of poverty in Ireland. We do this by looking at the impact of attributing these imputed values to sample households on the extent and composition of poverty in the 1997 Living in Ireland Survey. The results depend on how one is measuring poverty in the first place. Simply adding imputed values for the "free schemes" and medical card entitlement to cash income and recalculating relative income poverty rates was seen to substantially reduce those poverty rates overall. This reduction was most pronounced among the elderly, and the elderly would on that basis become much less important among the poor.

However, the contrast was much less marked when the comparison was with the poverty measure developed at the ESRI incorporating both low income and experience of basic deprivation – the approach currently adopted in the National Anti- Poverty Strategy's global poverty reduction target. With this "consistent poverty" measure, poverty rates were already significantly lower than those shown by relative income lines and the elderly already comprised a significantly smaller proportion of the poor than they did with those income lines. This reflects the fact that the deprivation element of the measure helps to capture influences on a household's command over resources going beyond current income, with the free schemes and medical card entitlement being one – though only one – of these factors.

We also examined the impact on this consistent poverty measure of broadening the income element to include estimates values for these State non-cash benefits. We saw that in 1997 this resulted in a modest reduction in the percentage of households both below relative income lines and experiencing basic deprivation. There are particular problems with simply adding imputed values for free health care to income, and this reduction was particularly modest when only the estimated values for the free schemes were added to household incomes.

7. NON-CASH BENEFITS FROM EMPLOYERS

7.1 Introduction

The point was made in Chapter 2 that, apart from the free schemes and medical card system, households benefit from a wide range of other free or subsidised goods and services from the State, such as housing, education, healthcare, and public transport. Estimating the value of many of these benefits/services is even more difficult than the ones we have covered in this study, which are in many respects nearer to cash income.[14] In any case, measures of poverty that incorporate non-monetary indicators of deprivation already provide one way of capturing such influences on command over resources. However, in concluding this study we do look briefly at another type of non-cash benefit, namely benefits-in-kind provided by employers. These are also closer to cash than for example free education, but more importantly they are concentrated in precisely that part of the income distribution that does not benefit greatly from the free schemes and medical card entitlement, namely those on higher incomes. It is therefore important to assess the extent to which looking at one side of the coin – the free schemes and medical card – without the other – employer benefits – could produce a misleading picture.

7.2 Imputing Values for Employer Benefits to Households

The 1997 Living in Ireland Survey contained a series of questions on the receipt of a limited range of fringe benefits from employment: occupational pension, health insurance, sport/leisure facilities, childcare, and free/subsidised accommodation. Respondents working more than 15 hours per week were asked if they had personally benefited from any of these provisions.[15] Very few employees said they benefited from housing/mortgage
subsidies. About 3 per cent had employer-funded childcare, 12 per cent had employer-provided sport or leisure facilities, 41 per cent had pension entitlements and 14 per cent benefited from health-care/insurance.

[14] The discussion in Chapter 2 brought out that further research on the distribution of Government spending on areas such as housing (including tax relief), education, etc. would be extremely relevant in any assessment of the total redistributive effect of government expenditure, and that in-depth research on the value and distribution of housing provision and subsidies from the State is much needed given the very significant cost increases in the private housing market in Ireland.

[15] Respondents working less than 15 hours per week were not asked directly about employer-provided benefits. However, the data on their earnings includes information on whether pension contributions are deducted from pay, and only one out of 270 had in fact contributed. We thus assume that these marginal workers do not receive any of the other employee benefits-in-kind.

No information was sought in the survey on the value of these benefits, so we have to make estimates. As in the case of state-provided non-cash benefits, recipients might not always chose to allocate their resources to these items (pension, health insurance, etc.) if they were given cash instead. For example, an employee might prefer to spend now than save for the future in the form of a pension. Furthermore, unlike the State non-cash benefits, most of the employer provided benefits are not basic necessities in the same way as electricity or a telephone, so the assumption that households would purchase these goods in the absence of a subsidy must be somewhat weaker.[16] The value of the benefit to the employee may then actually be lower than the cost of providing it, in which case our calculations may over-estimate the value of employer non-cash transfers. In contrast, the absence of information on other fringe benefits such as company cars and luncheon vouchers may bias our estimates downwards.

In assigning a value to an occupational pension as a non-cash benefit, we are interested only in the contributions made by the employer, rather than trying to value the future income stream that will come from the pension. The employer's contribution has a current value most clearly in the sense that an employee without such a pension could be expected to demand a higher wage. Hughes and Whelan (1996) suggests that the mean level of employer pension contributions for non-executive employees in Ireland in the mid-1990s was around 10 per cent of pay, while for executives the employers' contribution was between 15 and 19 per cent. We impute a value of 10per cent of gross weekly pay to employees with an occupational pension as a illustrative figure, though because on the lack of choice on how it is spent the true value for recipients may well be lower. Among the individuals who benefit from employer pension contributions the mean value attributed is £43 per week, and the median value is slightly lower at £38 per week. These individual payments are then aggregated to calculate the level of benefit within each household. An estimated 30 per cent of Irish households benefited from employer pension contributions in 1997 and the mean imputed value of these contributions for those who received them was £51 per household. As a sensitivity test we also look at the results produced by attributing a value of 15 per cent of gross weekly pay to those in the top three ISCO occupational groups – legislators, senior officials and managers; professionals; and technicians and associated professionals. Using this revised estimate the mean value for individuals in receipt of pension contributions is £57 per week (median £48).

Turning to health insurance, the annual cost of cover from the VHI, which dominates this market, varies quite widely depending on the chosen plan, from a minimum of £182 to a maximum of £733 per adult (at 1997 prices). We use as a proxy the cost of VHI coverage under the mid-range policy – Plan C (group rate) – where the annual charge was £156 per child and £401 per adult. The value of employer-provided health insurance was adjusted by the household status, on the assumption that a beneficiary's

[16] Private purchase of these goods is not uncommon. For example in 1995, 39 per cent of the non-agricultural self-employed had a private pension (Hughes and Whelan, 1996). While 37.2 per cent of the adult Irish population have health insurance (Nolan and Wiley, 2000).

spouse and any children under 18 would also be covered. For the 10 per cent of households receiving this benefit, the mean imputed value is £15.23 per week.

For employer-provided sports or leisure facilities we attribute an annual value of £200 to this benefit, which amounts to £3.84 per week. It is assumed that membership applies to the employee only and in nearly all cases only one household member reported receipt of this benefit. Since so few reported receiving childcare and housing subsidies their influence will be minimal, but we give employer-provided housing or housing subsidy a value of £250 per month and childcare a value of £60 per week.

7.3 The Scale and Distribution of Employer Benefits

Table 7.1 shows the impact of adding imputed values for the State and employer non-cash benefits on the mean equivalised household income for the sample. We see that in aggregate the employer benefits could be at least as significant, though this is heavily dependent on whether employers' pension contributions are included and how they are valued.

Table 7.1: Mean Equivalised Household Income when Various Non-Cash Benefits are Included, 1997

	Mean Equivalised Household Income
Cash Income	£164.75
+ Free Schemes	£166.27
+ Medical Card	£169.05
+ Employer BIK	£170.85
+ Pension Contributions (10%)	£178.31
+ Additional 5% Pension for Top Occupational Groups	£180.69

* Mean income if only cash and employer benefits included = £171.04

Turning to their distribution, employer non-cash benefits are heavily concentrated towards the top of the income distribution. Table 7.2 shows that the bottom 20 per cent of the income distribution receive less than one per cent of the benefit from employer pension contributions, and households in the bottom half of the distribution receive only 8 per cent. (The employer pension contribution used here is 10 per cent of earnings). Conversely, the top two income deciles receive over 50 per cent. Other employer benefits-in-kind (health insurance, crèche, sports facilities, and housing) are slightly less concentrated among the top income deciles, but the top two deciles still receive 45 per cent of the total. The very low levels of non-cash market income among the bottom income deciles in part reflects the fact that relatively few of this group are in employment. For example, only 7 per cent of households in the bottom income decile are headed by an employee[17] compared to 68 per cent of households in the top income decile.

Table 7.2: Proportion of Employer Non-Cash Held By Equivalised Income Deciles

	% of	% of	% All

[17] A further 12 per cent are farmers or self employed and so do not receive benefits from an employer.

Decile (Equivalised Cash Income)	Pension Contribution	Other Employer BIK	Employer BIK
1	0.0	0.0	0.0
2	0.1	0.8	0.2
3	0.7	0.9	0.7
4	1.8	3.1	2.1
5	5.0	10.4	6.0
6	8.6	10.3	8.9
7	12.0	12.3	12.1
8	17.1	16.8	17.1
9	22.4	16.5	21.3
10	32.1	28.9	31.5

7.4 Employer Benefits and Poverty

We now look at the impact taking these employer benefits into account might have on measures of household poverty. One approach would be to simply add the estimated values for all employer benefits to household income plus the imputed values for the free schemes and medical card cover, and recalculate relative income poverty lines. Table 7.3 shows that if employer benefits other than pension contributions are added, this leads to a small increase in the proportion of households under those lines. When an estimate of the value of employer pension contributions is also added, however, we see that relative income poverty levels rise to levels much closer to those based on cash income alone. This is accentuated if a higher estimate for pension contributions is attributed to the higher paid. Because employer non-cash benefits are concentrated at the opposite end of the income distribution to the State non-cash benefits we have studied here, broadening the measure of income in this way offsets much of the impact of those non-cash transfers on relative income poverty rates.

Table 7.3: Percentage of Households Living Below Poverty Lines Adjusting Income for State and Employer Non-Cash Benefits, 1997

	Cash Income	+ State Non-Cash Benefits	+ Employer Non-Cash (Except Pension)	+ Pension (10%)	+ Pension (15% for Top 3 Occupational Groups)	Consistent Poverty
40% Line	6.3	4.8	5.1	6.5	7.0	3.1
50% Line	22.4	14.4	15.0	17.2	17.7	6.7
60% Line	34.3	29.8	30.5	34.1	35.0	9.7

However, the table also highlights the marked contrast between these relative income poverty rates using "expanded income" and the poverty rates produced by the consistent poverty measure, combining low income with indicators of deprivation. The consistent poverty measure provides an alternative and more direct way of going beyond cash income in measuring living standards and poverty, which does not entail having to estimate the value of these various benefits (and others beyond the scope of this study). Nevertheless, comparing the distribution of these estimated values does provide valuable insights into the role of the State free schemes/medical card versus employer benefits.

7.5 Conclusions

Apart from the free schemes and medical card system on which this study has concentrated, households benefit from a wide range of other free or subsidised goods and services from the State and from benefits-in-kind provided by employers. A comprehensive examination of the distribution and impact on poverty of these benefits would be highly complex and beyond the scope of this study, but this chapter has looked briefly at the under-researched area of employer benefits, which (in contrast to benefits from the free schemes and medical card entitlement) are likely to be concentrated among those on higher incomes. The range of fringe benefits covered included occupational pension, health insurance, sport/leisure facilities, childcare, and free/subsidised accommodation. Assigning a current value to the fact that one's employer is contributing to future pension entitlements is particularly problematic, and results were therefore presented with and without those values.

The assignment to households of estimated values for the other employer benefits had relatively little effect on relative income poverty rates. However, when tentative values for employer benefits (as well as the free schemes and medical card) were assigned to the beneficiaries in the 1997 Living in Ireland Survey, relative income poverty rates were then much closer to those based on cash income than when only the state-provided benefits were added. The consistent poverty measure provides an alternative way of going beyond cash income in measuring living standards and poverty, which does not entail having to estimate the value of such various benefits.

8. Conclusions and Implications

In addition to cash social welfare transfers, the Irish State also has a range of schemes providing for example, free electricity/gas, TV licence and telephone rental for some social welfare recipients, free travel for the elderly, and free medical care to all those below an income threshold. Such in-kind support has grown in importance in Ireland in recent years, and as Quinn (2000) brings out this raises major issues in terms of their impact on poverty and social exclusion. This study has focused on the impact of these schemes on poverty, using data from the 1997 Living in Ireland Survey.

We began by outlining the complex issues that arise in seeking to go beyond cash incomes to include a valuation for such non-cash benefits in assessing living standards and poverty. We then described the specific State non-cash benefits currently available to Irish households on which this study focused. The data employed and the way valuations for the different State benefits or schemes were attributed to households were then described. In essence, beneficiaries were identified using information obtained in the Living in Ireland Survey, and average values for attribution to beneficiaries were based on the cost of provision of the benefit or service. In the case of health care, this took into account the variation in use of the services in question by age.

Benefits from the free schemes and the medical card scheme were seen to be heavily concentrated towards the bottom of the income distribution: 61 per cent of medical card spending and 65 per cent of other State non-cash benefits in 1997 went to households in the bottom 30 per cent of the distribution. In terms of effectiveness in reaching those most in need, State non-cash benefits were seen to be slightly more concentrated towards the bottom of the income distribution than total social welfare cash transfers – though the latter are of course much greater in scale and thus much more important to low-income households.

However, benefits from the free schemes and medical card scheme were also seen to be much more effective in assisting some low-income households rather than others. The elderly benefited to a much greater extent than the working poor, the unemployed and large families. The eligibility criteria for the free schemes, and the fact that a higher value for the medical card is attributed to older age groups to reflect their greater utilisation of health services, both contributed to the concentration of these State benefits among the elderly.

The study then turned to the impact of incorporating estimated benefits from the free schemes and medical card directly into the

measurement of poverty on our understanding of the extent and nature of poverty in Ireland. The conclusions were seen to depend on how one is measuring poverty in the first place. Simply adding imputed values for the "free schemes" and medical card entitlement to cash income and recalculating relative income poverty rates was seen to substantially reduce relative income poverty rates overall. This reduction was most pronounced among the elderly, and the elderly would on that basis become much less important among the poor.

However, the contrast was much less marked when the comparison was with the poverty measure developed at the ESRI incorporating both low income and experience of basic deprivation – the approach currently adopted in the National Anti- Poverty Strategy's global poverty reduction target. With this "consistent poverty" measure, poverty rates were already significantly lower than those shown by relative income lines and the elderly already comprised a significantly smaller proportion of the poor than they did with those income lines. This reflected the fact that the deprivation element of the measure helps to capture influences on a household's command over resources going beyond current income, with the free schemes and medical card entitlement being one – though only one – of these factors.

We also examined the impact on this consistent poverty measure of broadening the income element to include estimated values for benefits under the free schemes and medical card scheme. We saw that in 1997 this resulted in a modest reduction in the percentage of households both below relative income lines and experiencing basic deprivation. There are particular problems with simply adding imputed values for free health care to income, and this reduction was particularly modest when only the estimated values for the free schemes were added to household incomes.

Many other aspects of the State's spending affect the living standards of households, such as providing free education or subsidies to housing, but even more complex issues arise in trying to capture their impact on poverty. We highlighted housing in particular as a priority area for in-depth investigation. We did however seek to illustrate the potential importance of non-cash benefits provided by employers rather than the state: these have been little-researched and unlike the free schemes are found to be concentrated in the upper half of the income distribution. Particular problems were noted in assigning a current value to employees for the contributions employers make to occupational pension schemes, so results were presented with and without those values. Other employer benefits – health insurance, sport/ leisure facilities, childcare, and free/subsidised accommodation – had relatively little effect on relative income poverty rates. When tentative values for employer benefits were assigned to the beneficiaries in the 1997 Living in Ireland Survey, relative income poverty rates were a good deal higher than when only the estimated benefits from the free schemes and medical card were added.

In conclusion, it should be emphasised once again that non-cash benefits – including the ones studied here – are not the same as cash income, since the recipient has no choice about their allocation. The value of goods or services provided free of charge might also vary considerably between recipients depending on their preferences, capabilities and needs.

This is particularly true in the case of free health care, where it can be misleading to look at the distribution of benefits without taking into account underlying differences in needs – since heavier use itself often reflects greater need. Assessing their impact on poverty will thus never be straightforward. This study suggests that the broad picture of poverty revealed by research to date which has itself gone beyond household income is not substantially altered by directly taking benefits from the free schemes into account in measuring poverty. None the less, the results demonstrate that analysis of the distribution and scale of these types of provision can complement previous research and enhance our understanding of the effectiveness of anti-poverty policy.

APPENDIX 1: SENSITIVITY OF RESULTS TO CHANGES IN THE EQUIVALENCE SCALE

In comparing income levels across households some adjustment must be made to take account of household size and composition. There is no consensus on the size of the adjustment that should be made for additional household members, however, it is generally agreed that simply dividing income by the number of people in the household ignores economies of scale (most obviously in housing costs) and differences in consumption by age. The analyses in the body of this report are based upon an equivalence scale derived from the relativities implicit in Unemployment Assistance/Supplementary Welfare Allowance Schemes. The first adult in the household is given a value of 1, each additional adult is given a value of 0.66 and each child a value of 0.33. We call this Scale A. We adopt 14 years as the cut-off distinguishing children from adults, which seems consistent with quantitative and qualitative evidence on the higher costs of providing for teenagers (e.g. Russell and Corcoran, 2000).

Here we test the sensitivity of some of the findings to the adoption of alternative equivalence scales. Scale B applies a value of one to the first adult, 0.6 for additional adults and 0.4 for each child (under 14 years). This scale has been widely used in British research. Scale C applies an even higher weight to additional household members: 0.7 for additional adults and 0.5 for each child under 14. This is known as the "old OECD" equivalence scale. This scale has been widely used in comparative studies of poverty. Equivalence scales that give a higher weight to additional household members result in lower equivalent incomes for large households (because the divisor is larger), therefore, a higher proportion of large households will be identified as poor. Scales like that used in the main body of the text, which applies a lower weight to other households' members are likely to identify greater levels of poverty in a single person household, since a high proportion of these households are composed of the over 65s, this may impact upon the non-cash benefit results.

Table A1: Adjusted and Unadjusted Poverty Rates Using Alternative Equivalence Scales, 1997

	Scale A (1/0.66/0.33)		Scale B (1/0.6/0.4)		Scale C (1/0.7/0.5)	
	Cash Income	Cash + State Non-Cash	Cash Income	Cash + State Non-Cash	Cash Income	Cash + State Non-Cash
40% line	6.3	4.8	7.1	6.2	7.0	6.3
50% line	22.4	14.4	22.0	14.9	19.8	14.1
60% line	34.3	29.8	34.0	30.0	34.2	29.8

The unadjusted poverty levels are very close for scale A and scale B. Scale C produces higher poverty levels at the 40 per cent line and lower levels at the 50 per cent line. However, when we consider the impact of adding State non-cash benefits to cash income we find that the magnitude of the effect is very similar regardless of which equivalence scale is used. The exception to this is at the 40 per cent poverty line where the reduction in poverty levels found when using scale A (-24 per cent) is substantially higher than when the alternative scales are applied (-10 to -13 per cent).

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