

# THE MEANING AND MEASUREMENT OF POVERTY: TOWARDS AN AGENDA FOR ACTION

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## **Executive Summary**

- Poverty is a cause of considerable community concern, but the term is rarely
  used in government circles. As a consequence, developing strategies and
  programs that address the causes and consequences of poverty are not on the
  policy agenda.
- Poverty alleviation remains a primary goal of the Australian income-tested social security system and a raft of other public programs still use poverty status as a way of determining eligibility and targeting resources.
- There are differences about what poverty means in conceptual terms, and how to measure it. These differences have come to the surface in recent heated debate over the measurement of poverty.
- Poverty research now faces a severe credibility crisis, as its principal tools are widely perceived to no longer be capable of providing an accurate and objective basis for monitoring poverty trends and differences.
- A robust framework for identifying and measuring poverty provides the basis on which anti-poverty strategies, policies and programs can be developed, implemented, monitored and evaluated.
- The bottom line of the 'poverty measurement debate' is that we must understand what poverty is before we can take action to remove it.
- Rich countries like Australia can afford to abolish poverty. The financial cost of doing so represents only a small fraction of our national income. We can thus pay to remove all Australians from poverty if we want to: the fact that we don't do so is a matter of choice, not affordability.
- Poverty research must be independent of current government priorities if it is to serve its key function of informing poverty-reducing policies and actions.
- The adverse impact of poverty on child outcomes is an issue of great concern in a number of countries and warrants increased emphasis in Australia.
- Debate over the relevance of a specific poverty measure is an inherent feature of poverty research, but the fact that disagreement exists does not imply that the concept itself is flawed.
- Any new poverty measure must be readily understood by those in the population who have an interest in poverty and who will ultimately be asked to contribute to the cost of alleviating it.
- An income poverty line that is credible and has widespread support is important in identifying who is in (or at risk of) poverty, in raising community awareness about the causes and consequences of poverty, and in guiding public policies aimed at reducing poverty and combating its adverse effects.
- Despite its many limitations, i would be a mistake to abandon the current poverty line until we have a better one to replace it with.

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- We need a new approach that is academically robust and has credibility in the community in order to prevent the issue of poverty from being kept off the policy agenda.
- No single poverty standard can be expected to meet the many (often conflicting) demands placed upon it.
- The two main stakeholders involved in the task of developing a poverty measure are: the *experts* whose job it is to operationalise the measure, and the *community* who will have ultimate power over its use and impact.
- The two key features that form the core of any definition of poverty are that it is a situation in which resources are not adequate to meet *basic needs*, and that it should embody *community perceptions* in some way.
- The definition of poverty as 'an enforced lack of socially perceived necessities' captures these two critical aspects of poverty with admiral brevity.
- Research indicates that around three-quarters of all Australians view poverty in terms of subsistence needs, and that this percentage is remarkably stable over time and across different sub-groups of the population.
- A needs-based subsistence definition of poverty does not imply that poverty should be defined in absolute terms. Although the needs refer to basic items like food, housing and clothing, the commodities that will satisfy these needs can only be defined relative to existing customs and standards of living.
- Deprivation provides a direct indicator of poverty status because it reveals a situation of unmet need that is actually observed and thus experienced. It thus provides strong support for the claim that poverty exists.
- The deprivation approach has been employed in a number of recent European poverty studies, particularly in the United Kingdom.
- A detailed study of Australian attitudes to different forms of deprivation and the levels of deprivation being experienced will provide invaluable information that will advance the search for a new poverty measure.
- A move in this direction involves measuring poverty using information on both income and expenditure. The income poverty rate in 1993-94 was around 20 per cent, with poverty highest among single people and sole parents. When expenditure is used to determine poverty status, there is almost no effect on the overall poverty rate, although poverty among specific demographic groups changes considerably.
- The extent of 'core income poverty' approach defined as a situation where *both* income and expenditure are below the poverty line was less than 3 per cent in 1993-94.
- A range of alternative estimates are presented for 1998-99, the latest year for which the data are available. These indicate that poverty is sensitive to the methods and data used to estimate it.

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- The main themes that emerge from this analysis are:
  - ➤ Measured conventionally, the poverty rate is highest among single aged people, followed by sole parent families, aged couples and non-aged single people. Poverty is lowest among non-aged couples, with and without children.
  - Although a large percentage of Australian families are estimated to have incomes below the poverty line, their incomes do not place them too far below it. Overall, the pattern of poverty rates across family types is fairly robust.
  - ➤ The poverty rate for jobless families (i.e. with no employed member) is almost seven times higher than the poverty rate among families with one employed person.
  - ➤ It is not so much access to employment that greatly reduces the risk of poverty, but access to full-time employment.
  - Many families with incomes below the poverty line are spending more than their income. This is necessary to allow them to meet their needs, but it leaves open the question of how this dis-saving is financed and whether it can be sustained.
  - ➤ When the conventional income poverty measure is supplemented by a deprivation indicator, the poverty rate drops from 25.2 per cent to 18.2 per cent. Further declines to 14.8 per cent and 12.3 per cent occur if a more restrictive deprivation measure is used.
  - ➤ Use of the deprivation indicators to supplement income poverty results in a far greater decline in poverty rates among the aged than among families with children.
  - ➤ When a severe poverty measure is used that reflects the presence of one core deprivation indicator, the overall poverty rate declines from 25.2 per cent to 9.6 per cent.
  - ➤ On the basis of the severe poverty measure, the poverty profile is much flatter across different family types. The aged (particularly aged couples) have below-average poverty rates, but poverty among both non-aged single people and sole parent families remains high.
- Three features of the poverty estimates stand out as being robust across all measures:
  - Firstly, the group with the highest incidence of poverty is always sole parent families, whose poverty rate varies from between twice and four times the overall (national) poverty rate.

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- ➤ Second, there is a strong association between joblessness and poverty, with a clear indication that full-time employment is required to escape poverty.
- Third, the poverty rate among the aged is high when the conventional (income-based) measure is used, but far lower rates are produced by many of the alternative measures.
- The analysis suggests that five alternative approaches can form the basis of a new poverty measure that uses existing data:
  - Conventional poverty defined by comparing need-adjusted household income adjusted with a simplified version of the current poverty line.
  - ➤ Validated poverty defined as above, but excluding all incomepoor households whose level of expenditure exceeds their disposable income by 50 per cent or more.
  - ➤ Core expenditure or constrained poverty defined as a situation in which both income and expenditure (or the maximum of both) are below the poverty line.
  - ➤ Deprivation poverty defined as having income below the poverty line and experiencing at least two of the full list of available hardship indicators.
  - Extreme deprivation poverty defined as having income below the poverty line and experiencing at least one of the restricted list of core hardship indicators.
- Which approach is used to measure poverty makes a big difference to how much of it is estimated to exist.
- *In summary*, any poverty line will embody judgements, but some judgements are better than others and the aim is to find those that best reflect the available expert knowledge, are most widely endorsed and most enduring. This is a challenging, but not impossible task.
- The poverty line is an important vehicle for communicating research findings and raising community awareness about the nature, causes and consequences of poverty in general, and child poverty in particular.
- There is still an urgent need for an income poverty line, despite its many conceptual limitations and practical imperfections. Most people lives depend principally on their income and everyone can understand what income poverty means by extrapolating from their own experience.
- The development of a new poverty measure is the first stage in an agenda to reduce poverty. Once a new measure is in place, it should be used to set poverty reduction targets and monitor progress towards them.

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- In this way, poverty research can play a valuable role in helping to identify the extent of the problem and in shaping the policy response to it.
- The claim that the poverty line has passed its 'use by date' represents a mistaken view of contemporary Australian society and fundamentally misunderstands the wishes of its people.

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# 1 Introduction\*

Poverty is a cause of considerable community concern, but the term is rarely used in government circles in Australia. As a consequence, developing strategies and programs that address the causes and consequences of poverty are not on the policy agenda – to the detriment of those Australians whose poverty contrasts starkly with the growing prosperity that surrounds them. The attention of policy makers is focused on a number of issues that are highly correlated with poverty – including unemployment, jobless households, economic disadvantage and social exclusion – but these are not synonymous with poverty, defined as an inability to meet basic needs because of lack of resources.

Poverty is an emotive term that carries a strong moral overtone. This is not always conducive to clear reasoning and objective analysis that can provide a sound evidence base for policy development. For this reason, there are differences of view on what poverty means in conceptual terms, and even greater differences on how to measure it. These differences span a broad spectrum of normative and ideological positions, but also raise a number of technical issues surrounding the statistical measurement of poverty.

These differences have come to the surface in recent heated debate over the measurement of poverty in Australia, its level and whether or not the poverty rate has increased, and by how much. The fragile consensus among researchers about how best to measure poverty has apparently disappeared, confirming the stance taken by those who have already abandoned its use in policy development. At the same time, concerns over the quality of some of the data used to measure trends in poverty have further undermined confidence in the poverty statistics. As a consequence, poverty research now faces a severe credibility crisis, as its principal tools are widely perceived to no longer be capable of providing an accurate and objective basis for monitoring trends over time or differences within the population.

Many now see poverty as mainly 'in the eyes of the beholder' – an unreliable mirage that reflects the judgments and ideology of those who measure it or those who exert political pressure on behalf of the poor. Not surprisingly, the poverty statistics no longer have the power they once did to stir the national consciousness and provoke ameliorative action.

The main losers from this situation are the poor themselves. By denying the validity of the instruments we use to identify and measure poverty, we avoid confronting the reality of the anxiety and suffering that it causes. And the longer we are prepared to tolerate this situation, the longer it will be before we can move beyond the political rhetoric to address the very real social issues associated with the causes and consequences of poverty: how it arises, who it effects, for how long and with what outcomes?

A robust framework for identifying and measuring poverty provides the basis on which anti-poverty strategies, policies and programs can be developed, implemented, monitored and evaluated. The bottom line of the 'poverty measurement debate' is that we must understand what poverty is before we can take action to remove it The

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discussion of conceptual and measurement issues presented in this Submission is intended to guide the development of such an agenda for action, not to add yet further complexity to what has become a largely sterile debate over the poverty statistics themselves.

The main purpose of the Submission is thus to redress the overall imbalance and lack of sound reasoning that now dominates much of the poverty literature by arguing that:

- Poverty is still an important issue in contemporary Australia;
- It is possible to develop a modern definition of poverty that embodies the best available expert knowledge and has credibility within the community;
- Such a definition must encompass the two basic features of any notion of poverty that it reflects a lack of resources compared with need, and that it is fundamentally relative in its conception and measurement;
- Many (but not all) of the statistical objections to the current poverty methods do not affect the principal findings and policy implications of the available research;
- We have the data and capacity to assess how robust our poverty estimates are and there are many overseas examples on which to draw when considering new approaches; and
- The establishment of realistic and achievable poverty reduction targets is essential to focus public attention on an issue that has damaging consequences for families, and for their children.

The remainder of the Submission is organised as follows: Section 2 provides an overview of poverty research and explains its role and purpose, while Section 3 outlines the key features of a new approach designed to overcome some of the existing limitations. Section 4 presents a series of estimates that illustrate how a new approach can be developed from existing data, while Section 5 summarises the main arguments. An Appendix presents results from recent research in the Britain that examines the nature and degree of severe child poverty in that country using a methodology that could be modified for application in Australia.

# 2 Background to Poverty Research

## 2.1 Why Do We Need Poverty Research?

All societies share a concern to ensure that their citizens are able to attain a minimum standard of living. This is generally regarded as a basic right of citizenship and is justified on either social justice grounds – that everyone has a right to a minimum level of access to society's resources – or, more instrumentally, as necessary to avoid social unrest by guaranteeing that everyone is protected by a minimum safety net. The moral case for alleviating poverty is particularly compelling and receives very widespread community support in rich industrial countries like Australia. Poverty alleviation is also important among poorer developing countries, where reducing the poverty rate is an explicit goal of the development process.

There is no doubt that rich countries like Australia can afford to abolish poverty. The financial cost of doing so represents only a small fraction of our national income or gross domestic product (GDP). Estimates provided in one recent study, for example, imply that the total annual income shortfall of all Australians living below the poverty line in 2000 was around \$14.9 billion. Even accepting that this figure is likely to be somewhat too high because of the generosity of the poverty line on which it is based (and the fact that some low incomes may be under-reported), the poverty gap is still totally dominated by year 2000 GDP of around \$632 billion. Even an exaggerated estimate of the poverty gap thus represents less then 2.4 per cent of GDP. We can thus pay to remove all Australians from poverty if we want to: the fact that we don't do so is a matter of choice, not affordability.

There are, of course, good reasons why we might not want to go so far as to reduce poverty to zero. This might be a financially affordable target, but its achievement could create incentive structures that impose other costs. However, no one has argued that we should not try to reduce poverty at all, and issues therefore arise of setting realistic targets for poverty reduction and assessing the effectiveness of the measures that are introduced to achieve them.

In order to do this, it is necessary to have a framework within which poverty can be identified and measured, and these are the two of the principal goals of poverty research. Unless it is possible to identify and measure poverty, it will not be possible to establish whether it has changed, by how much, and for what reasons. For this reason, issues surrounding the definition and measurement of poverty have dominated the poverty research agenda in all countries, including Australia.

The complexity of these issues should not be under-estimated. There is a range of conceptual approaches to the identification of poverty (some of which are discussed briefly below) and there is no agreement on how best to measure it once it has been defined. Practical problems also arise in ensuring that the preferred methods can actually be implemented given the available data and other information. These problems can only be resolved by each country deciding what best suits its own

This estimate has been derived from the poverty estimates contained in Ann Harding, Rachel Lloyd and Harry Greenwell, *Financial Disadvantage in Australia*, 1990 to 2000. The Persistence of Poverty in a Decade of Growth, The Smith Family, Sydney, 2001: Tables 1 and 12. The average weekly poverty gap has been expressed on an annual basis and applied to the estimated numbers in poverty.

economic and social circumstances, given the values and attitudes of its citizens and the available data. The important point is that the broad shape and detailed parameters of poverty research, like poverty itself, can only be sensibly formulated and discussed in a specific national context.

Other considerations, such as political imperatives, the policy priorities of government and the resources available to address the poverty problem make a difference to the targets that are set (if any) and to what is actually done, but these do not affect the extent of the problem itself. Poverty research must be independent of current government priorities if it is to serve its key function of informing the basis for poverty-reducing policies and actions.

Although identifying and measuring poverty are key dimensions of poverty research, a number of other aspects are also important. Understanding the causes and consequences of poverty involves looking beyond the statistics to examine the processes and events that expose people to poverty, the conditions that prevent their escape and thus lead to its entrenchment, and the effects of poverty on those affected by it – its adverse outcomes. The adverse impact of poverty on child outcomes is an issue of great concern currently in a number of countries and it warrants increased emphasis in the Australian debate. Again, poverty research is required to identify and understand these effects, particularly research that can track people through time using longitudinal data.

Research is also needed to investigate the nature of community attitudes to poverty – including what it means and how best to measure it – since this provides a basis for ensuring that the concept itself, as well as the policy response to it, are grounded in community attitudes and consistent with community aspirations. Poverty is a complex issue that involves expert input into its conceptualisation and measurement, but this does not mean that the tools and techniques developed by the experts cannot reflect community understandings of poverty, as well as the social norms and judgments that underpin it.

In summary, poverty research is important because poverty itself is an important social problem. No country can take comfort from knowing that it has a poverty problem, and the goal of poverty research is to document poverty and monitor how it changes over time and varies between different groups so that government and non-government agencies can better target their actions. This involves the systematic study of a complex issue that has both objective (statistical) and subjective (attitudinal) dimensions.

Because of its nature, it is too much to expect that there will be total agreement with all aspects of poverty research – even among the experts themselves. We do not have the technical ability to resolve all areas of disagreement - principally because many of them cannot be resolved on technical grounds alone. Judgments are also important, and these will always reflect different views and give rise to debate. However, many of the differences that exist are statistical and can be resolved objectively.

Transparency requires that the judgments used in poverty research are made explicit so that others can judge for themselves about their relevance and plausibility. Debate over the relevance of a specific poverty measure is thus an inherent – almost inevitable – feature of poverty, but the fact that disagreement exists does not imply that the concept itself is flawed.

We need an open and vibrant debate on these issues, but we need to ensure that this leads to better measures rather than to the abandonment of poverty research all together. Above all, we need a range of poverty measures, for two reasons, First, there is no agreement on which specific measure has most relevance when assessing the poverty trend or when evaluating the impact of policy. Alternative measures thus allow progress against differing goals to be assessed. Secondly, a range of measures allows the robustness of the estimates themselves to be evaluated: if all show the same general patterns, then we can be confident that these are not a 'manufactured' statistical artifact.

#### 2.2 Do We Need a Poverty Line?

Although there are difficulties surrounding where to set the poverty line (reflecting the judgments and other factors described above), some kind of poverty line has proved to be invaluable for national poverty researchers, for international agencies like the World Bank, and for governments in industrial and developing countries. The poverty line indicates the income level below which poverty exists, thus defining those who are in income (or primary) poverty. The (headcount) poverty rate is defined as the percentage of the population (or of sub-groups within the population) with incomes below the poverty line.

The headcount measure has been criticised because of its 'all or nothing' character, which implies that someone whose income is one dollar below the poverty line is defined as poor, whereas someone whose income is one dollar above the line is not poor. Can we ever be confident that such small income differences represent substantial differences in measured poverty? Clearly, the answer is no. But this suggests that caution must be applied when interpreting the headcount poverty statistics, and that the poverty rate should be accompanied by other measures.

One such measure is the poverty gap, which indicates the gap between income and the poverty line for those who are below it. The total poverty gap indicates how much income would need to be distributed to the poor in order to raise all of their incomes up to the poverty line, thus reducing the poverty rate to zero. This figure provides a useful benchmark for policy by setting limits on the financial task of tackling poverty (as indicated in the earlier discussion) and the poverty gap is a valuable addition to the poverty rate, which indicates how many people are poor, but not how poor they are. Note that a small increase in the income of someone who is very close to the poverty line will have a much smaller impact on the poverty gap than on the poverty rate.

A range of more sophisticated variants of the poverty gap exist that give greater emphasis to those whose incomes are furthest below the poverty line when deriving an overall index of poverty. These measures exhibit a number of desirable statistical properties, but they are rarely if ever used in public debate over poverty, primarily because of their complexity. This highlights an important feature of any poverty measure, which is that it should be capable of being readily understood by those in the population who have an interest in poverty and who will ultimately be asked to contribute to the cost of alleviating it. The poverty line, the headcount poverty rate and the poverty gap all satisfy this important characteristic and this explains their widespread use and resilience.

The above arguments suggest that a poverty line still has a lot to contribute to both research and to the public dialogue about poverty. But this is not to deny that there has been criticism of its continued use made by some Australian commentators. This

criticism has been made at two distinct levels: first, it has been argued that since we cannot all agree about where to set the poverty line, any poverty line will always be arbitrary and thus of no value in measuring poverty objectively, or as an input into the policy process; the second argument against the use of a poverty line is based on the view that income itself has changed along with economic and social conditions, so that to measure poverty using a fixed income standard will produce increasingly misleading and irrelevant findings.

As implied from the above discussion, there is some merit in the first argument since it is not possible to derive a poverty line without making a judgment about where to set a minimum benchmark or standard in what is actually a continuum of resources relative to needs. However, it does not follow logically that because setting the poverty line involves an element of judgment that we should abandon the task altogether. There are many other areas of policy-relevant research where judgments have to be made and the aim must be to do the best that one can in the circumstances, not to abandon the effort or to urge more intensive search for the a 'scientifically objective' poverty line that can never be found. What this involves in practice is discussed in more detail later.

The second argument against an income poverty line - that the shifting boundaries between cash, near-cash and non-cash forms of income undermine the value of any specific (cash) income benchmark raises a number of complex issues. It is certainly true that there are a number of new forms in which people receive their incomes in modern economies. Examples include fringe benefits, share options, deferred income (occupational superannuation) and the various forms of salary sacrificing that are becoming increasingly popular.

Other factors that are also important in this context include public programs that are designed to meet specific needs, including schemes that deliver and in part pay for, health care, education and other social support needs. As these 'social wage' provisions have grown in importance, the role of cash income alone in indicating one's economic position has changed and, the critics argue, so must the methods used to set the poverty line.

This is an important argument that needs to be taken into account when deciding where to set the poverty line, how to adjust it over time and how to measure the extent of poverty when using it. The underlying point is that poverty can only be meaningfully studied in the context within which needs develop and the resources required to satisfy them are generated. The argument is thus a specific formulation of the general point made earlier, that poverty is both temporally and spatially *relative*.

The fact that the government funds a Medicare system that meets many health care needs with relatively small out-of-pocket expenses, for example, obviously implies that this should be reflected in the measure of income that is used to set the poverty line and measure poverty. If Medicare were to suddenly disappear, the poverty line would have to rise to reflect those health care costs that would now have to be met from private wallets rather than from the public purse. Disposable incomes would rise to reflect the lower taxes and charges associated with the removal of Medicare, so that some would face a lower risk of poverty and others the opposite, with the net impact on poverty uncertain.

However, the fact that Medicare and other social wage programs exist does not negate the argument that there are many other needs that people have to meet from their own resources – for which they need an income of their own. There is thus a need to pay heed to the existence of social wage type programs when setting the poverty line – particularly when using it to make comparisons over time or between countries – but this does not diminish the value of an income poverty line.

The poverty line in Australia, as elsewhere, has been an invaluable tool for identifying the extent, nature and trends in poverty and for raising public awareness about these issues. The value of this is all the more compelling in a country like Australia, where the income support system is designed to provide a minimum safety net that provides means-tested assistance to those who are unable to meet their own needs when their income earning capacity is restricted. An income poverty line also provides a benchmark for assessing the adequacy of income support payments and it has played a critical role in this regard for much of the last three decades.

More important than all of these reasons is the fact that cash is still the predominant medium of exchange in industrial countries like Australia, where it is also the main 'currency of policy'. There exists a raft of policies designed to transfer incomes away from some segments of the population and towards others and the rationale for, and impact of, these programs is of intense interest. Despite the growth in non-cash and near-cash forms of income, family income is still the best single indicator of economic status and its lack the most telling sign of poverty.

Finally, when assessing the value of an income poverty line, it is important to distinguish between how poverty is conceived and the basis on which it is measured. The use of an income poverty line does *not* imply that poverty itself is conceptualised solely in terms of a lack of income. On the contrary, it is possible to adopt a more sophisticated conceptual framework that *defines* poverty in terms of a range of factors including experienced deprivation and enforced exclusion, but still choose to *identify* those who are in poverty using an income poverty line. This may result in some loss of precision, but that may be more than compensated by the ease with which results can be communicated to those who can easily understand what low income means for living standards from their own experiences.

For all of these reasons, an income poverty line that is credible and has widespread support has an important role to play in identifying who is in (or at risk of) poverty, in raising community awareness about the causes and consequences of poverty, and in guiding public policies aimed at reducing poverty and combating its adverse effects.

#### 2.3 What is Wrong with the Current Poverty Line?

It should by now be apparent that any poverty line has to encompass a variety of conflicting claims and issues and will thus always be contested. There is also a need to recognise that estimates of poverty derived from *any* poverty line are only that – *estimates* – that embody all of the ambiguities and imperfections that influence where the poverty line itself is set and the data used to identify who is below it. These factors suggest that the poverty line should be kept under constant review to ensure that it is not allowed to drift too far away from what is current 'best practice' with regard to the methods and data that are used to set it.

It is also important to monitor the degree to which the poverty line accords with community understanding of the meaning and measurement of poverty, so that it can

maintain its *credibility* as an instrument for social monitoring and policy development purposes. Against this, there is need for a degree of stability in where the poverty line is set. If it is changed too frequently, it will become impossible to ascertain the extent to which any observed change in poverty reflects the change in the poverty line itself, as opposed to the impact of external factors. If this happens, then the poverty line will become a source of confusion. If there is a need to modify the poverty line, therefore, this should only be done infrequently and be accompanied by analysis that allows the statistical impact of any change to be identified and monitored over time.

The two key features that underpin the credibility of the poverty line are: firstly, that the methods on which it is based reflect current 'best practice' scientific research methodology and data; and second, that the judgments on which it is based are broadly in line with community opinion on the meaning and measurement of poverty. The poverty line should be regularly exposed to these two criteria of scientific integrity and community credibility. When there is an obvious gap with current practice, a review of current methods should be undertaken and, where appropriate, revisions incorporated.

If these two criteria for the validity of the poverty line are applied to the Henderson poverty line, it is apparent that there is an overwhelming case for reviewing its current relevance and developing a revised formulation.

This is not an appropriate forum for documenting all of the limitations of the Henderson poverty line (HPL) named after the Chairman of the 1970s Poverty Inquiry, Professor Ronald Henderson.<sup>2</sup> The HPL has its basis in the research originally conducted at the University of Melbourne in the mid-1960s.<sup>3</sup> In its original formulation, the HPL reflected the appropriateness of the minimum (basic) wage (supplemented by family allowance benefits) as being a close approximation to an 'official' Australian low-income standard for a one-earner family, that was in line with community sentiment on what poverty meant at the time. It also incorporated the judgment made by Professor Henderson and his colleagues that since income poverty was an explicitly relative concept, the poverty line should be adjusted to maintain its parity with average community incomes.

Both of these decisions now seem far less justifiable than they were at the time, though for different reasons. The relevance of the basic wage to a poverty income benchmark has long disappeared, along with the 'male breadwinner' model of the labour market on which it was implicitly based. In fact, the poverty line is now often cited in Hearings before the Industrial Relations Commission as being a basis for setting the basic wage rather than *vice versa*. More generally, the fact that the labour market has changed so radically over the last forty years suggests that any income benchmark set before this happened is now in need of review.

These arguments would be less compelling if the method used to index the poverty line over time to average community income was sound. Then, it could have been argued that the standard was originally set at a historically significant level and by

Commission of Inquiry into Poverty, First Main Report. Poverty in Australia, AGPS, Canberra, 1975.

R.F. Henderson, A. Harcourt and R.J.A. Harper, *People in Poverty. A Melbourne Survey*, Cheshire for the Institute of Applied Economic and Social Research, Melbourne, 1970.

maintaining its relative position, the poverty line now gives contemporary relevance to that historical significance.

Unfortunately, this case cannot be sustained because of the problems with how the poverty line has been adjusted over time. Several analysts – including those who are both sympathetic and critical of the HPL – have pointed out that the current practice of adjusting the poverty line to reflect movements in household disposable income per capita (HDYC) produces an upward bias in measured poverty because the HDYC measure includes a number of income components that are not included in the ABS survey data that are used to estimate poverty.<sup>4</sup>

As a consequence, the Henderson poverty line has gradually shifted up the income distribution over time compared with other measures such as those based on median or mean income that, by definition, represent a fixed distributional marker. This in turn has produced an upward bias in the poverty trend, one recent study concluding that: 'the extent of poverty may have been increasingly over-stated from 1981 onwards by studies that rely on the Henderson poverty line ... [and that] ... some degree of overestimation may exist in all poverty estimates calculated using the Henderson Poverty Line'.

Although the method used to adjust the poverty line is now widely acknowledged as flawed, there are other problems with the HPL measure. Some of these, such as the use of an equivalence adjustment based on the relative needs of households living in New York in the 1950s have always been of limited relevance to Australia and now exceed the limits of acceptability. The data now exist to estimate an equivalence (relative need) scale that is relevant to Australian conditions and the several studies that have already done this provide a sound basis for introducing improvements in this area.

The budget standards study, undertaken by the Social Policy Research Centre in the 1990s under commission to the (then) Department of Social Security derived a set of equivalence relativities based on an exhaustive study of the needs of Australian households. Although the standards themselves have been criticised for being too generous, there is broad acceptance that the *relativities* they embody are the best estimates of relative need currently available. The SPRC budget standards provide the basis for a new set of equivalence relativities and their use for this purpose should be examined.

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P. Saunders, 'Poverty in the 1990s: A Challenge to Work and Welfare' in P. Sheehan, B. Grewal and M. Kumnick (eds.), *Dialogues on Australia's Future. In Honour of the Late Professor Ronald Henderson*, Centre for Strategic Economic Studies, Victoria University of Technology, 1996: 325-350.

<sup>&</sup>lt;sup>5</sup> See Harding, Lloyd and Greenwell, op. cit., p. 22.

P. Siminski, P. Saunders, S. Waseem and B. Bradbury, 'Reviewing the Comparability of ABS Household Income Data with External Aggregates', *SPRC Discussion Paper*, forthcoming, 2003.

P. Saunders, J. Chalmers., M. McHugh, C. Murray, M. Bittman and B. Bradbury, Development of Indicative Budget Standards for Australia, policy Research Paper No. 74, Department of Social Security, Canberra, 1998.

D. Johnson, 'Some Reflections on Calculating Poverty', *Melbourne Institute Newsletter*, 2003: 2 & 7.

This example illustrates that there is already ample scope to improve the poverty line by ensuring that it incorporates the best research and data that are currently available. However, this might still not restore the loss of credibility that is the main reason why we need a new poverty measure.

One clear message to emerge from the highly-publicised debate between researchers form the Centre for Independent Studies (CIS) and the National Centre for Social and Economic Modelling (NATSEM) was that the existing instruments for measuring poverty produce conflicting results, particularly regarding how the poverty rate has changed over time. The NATSEM estimates that were published by The Smith Family included a suite of results designed to allow readers to make up their own minds about which measure was best and check how sensitive the results are to the use of a different measure. However, the CIS critique left many with the impression that all of the measures were arbitrary and thus of little value in the policy debate.

Australian poverty research is still recovering from the consequences of those events and coming to terms with the implications. Some of the points made by the CIS group were greatly exaggerated or misplaced, while others reflected a misunderstanding of the data or its use in poverty research. At the same time, a number of the points raised important conceptual and measurement issues that warrant a response. An important point made in the CIS critique is the need to supplement the headcount poverty rate with information on changes in the real disposable incomes of the poor. Both are important, the former because it summarises the risk of poverty, the latter because it reflects changes in the real value of social benefits which are the principal instrument under the control of the government.

The challenge is for poverty researchers to propose a new approach that can overcome the limitations of the current methods for identifying and measuring poverty. The growing unease with the current poverty line has reached the point where its continued use is no longer a viable option. But it would be a mistake to abandon the current poverty line until we have a better one to replace it with. We need a new approach that is academically robust and has credibility in the community in order to prevent the issue of poverty from being kept off the policy agenda. This Submission is designed to contribute to this task.

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The main contributions to the recent 'poverty measurement debate' are Harding, Lloyd and Greenwell, op. cit; Peter Saunders and Kayoko Tsumroi, 'Poor Arguments' CIS Issues Analysis, No. 21, Sydney, 2002 and Poverty in Australia. Beyond the Rhetoric, CIS Policy Monograph 57, CIS, Sydney, 2002; and P. Saunders, 'Getting Poverty Back onto the Policy Agenda, Briefing Paper No. 10, The Smith Family, Sydney, 2002. Note that the CIS contributor to this debate is distinguished from the current author by the use of his full first name

# 3 Towards a New Approach

It is argued in the previous section that a new approach to conceptualising and measuring poverty is needed, and that a revised poverty line should form part of any new approach. In order to provide a clear focus for the discussion, this section considers what is required of a poverty line and locates the discussion within the broader poverty debate. This will involve a brief overview of some aspects of the conceptual literature on poverty in order to draw out the main threads on which to build.

#### 3.1 Alternative Approaches to Setting a Poverty Line

Four broad approaches to setting an income poverty line have been identified in the literature. These are:

- An approach which identifies needs in terms of a basket of goods and then estimates what it would cost to buy it (*budget standards*);
- An approach which sets standards in an explicitly relative way, i.e. as a fixed percentage of median (or mean) income (*low-income income benchmarks*);
- An approach based on 'official' or endorsed benchmarks for low income (as reflected in income support payment levels, for example) (official thresholds); and
- An approach that is based on community perceptions of minimum income levels (*the subjective approach*).

All four methods are open to  $criticism^{10}$  and no single poverty standard can be expected to meet the many (often conflicting) demands placed upon it.  $^{11}$ 

The budget standards approach is very complex to operationalise and requires a large number of assumptions and judgments before the budgets can be specified and priced. Although the method is often claimed to be transparent and thus open to debate and modification, in practice the baskets are so complex as to be incomprehensible to anyone other than those who originally constructed them. A consequence of these features is that budget standards are not, by themselves, persuasive; they are too easy to criticise (albeit often unfairly) and thus have difficulty retaining credibility.

Against this, the principal strength of the budget standards approach lies in its explicit attempt to derive the cost of meeting needs at a given standard of living across all areas of consumption. In addition, the fact that every single item that enters the budgets is identified very precisely, as are the assumptions used for costing, means that the approach can be used to check what difference it makes if particular items are changed or omitted altogether. The approach also utilises prevailing social norms and standards to develop the budgets, thus building on existing knowledge about minimum standards where they exist. Finally, the budgets can be disaggregated to

T.Callan and B. Nolan, 'Concepts of Poverty and the Poverty Line: A Critical Survey of Approaches to Measuring Poverty', *Journal of Economic Surveys*, 1991: 243-62.

J. Veit-Wilson, Setting Adequacy Standards. How Governments Define Minimum Incomes, The Policy Press, Bristol, 1998.

examine how much is needed to meet the standards in a limited range of areas, or to explore differences in the consumption levels of individuals within the family. These strengths of the budget standards approach explain its use – albeit in a restricted version – to set the poverty line in the Unites States. 13

The use of income benchmarks overcomes some of the criticisms that have been levelled at budget standards, but only by introducing a raft of new problems. In particular, they suffer from the problem that they are explicitly arbitrary and have no needs basis. There is also no agreement on whether the median or the mean is the better measure on which to base a relative income threshold. <sup>14</sup> They are useful when comparing poverty rates across countries with different income levels, but have less justification for use within a single country.

These features make it difficult to argue against the arbitrariness of the measures and thus undermine the value of poverty research in providing a compelling evidence-based platform for action. Although income benchmarks are a valuable part of the poverty research armoury – in part because they are easy to comprehend and communicate - they need to be complemented by other, more convincing (needs-based) measures (or evidence).

The use of official thresholds suffers from the problem that they do not provide an *independent* basis on which to assess the poverty impact of government actions to reduce poverty. At times they will produce perverse results. Thus, government actions to improve social benefits will automatically *raise* the poverty line and *increase* the numbers who fall below it. While some form of official endorsement of the poverty line will greatly contribute to its credibility and value, the use of official income standards as the sole basis for setting a poverty line would be counter-productive.

Finally, the subjective approach has been shown to be deficient in that it does not produce a clear consensus on what the community thinks are acceptable minimum income levels. Social surveys that have attempted to develop a subjective poverty line have found that there is considerable diversity regarding what constitutes a minimum income level, and this implies that the method used to generate a single poverty line has an important bearing on the results. Although the strength of this approach lies in its attempt to develop a democratic (community-based) approach to setting the poverty line, in practice the experts have the dominant impact on the outcomes.

It is worth observing at this stage that the original Henderson poverty line contains elements of all four of the above approaches; it was informed by research on household budgets, bore a similar relation to average incomes as poverty lines used in

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This latter use of the budget standards is explored in B. Bradbury and P. Saunders, 'Children's Consumption of Market and State-provided Goods and Services in Australia', presented at the conference on *Rethinking Expenditures on Children: Towards an International Research Agenda* Australian National University, Canberra.

C.F. Citro and R.T. Michael (eds.), *Measuring Poverty. A New Approach*, National Academy Press, Washington D.C., 1995.

P. Saunders and T.M. Smeeding, 'Beware the Mean!', SPRC Newsletter, 2002: 1-6.

P. Saunders and G. Matheson, *Perceptions of Poverty, Income Adequacy and Living Standards in Australia*, Reports and Proceedings No. 99, Social Policy Research Centre, University of New South Wales, 1992.

other countries, was set using official income benchmarks as reflected in the basic wage and level of child benefits, and was seen by its developers as being broadly consistent with community understandings of how much was needed to avoid poverty at the time.

One of the great strengths of the Henderson approach – and one of the factors that contributed to its initial impact and on-going endurance – was that it drew on evidence and arguments from a range of different approaches. This aspect provides the key to developing an informed and resilient instrument today and it forms the basis for the proposals set out below.

But which specific ideas, concepts and definitions should be incorporated into a new poverty line? There are so many competing notions to choose from! In deciding which of the alternatives offers the best prospects of achieving a good outcome, it is necessary to review some of the alternative approaches, and this is now done.

#### 3.2 Reviewing Alternative Poverty Concepts

We have no shortage of approaches to the conceptualisation and definition of poverty. Some of the most eminent social scientists have been trying to define poverty for more than 200 years and Table 3.1 summarises the key features of some of the most influential studies that span this period.

In spite of the apparent diversity displayed in these definitions, they all encompass two key features that form the core of any definition of poverty. The first is that poverty is a situation in which resources are not adequate to meet *basic needs*. This is brought out most forcibly in Adam Smith's reference to what is 'indispensably necessary', or in Rowntree's famous definition in terms of 'the minimum necessities of merely physical efficiency'. The second is that any definition of poverty should embody *community perceptions* of poverty in some way – as reflected, for example, in Henderson's mention of community attitudes, or in Townsend's reference to activities, conditions and amenities that are widely approved. Sen's modern approach based on the ideas of capabilities and functioning also embodies notions of need and of relativism.

These two features reflect the two main stakeholders involved in the task of developing a poverty measure: the *experts* whose job it is to operationalise the measure, and the *community* who will have ultimate power over its use and impact. In meeting the demands of these two groups, the poverty measure must satisfy the conditions of scientific integrity (in its incorporation of expert information on needs), and be consistent with community norms and expectations (in its incorporation of broadly-based attitudes).

#### **Table 3.1: Alternative Definitions of Poverty**

#### Adam Smith (1776):

'By necessaries, I understand not only the commodities which are indispensably necessary for the support of life but whatever the custom renders it indecent for creditable people, even of the lowest order, to be without. A linen shirt, for example, is strictly speaking not a necessity of life ... But in the present time ... a creditable day-labourer would be ashamed to appear in public without a linen shirt, the want of which would be supposed to denote that disgraceful state of poverty'

#### Seebohm Rowntree (1899):

'[A family is counted as poor if their] ... total earnings are insufficient to obtain *the minimum necessities of merely physical efficiency*'

### William Beveridge (1942):

'In considering the minimum income needed by persons of working age for *subsistence during interruption of earnings*, it is sufficient to take into account food, clothing, fuel, light and household sundries, and rent, though some margin must be allowed for inefficiency in spending'

#### Ronald Henderson (1975):

'Insofar as poverty is defined by reference to a minimum acceptable standard of living, it is a relative concept. [It requires] a value judgment [that] must *reflect the productivity of the economy and community attitudes*. The task of determining a minimum standard of living is difficult given the variety of lifestyles and values in Australian society and the range of matters, such as food, shelter, clothing, health and education, that must be considered'

#### Peter Townsend (1979):

'Individuals' families and groups in the population can be said to be in poverty when they lack the resources to obtain the types of diet, participate in the activities and have the living conditions and amenities which are customary, or at least widely encouraged or approved, in the societies to which they belong'

#### Joanna Mack and Stewart Lansley (1985):

'Poverty is an enforced lack of socially perceived necessities'

#### Amartya Sen (1992):

'Poverty [is] the failure of basic capabilities to reach certain minimally acceptable levels. The functionings relevant to this ... can vary from such elementary physical ones as being well-nourished, being adequately clothed and sheltered, avoiding preventable morbidity, etc., to more complex social achievements such as taking part in the life of the community, being able to appear in public without shame, and so on'

These two aspects are designed to ensure that the poverty measure is credible amongst both the research community and within the community generally, and this is the key to its successful development and implementation. However, these are only general principles and they do not pre-empt the need to think carefully about how best to build them into a specific operational definition of poverty.

It is important to note that <u>it is how the basic concepts of need and attitudes are expressed that provides the basis for the claim that poverty is a relative concept.</u> The relative dimension of poverty is not inherent to the notion of how poverty is conceptualised and defined, but emerges when that notion is made operational and applicable in a specific context. This is when the relative aspects come to the fore, since these reflect the context that gives meaning to a notion that is otherwise divorced from reality.

There are two aspects to this relativity. First, there is an important sense in which even basic needs can only be defined relatively. How much people need, and of what, are questions that can only be answered in relation to a specific place at a specific time, as reflected in social norms and economic conditions. Second, any notion of poverty that reflects community perceptions will also be relative, since those perceptions will embody specific social norms and attitudes.

Overall, the definition of poverty as 'an enforced lack of socially perceived necessities' (see Table 1) captures the two critical aspects of poverty with admiral brevity. It also emphasises the fact that poverty is a situation which is forced onto people, not chosen by them. Many modern definitions of poverty take this as their reference point, refining it to suit specific social circumstances and community attitudes.

#### 3.3 Subsistence Needs

In relation to the notion of need itself, the available research indicates that most people have a notion of subsistence in mind when they think about poverty, and the definition of poverty should thus reflect this. Table 3.2 summarises evidence produced from two recent surveys conducted by the Social Policy Research Centre (SPRC). Prior to asking the question, respondents were asked whether or not they agreed with each of a series of statements that described poverty and were shown the list in Table 3.2. Most indicated that they agreed with *all* of the definitions they were shown, but they were then asked which definition *best* describes poverty, and the results this generated are summarised in the table.

The results support the claim that the majority (around three-quarters) of Australians view poverty in subsistence terms, and also that the percentage that takes this view is remarkably stable over time and across different sub-groups in the population. Table 3.2 also indicates that there is little support for definitions of poverty that embody an explicitly relative component. Thus, there was very little support for seeing poverty as having 'a lot less than everyone else', or not being able to afford either 'what other people take for granted', or 'any of the good things in life'. Poverty thus means not having enough to buy basic items, rather than being unable to buy items that the majority can afford: it reflects need, rather than envy.

It is very important to emphasise that <u>adopting a needs-based subsistence definition of poverty does not imply that poverty should be defined in absolute terms.</u> Although the needs themselves are absolute in the sense that they refer to universal conditions as

reflected in adequate food, housing and clothing, the actual commodities that will satisfy these identified needs and their quality will be defined relative to existing customs and standards of living. To paraphrase Sen, while there is a core of poverty that is absolute in relation to capabilities, it is relative in relation to incomes or resources.<sup>16</sup>

The standard of housing that is regarded as providing a minimum level of shelter in Australia in 2003, for example, will differ from that in Australia in 1903, or for that in India or Indonesia in 2003. It is these differences that give a relative dimension to the operational expression of subsistence – even though the poverty line itself is derived as the cost of purchasing a fixed list of subsistence items.

**Table 3.2: Overall Descriptions of Poverty (percentages)** 

QUESTION: Overall which of these statements BEST describes what being in poverty means to you	Sample of DSS clients (1995)	Sample of adult Australians (1999)	Sample of rural and remote residents (1999)
Not having enough to buy basics like	41.9	43.8	44.8
food, housing and clothing			
Having to struggle to survive each and	26.4	32.2	30.1
every day	10.2	10.5	11.0
Not having enough money to make ends	12.3	10.5	11.0
Met having arough to be able to live	8.6	6.5	8.2
Not having enough to be able to live decently	8.0	0.3	8.2
Not having enough to buy what most	_	2.7	4.2
others take for granted		2.,	1.2
Having a lot less than everyone else	1.8	-	-
Not being able to afford any of the good	6.7	2.0	-
things in life			
Don't know/multiple responses	2.5	2.5	2.5
Sample size	1,146	2,269	590

**Source:** P. Saunders, *The Ends and Means of Welfare. Coping with Economic and Social Change*, Cambridge University Press, 2002; supplemented by unpublished survey data.

Implicit in the subsistence approach to poverty is the idea that the poverty line should only be adjusted to reflect increases in the prices of the items that are included in the basket of goods that constitute subsistence. This is true as long as the specification of the subsistence items does not change. Over time, however, the nature of these items will change in line with economic conditions and social norms. This is why it is necessary to regularly review the items that are included in the subsistence basket (as is done using the budget standards approach described earlier), and it is this that gives the subsistence approach its relative dimension.

A.K. Sen, *The Standard of Living*, Cambridge University Press, Cambridge, 1987.

The method illustrated above, in which people are asked to identify what poverty means to them, not only provides a basis for identifying which needs should be included in the definition of poverty, but is also a vehicle for incorporating community perceptions into the poverty measure. It thus satisfies both of the conditions identified earlier as being the key ingredients of any poverty measure.

Is it necessary to go further than this? The answer is yes, because the more that it can be shown that the poverty measure reflects a subsistence standard of living that is identified as unacceptable by the community, the greater will be its claim to community credibility. It is thus necessary to expand the subsistence approach sketched out above by incorporating elements of the other approaches to poverty measurement described earlier.

#### 3.4 Incorporating a Deprivation Component

Thus far, it has been argued that the idea of subsistence is a natural departure point from which to develop a new poverty measure. However, although the evidence presented above supports this proposition, it does not give sufficient guidance to allow the level of the poverty line to be determined. As one recent study has argued:<sup>17</sup>

'[V]irtually no modern study of poverty tells us whether people living below the poverty line have an unacceptably low standard of living. This does not mean that relative poverty in rich communities is not real, but rather that we need different sorts of research to link demonstrated problems with living standards and the statistical measures of low income commonly used as proxies for poverty.'

The claim that there is no evidence linking poverty to unacceptable living standards is an exaggeration, although it is true that further research on the actual living standards and circumstances of those classified as poor is needed to substantiate the claim that their living conditions are synonymous with poverty.

Such additional information should be consistent with the broad principles underlying the above discussion and can be used to help identify where to set the poverty line. By incorporating such information, the goal is to refute the claim that the poverty line is arbitrary. One move in this direction involves observing the levels of deprivation experienced by those living on low incomes as a way of identifying (or at least, of approximating) the income level that corresponds to poverty.

The key feature of deprivation measures in this context is that they provide a direct indicator of poverty status because they reveal that basic needs are not being met. This is in contrast with resource-based poverty indicators such as income, which are indirect in the sense that they imply that poverty is present, but do not actually confirm this through direct observation. <sup>18</sup>

Because deprivation reflects a situation of unmet need that is actually observed and thus experienced, it provides strong support for the claim that poverty exists. At the

P. Whiteford, 'Measuring Poverty and Income Inequality in Australia', *Agenda*, 1997: 39-50 (italics have been added).

S. Ringen, 'Direct and Indirect Measures of Poverty', *Journal of Social Policy*, 1987: 351-65.

same time, it is possible to identify which forms of deprivation are regarded as unacceptable in the community by surveying public opinion (in a similar manner to that used to produce the results in Table 3.2), thus giving increased credibility to the measure.

This way of utilising the deprivation approach has been employed in a number of recent European poverty studies, particularly in the United Kingdom. <sup>19</sup> The basic idea is encapsulated in the definition of poverty as; 'an enforced lack of socially perceived necessities' (see Table 3.2) where the term necessities is defined broadly to include not only the material goods needed to meet minimum consumption standards, but also those activities and facilities that are broadly regarded as necessary to support participation and other important dimensions of social functioning. The list should thus include such items as: being able to send one's children on school excursions; having enough to afford to buy presents for family members on important occasions; having enough to pay household bills on time; and not having to rely on welfare agencies, or food or clothing banks to get by.

The British research presented in <u>Appendix A</u> provides a framework for defining severe child poverty in terms of a combination of income, deprivation and exclusion indicators along these lines.

Two specific issues must be resolved before this approach can be made operational. First, it is necessary to decide which among the many deprivation indicators to include. In line with the framework already proposed, this involves identifying those dimensions of deprivation that a broad majority of the community perceives as being unacceptable because they are closely associated with, and thus indicative of, poverty. It will often be easier to specify the circumstances that arise when a particular item is *lacking* as a way of establishing that it is an important dimension of deprivation. Thus, having essential services cut off due to unpaid bills, or being forced to rely on emergency relief is likely to be seen by many as evidence of deprivation, irrespective of the specific circumstances that led to these events occurring.

Separate indicators could be selected for different family members, according to their age (adults or children) and economic status (employed or not in the labour force), since this will affect what kinds of indicators are appropriate. Identifying deprivation indicators that represent unacceptable circumstances for children is of particular importance, since a deprived childhood is not only a source of immediate misery, but also a cause of longer-term disadvantage.

Once the list of deprivation indicators has been identified, the second stage involves trying to identify the relationship between these indicators and the incomes of those who experience them. This is intended to provide a rationale for choosing a particular income level as the basis for identifying poverty. This is a challenging and difficult task. The goal is to establish through a special social survey the actual profile of experienced deprivation in the population, and then to undertake statistical analysis of the relationship between disposable income (adjusted for need in some simple way) and experienced deprivation in order to identify the income level (or, more likely, the range of income) at which deprivation increases to an unacceptable level.

See <u>Appendix A</u> and D.Gordon and C. Pantazis (eds.), *Breadline Britain in the 1990s*, Ashgate, Aldershot, 1997.

It is possible that the approach may not produce an estimate that is precise enough to set an income poverty line. It may be that the degree of diversity in the population will be too great to permit this, as some overseas experts have argued. However, even if this is the case, the information collected in the survey will allow the incomes of those who are actually experiencing unacceptable levels of deprivation to be identified. This information will provide a valuable supplement to the other data on the circumstances of those at risk of poverty, thus helping to identify what is an unacceptably low level of income. At the very least, the approach should help to set an income floor below which it is not possible to survive without experiencing a level of deprivation that exceeds the reasonable limits of unacceptability as set by community opinion.

In summary, <u>a detailed study of community attitudes to different forms of deprivation</u> and of the levels of deprivation being experienced by different households will provide invaluable information that will advance the search for a new poverty measure.

A step in this direction has already been taken by the Australian Bureau of Statistics (ABS) through the inclusion of a series of questions on financial stress and hardship in the latest (1998-99) *Household Expenditure Survey* (HES). This is to be welcomed, and the ABS should be encouraged to continue this work and expand its coverage in future HES and other household surveys.

The scope of this work was limited by the many other competing demands on the HES questionnaire and a better approach would involve conducting a special social survey focusing specifically on deprivation and its relationship to other indicators of living standards, along the lines of the *British Poverty and Social Exclusion* survey described in **Appendix A** In the absence of such data, use is made of the available HES data in the next section to illustrate how to develop a new poverty measure.

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D. Piachaud, 'Peter Townsend and the Holy Grail', New Society, 1981: 419-21.

# 4 Experimental Sensitivity Results

#### 4.1 Using Expenditure Data to Supplement Income

Considerable concern has recently been expressed over the quality of the income data reported in ABS surveys, including the HES and the *Survey of Income and Housing Costs* (SIHC) that are widely used to estimate poverty. The ABS itself has cautioned against the reliability of the reported income data for those in the lowest income decile, noting that many report negative or implausibly low incomes whilst reporting higher levels of consumption spending – at times, much higher. As a result of these concerns, ABS has shifted its focus to households in deciles two and three rather than those in the first (lowest) decile when describing the circumstances of those facing economic disadvantage. 22

These developments are worrying because they threaten to reduce even further the already rather limited information available on the circumstances of those who are at the bottom of the income hierarchy. While there is no justification for presenting and analysing data that are not reliable, it is important to ensure that this does not further erode the capacity to undertake poverty research by making every effort to improve data quality in those areas where problems have been identified.

An obvious alternative measure of well-being to income on which to base a poverty standard is the level of total *expenditure*, for which there is comprehensive and reliable data collected in the HES. The use of expenditure to indicate the standard of living has been endorsed by Peter Travers and Sue Richardson, who have argued in relation to measuring poverty, that:<sup>23</sup>

'When measuring the resources available to an individual it is preferable to quantify expenditure rather than income. Expenditure generates the flow of services from which material well-being is derived. Income, in contrast, provides the *capacity* to purchase things ... generally income is valued not for its own sake but for the ability it provides to buy goods and services. It is thus more satisfactory to measure directly the level of goods and services bought.'

The conventional rationale for measuring poverty using income is that it is after-tax income that restricts the total level of *consumption possibilities*. In contrast, *actual consumption expenditure* is seen to be the outcome of choices that may reflect tastes rather than constraints on the available consumption options. However, this dichotomy between constraint and choice variables is an over-simplification since income is also partly the outcome of choices made (in the labour market, for

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See Peter Saunders and Kayoko Tsumori, op. cit., and ABS, 'Upgrading Household Income Statistics', *Australian Economic Indicators, April 2002*, ABS Catalogue No. 1350.0, 2002; and ABS, 'Mapping Australia's Progress', ABS Catalogue No. 1370.0, 2002.

See the discussion of the supplementary indicators of economic disadvantage in 'Mapping Australia's Progress'.

P. Travers and S. Richardson, *Living Decently. Material Well-Being in Australia*, Oxford University Press, Melbourne, 1993.

example), while consumption expenditure obviously constrains the standard of living that is actually experienced.

There are also a number of practical limitations to using expenditure to measure the standard of living. First, there is the important point that what actually matters for living standards is the *consumption* of goods and services rather than the level of *expenditure* as such. These diverge whenever money is spent on consumer durables, since the amount spent in the purchase period far exceeds the services consumed from the item in that period.

Furthermore, where a low level of expenditure reflects the choice of consumers, this may have no implications for the standard of living of those who voluntarily entered into these choices in the first place - at least none of any *policy* consequence. This is particularly important in the context of poverty, which is a situation characterised by constraint and enforcement, not by choice and preference. The wealthy miser may consume little, but this does not make him (or her) poor.

But similar arguments also caution against the use of income as the basis for identifying poverty. The low *voluntary* labour supply (and hence low earnings) of those with a strong preference for leisure is no more indicative of poverty than is the low spending of the wealthy miser.

Aside from these conceptual considerations, there are a number of practical problems associated with using expenditure data in poverty research. One of these relates to the infrequent purchase of durable items that leads to a degree of inter-temporal variation in expenditure that does not reflect variation in the underlying standard of living. As noted above, this problem can be overcome by omitting expenditures on consumer durables from the analysis, an approach that is likely to have little impact on the poorest households, who are unlikely to be spending very much on durable items. Finally, use of expenditure rather than income does not overcome reporting problems. There is a tendency for expenditure surveys to under-report some items of expenditures including those on tobacco and alcohol.

These remarks suggest that there are both conceptual and practical issues to be resolved before reaching any final conclusion regarding the use of income or expenditure in research on poverty and living standards. Income has been used in the past partly because it is there, partly because income has been seen as the better measure of available resources, but mainly because, as noted earlier, it is *income* that gets redistributed through the tax and transfer systems.

The above discussion suggests that it may be fruitful to consider income and expenditure not as alternative indicators of poverty, but rather as complementary. This is based on the idea that there are two distinct conceptions of poverty: a *standard of living approach* which emphasises minimum levels of consumption of goods and leads naturally to an expenditure-based measure; and a *minimum rights approach* which emphasises the provision of minimum incomes but does not prescribe how these should be spent.<sup>24</sup> Use of expenditure patterns to examine poverty also provides a way of exploring issues associated with the capability approach to poverty

A.B. Atkinson, 'How Should We Measure Poverty? Some Conceptual Issues', in A. B. Atkinson, *Poverty and Social Security*, Harvester Wheatsheaf, London, 1989: 7-24.

measurement developed by Sen,<sup>25</sup> since the expenditure data cover some of the functioning activities that determine one's capability.

Figure 1 shows how all of the possible income and expenditure combinations compare with a (fixed) poverty line. In total, there are eight combinations of household income and expenditure relative to the poverty line. <sup>26</sup> The conventional approach defines as poor those households in any of the four situations labelled (2), (4), (5) and (8), while identifying poverty status on the basis of expenditure would also include households who are in situations (2), (5), (7) and (8).

It should be noted that the income approach defines as poor those households in situation (4), even though their expenditure exceeds the poverty line. An obvious question that arises here is how is this situation achieved, and is it sustainable? Presumably, it involves an element of dis-saving that can only persist while there are assets (or debts) to support it. The household in situation (4) may not be poor in terms of its current standard of living, but it clearly faces very poor prospects.

It should also be noted that the expenditure approach includes as poor those in situation (7), even though their income is above the poverty line. Furthermore, in situation (8), expenditure is less than income, even though income is below the poverty line. Is a poverty classification warranted in a situation where observed household behaviour appears to imply that (income) resources are more than adequate to meet the (expenditure) needs of the household? At the very least, further investigation is warranted to shed light on what is happening in these situations, including whether or not they are sustainable.

This discussion suggests that situations (4) and (8) are qualitatively different from situations (2) and (5) which unambiguously represent poverty. This suggests that there may be merit in distinguishing, at least for exploratory purposes, between what might be termed 'core income poverty' - represented by situations (2) and (5) in Figure 1 - from 'conventional income poverty' which also includes situations (4) and (8).

The expenditure poverty situations shown in Figure 1 can be similarly separated into those corresponding to 'core expenditure poverty' (situations (2), (5) and (8)) and those that correspond to 'conventional expenditure poverty' - which would also include situation (7). (Note that in this case, situation (8) is included in the definition of core poverty even though not all income is spent, because even if it were,

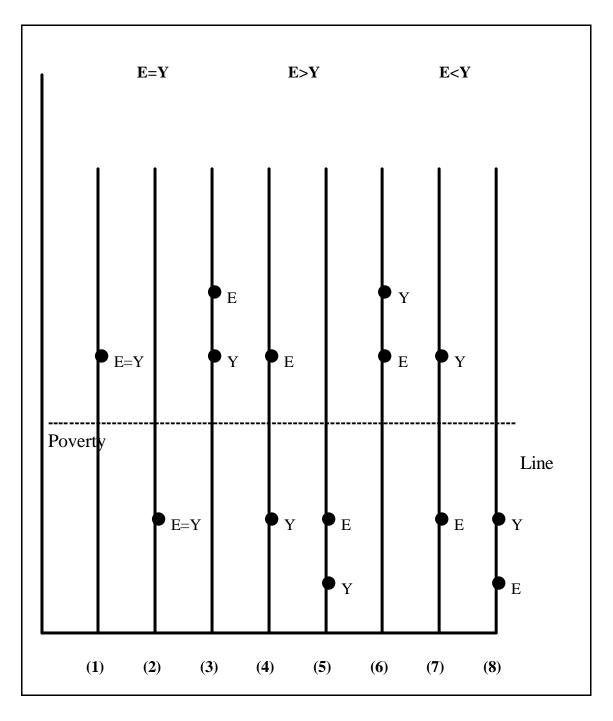
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A.K. Sen, Commodities and Capabilities, North Holland, Amsterdam, 1985;. The Standard of Living, Cambridge University Press, Cambridge, 1987; Inequality Re-examined, Clarendon Press, Oxford, 1995; and Development as Freedom, Oxford University Press, Oxford, 1999.

The discussion that follows draws heavily on: P. Saunders, 'Living Standards, Choice and Poverty', *Australian Journal of Labour Economics*, 1997: 49-70.

Figure 1: Income and Expenditure as Complementary Poverty Measures



Income poverty:

(2) + (4) + (5) + (8)

'Core income poverty':

(2) + (5)

Expenditure poverty:

(2) + (5) + (7) + (8)

'Core expenditure poverty'

(equals Max (E,Y) poverty): (2) + (5) + (8)

Min (E,Y) poverty:

(2) + (4) + (5) + (7) + (8)

*expenditure* would still be below the poverty line). In contrast, situation (7) is one in which the low level of expenditure appears to have been *chosen* from a feasible consumption set could have supported a higher (non-poverty) level.

The 'core expenditure' poverty measure developed above implies that only those for whom *both* income and expenditure are below the poverty line are defined as poor. This measure is thus equivalent to defining poverty by comparing the *maximum* of income and expenditure with the poverty line and is shown below Figure 1 as the Max (E,Y) poverty measure. For completeness, the Min (E,Y) poverty measure is also shown, corresponding to situations where people are *either* income-poor *or* expenditure-poor - or to where poverty status is assessed by comparing the *minimum* of income and expenditure with the poverty line.

Having briefly described the approach, Table 4.1 presents estimates of the five alternative poverty measures described above using unit record data on incomes and expenditures from the 1993-94 HES. The analysis has been restricted to single income unit households because of the problems inherent in allocating certain household expenditures in the HES to income units who share accommodation. Poverty has been estimated using the (simplified) Henderson poverty line, updated to each of the four quarters of 1993-94 for which the HES data were collected. The income variable refers to disposable income, derived by deducting *imputed* income tax from *reported* gross income, while the expenditure variable refers to total goods and services expenditure.

Table 4.1: Alternative Estimates of income Poverty and Expenditure Poverty in 1993-94 (percentages)

Income unit type	Income poverty (Y)	Core income poverty (Y*)	Expenditure poverty (E)	Core expenditure poverty (E*)	Minimum (Y, E) poverty
Single aged (m,65+;f,60+)	37.2	2.0	41.4	21.4	57.2
Single, non-aged	28.0	4.9	20.6	12.1	36.5
Aged couples (head,65+)	9.3	1.2	22.2	2.8	28.7
Non-aged couples	11.3	1.9	11.7	3.1	19.9
Couples with dependants	16.8	2.5	14.1	5.2	25.7
Sole parents with dependants	33.7	6.1	20.4	12.3	41.8
All income units	20.3	2.8	19.5	8.2	31.6

Source: Household Expenditure Survey, 1993-94, confidentialised unit record file.

When poverty is measured using the conventional income approach, the estimates in the first column of Table 4.1 indicate that the overall poverty rate in 1993-94 is around 20 per cent, with poverty highest among single people and sole parents.<sup>27</sup> Income poverty among sole parents is high (33.7 per cent), and is much higher amongst the single aged than amongst aged couples, although these estimates are very

Harding, Lloyd and Greenwell, op. cit.: Table 17 estimate Henderson poverty in 1995 to be between 19.0 per cent and 20.2 per cent.

sensitive to where the poverty line is set, because of the close proximity of the single rate of pension to the Henderson poverty line.

When the more restrictive 'core income poverty' approach is used, the overall poverty rate falls dramatically, from just above 20 per cent to less than 3 per cent. In proportional terms, the decline is greatest for those aged over 65, although substantial absolute declines occur for all income unit types. The poverty profile is, however, largely unchanged with poverty remaining highest among sole parent families and single non-aged people, although the single aged are less prone to poverty when the core income measure is used.

When expenditure rather than income is used to determine poverty status (by comparing it to the same income poverty line), the estimates in the third column of Table 4.1 show that although there is almost no effect on the overall poverty rate, poverty among specific demographic groups (and hence the *composition* of the poverty population) changes considerably. Expenditure poverty amongst the aged actually *exceeds* income poverty, which is not what the conventional life-cycle model of consumption in retirement would predict, unless explicit account is taken of a very strong bequest motive for saving among the aged.

The estimates of core expenditure poverty are lower again, although the composition of the poor is similar to that for income poverty. The overall poverty rate is now 8.2 per cent, well below the conventional figure of over 20.3 per cent, but well above the core income estimate of 2.8 per cent. According to this measure, there are many older Australians living alone, as well as large numbers of younger single people and sole parent families who have below poverty line levels of both income and expenditure. However one looks at the data, these groups face a very high risk of poverty.

Finally, the estimates in the final column of Table 4.1 indicate that, on this most generous of the alternative poverty measures considered, poverty remains highest among single aged people living alone, although many more couples and sole parents now have either insufficient incomes to raise them above the line, or are not spending a poverty line budget when their incomes would allow them to.

The estimates presented and discussed above are only illustrative. The fact that no adjustment has been made to remove expenditures on consumer durables suggests that they should be treated with caution, since this will inflate the expenditures of those households who purchased any durables in the survey period. The aim of the results is to illustrate how combining information on expenditure with that on income opens up new perspectives on poverty and prompts new questions about whether income alone is capable of providing an unambiguous classification of the poverty status of households.

In so doing, the estimates also raise new and interesting questions about the definition of poverty and how it relates to the realities faced by households. Further work along these lines should form part of any future poverty research agenda.

#### 4.2 Modifying the Income Poverty Measure: Methodology

This section reports some further poverty estimates derived from the latest data (1998-99) HES data. Although poverty estimates are normally based on unit record data from the *Survey of Income and Housing Costs* SIHC, such data from the two latest

surveys have not yet been released because of problems with the reported data on government benefit incomes.<sup>28</sup>

The methodology used to produce the results consists of the following assumptions:

- Two basic poverty lines are used. The first is an amended version of the Henderson poverty line that assumes an equivalence scale equal to the square root of household size, using as its benchmark the 1998-99 poverty line for a two-adult, two-child family published by the Melbourne Institute. The second poverty line is set at half the median household income, after adjusting for differences in need using the square root equivalence scale.
- Estimates have also been derived by setting each poverty line at 80 per cent of its original level so as to provide an indication of the sensitivity of results to variations in the poverty line.
- The amended Henderson poverty line described here for a two-adult, two-child family in 1998-99 is equal to \$474.08 a week. The corresponding (adjusted) median income level poverty line for that family is equal to \$405.88, or around 86 per cent of the Henderson line.
- The 80 per cent benchmark for the median income poverty line thus corresponds to 0.80 x 0.86 = 0.69, or just below 70 per cent of the amended Henderson line. In effect, therefore, the four sets of poverty estimates correspond to using a poverty line equal to 100 per cent, just below 90 per cent, 80 per cent and just below 70 per cent of the amended Henderson poverty line, respectively.
- Most of the results presented and all of those discussed in detail refer to single income unit households only, where an income unit consists of either a single person, a sole parent with children, and couples with or without children. For ease of exposition, the terms 'income unit' and 'family' are used interchangeably in the discussion.
- Results are presented in aggregate and for a breakdown by family type and labour force (employment) status.

A major aim of the analysis that follows is to examine the sensitivity of the poverty estimates when various adjustments are made to the data used to derive them. The specific adjustments examined have been guided by the concerns raised in the recent debate over the validity of poverty estimates generally, with the goal of identifying which of the many potential conceptual and practical (data) limitations raised by the recent criticism of poverty research actually make a substantial difference to conventional estimates of poverty.

ABS, 'Upgrading Household Income Distribution Statistics', op. cit..

The specifications of the range of alternative experimental estimates are shown in Table 4.2, which describes how each specification was structured and provides the rationale for each in terms of the underlying issue under consideration. As Table 4.2 indicates, the different specifications are designed to assess how sensitive the poverty rate is to changes in the methods used to derive it.

It should be emphasised at the outset that the first three specifications shown in Table 4.2 reduce the *coverage of households* included in the analysis: these specifications thus exclude certain households from both the numerator and the denominator used to estimate the poverty rate. In contrast, the focus of the remaining specifications is on how poverty changes when *the conditions used to define it are changed*, and these specifications thus remove the relevant households from the poverty population, but keep them in the overall population – i.e. they are removed from the numerator of the poverty rate but are kept in the denominator. This approach seems appropriate when examining the impact on the poverty rate of removing households for which there is evidence to suggest that that may not be as poor as their income alone implies.

The first three specifications in Table 4.2 assess the impact of removing from the analysis all those households with income from self-employment and negative reported incomes from any source. The next five specifications exclude any households from the poverty population whose expenditure exceeds their disposable income by varying amounts, or who report very high levels of expenditure on single items. The aim of these specifications is to assess how many of those families with incomes below the poverty line are apparently spending more than their income (V4 – V6) or spending large amounts on single items (V7 & V8) – both of which suggest that their actual standard of living could be above the poverty line.

Together, these five specifications experiment with moving away from reliance on income as the sole measure of economic (and hence poverty) status, towards a measure that also takes account of the spending patterns of those with low reported incomes. They thus move in the direction of replacing income by expenditure when measuring poverty developed earlier (see Figure 1 and Table 4.1) but keep income as the primary basis for estimating poverty.

Specifications V9 – V12 remove all income poor households who report very low incomes from government benefits (well below the maximum rate of payment) who also report very low market incomes (from earnings and investments). There is the suggestion in these cases that benefit income may be under-reported, either from error or to conceal some form of fraudulent activity. As noted earlier, there has been a good deal of concern expressed recently about the quality of the ABS survey data on income from government benefits and these specifications attempt, albeit in a rudimentary way, to assess how much the poverty estimates change when families with what appear to be implausibly low reported benefit income are excluded from the poverty population. <sup>29</sup>

Note that low benefit incomes may be less indicative of reporting problems in future, as breaching becomes more widespread.

**Table 4.2: Specification of the Alternative Poverty Estimates** 

Version	Specification	Comment/Rationale
V1	All households	A comprehensive, benchmark
		estimate
V2	As above, but excluding all	Concerns over the reliability of
	households with income from self-	reported income from self-
	employment	employment
V3	As above, but also excluding any	Reported negative incomes may be
	household reporting a negative	unreliable
	income from any source	
V4	As V3, but excluding from the	These households have a higher
	poverty estimates any household	standard of living than is implied by
	where expenditure exceeds	the reported information on DY
	disposable income (DY) by more	
	than 50%	
V5	As V4, but replacing 50% by 20%	A stricter test of the same idea
V6	As V5, but reducing 20% to zero	An even stricter test of the same idea
	(i.e. excluding all poor households	
	who spend more than their income)	
V7	As V3, removing from the poverty	Such large expenditures are
	estimates any household spending	inconsistent with being in poverty
110	more than \$1000 on a single item	
V8	As V7, but lowering \$1000 to \$500	A stricter test of the same idea
V9	As V3, but removing from the	Adjusts for households with
	poverty estimates any household	implausibly low reported benefit
	reporting less than \$20 a week in	income
	benefit income and \$20 a week in	
V10	earnings plus investment income	A stricter test of the same idea
V10 V11	As V10, but increasing \$20 to \$50	An even stricter test of the same idea
V11 V12	As V11, but replacing \$50 by \$100	
V12 V13	As V11, but replacing \$100 by \$150 As V3, but removing from the	An even stricter test of the same idea
V15	poverty estimates any household	Supplements income poverty with a deprivation measure
	who do not report experiencing at	deprivation measure
	least one of the 16 financial stress	
	indicators	
V14	As V13, but increasing the number	A stricter test of the same idea
	of stress indicators to 2	11 Shieter test of the Suine Idea
V15	As V14, but increasing the number	An even stricter test of the same idea
	of stress indicators to 3	1
V16	As V3, but removing from the	A stricter test of the supplementary
	poverty estimates any household	deprivation approach
	who do not report experiencing at	* **
	least one of the 6 core financial	
	stress indicators	
V17	As V16, but increasing the number	A stricter test of the same idea
	of core stress indicators to 2	
V18	As V17, but increasing the number	An even stricter test of the same idea
	of core stress indicators to 3	

Finally, specifications V13 – V18 combine information on low income with additional data on financial stress and hardship in identifying who is poor. These specifications define as poor only those households who have incomes below the poverty line **and** who experience some of the hardship indicators that were included as part of the HES in 1998-99 for the first time. These indicators have been used in recent studies by ABS and the Department of Family and Community Services to examine the profile of households facing financial stress and hardship. The estimates are designed to illustrate an approach to poverty measurement that combines both indirect (income-based) and direct (deprivation-related) indicators in order to establish who is poor (see also **Appendix A**).

### 4.3 Modifying the Income Poverty Measure: Results

The results reported below are designed to assess the impact of the alternative specifications described in Table 4.2 on the overall poverty rate and the rates for specific sub-groups in the population. The combination of alternative poverty lines, alternative data specifications and different sub-group characteristics makes for a very large – at times, confusingly large - array of estimates.

There are those who will argue that this introduces further complexity into an area of research that is already too complicated for most people to follow. There is an element of truth in these claims and, as argued earlier, it is important that the poverty measure can be communicated to, and understood by the community. However, the aim of the current exercise is to try to clear the way towards the development of such a measure by highlighting which of the current limitations need to be overcome in any new approach.

In describing the results, only the main points are highlighted, leaving it to those who are interested to explore the results for themselves in greater detail. It is also important to emphasise that the focus is on assessing how *sensitive* the estimates are to variations in the methods used to derive them. The following summary should thus be primarily seen as a contribution to the broader debate about how best to estimate poverty using available data sources.

### **Poverty by Family Status**

Beginning with the 'amended' Henderson poverty estimates, the main results are shown in the first three lines of Table 4.3. The estimates shown in the third line exclude all households reporting any income from self-employment or any negative income from any source. Because these estimates are closest to the conventional Henderson poverty approach – which treats the self-employed separately - they are shown in bold in Table 4.3 and later tables. When estimated on this basis, the overall household poverty rate in 1998-99 is 19.9 per cent, although this rate rises significantly to 25.2 per cent among households with only one income unit. This rise reflects the fact that many multiple income unit households have higher incomes than single income unit households, even after adjusting for the fact that they contain more individuals and thus have more needs to meet.

R. McColl, L. Pietsch and J. Gatenby, 'Household Income, Living Standards and Financial Stress', *Australian Economic Indicators. June 2001*, Catalogue No. 1350.0, ABS, Canberra: 13-32, and J.R. Bray, 'Hardship in Australia. An Analysis of Financial Stress Indicators in the 1998-99 Australian Bureau of Statistics Household Expenditure Survey', *Occasional Paper No. 4*, Department of Family and Community Services, Canberra, 2001.

However, there is a less compelling reason to believe that resources are shared within households than within income units (as is assumed when estimating poverty using the total income of the household/income unit). Many multi-income unit households are group households that contain individuals who live largely independent lives, for whom the equal resource-sharing assumption is inappropriate. Largely for this reason, Australian poverty researchers have used the income unit rather than the household as the unit when estimating poverty, and that approach is followed here (although both sets of estimates are presented for completeness).

It is noteworthy that removing the self-employed and those reporting negative incomes actually causes the estimated poverty rate to *increase* (compare the estimates in lines 1, 2 and 3 in Table 4.3). This reflects the fact that overall, households reporting negative incomes or income from self-employment have a below-average poverty rate compared with other households in the population. This does not address the issue that reported income for those in self-employment may under-state the actual standard of living, but it does alert one to the fact that it is not always straightforward to predict the impact of adjusting the data to reflect concerns over its voracity.

Looking across the third row of Table 4.3, it is clear that the poverty rate varies considerably across different family types. The poverty rate is highest among single aged people, followed by sole parent families, aged couples and non-aged single people. Poverty is lowest among non-aged couples, with and without children.

The between-family variations in poverty are a combination of two factors. The first is the extent to which each family is exposed to the *risk of poverty* and the second is the *adequacy of the income support* provided (relative to the poverty line) to those who actually experience that risk. The poverty rate relativities in Table 4.3 are so large as to suggest that both factors have a role to play in causing poverty: thus, the fact that poverty is highest among the aged while their pension levels are higher than for many other groups implies that they face a greater exposure to the risk of poverty; furthermore, the fact that poverty varies with family size for those of working age suggests that the adequacy of income support payments is also an important factor in affecting the poverty profile.

The use of alternative poverty lines provides a clue to the extent to which income support payments are not adequate to protect recipients from financial poverty. When the poverty line is reduced by 20 per cent, the results show that the overall poverty rate is reduced by more than half, from 25.2 per cent to 11.1 per cent (Table 4.4). This is an important finding, since it indicates that while a large proportion of Australian families are estimated to have incomes below the (amended) Henderson poverty line, their incomes do not place them too far below it. The poverty rates for the single aged and aged couples decline from 64.1 per cent to 40.6 per cent, and from 37.6 per cent to 4.3 per cent, respectively, when the poverty line is lowered by 20 per cent. Even at this lower poverty line, poverty remains high among sole parent families, while the relative poverty rate among non-aged single people increases – suggesting that their economic circumstances are far less favourable than other groups.

Table 4.3: Poverty Rate Sensitivity by Family Status: Henderson Poverty Line (percentages)

	All households (hhs)	All single income unit hhs	Aged single	Aged couple	Non- aged couple	Couple with 1 child	Couple with 2 children		Non- aged	Sole parent with 1 child	Sole parent with 2 children	Sole parent with 3+ children
V1	18.7	23.4	63.8	37.6	15.6	11.1	11.4	15.8	30.1	50.4	57.2	60.4
V2	19.1	24.0	64.4	37.6	15.3	11.0	10.3	13.1	30.6	50.3	58.0	60.4
٧3	19.9	25.2	64.1	37.6	16.1	11.4	11.1	14.4	31.0	50.6	60.0	61.7
V4	13.2	17.1	49.6	28.1	10.7	7.1	6.2	8.1	18.8	38.4	38.5	34.2
V5	10.1	13.3	41.4	22.5	7.8	6.5	4.4	6.3	14.6	24.3	26.1	30.8
V6	7.0	9.1	30.6	17.3	5.2	3.6	2.3	4.4	10.2	16.9	17.6	16.1
V7	19.9	25.1	64.1	37.1	16.0	11.4	11.1	14.4	30.9	50.6	60.0	61.7
V8	19.4	24.5	63.7	36.0	15.4	11.1	10.5	13.6	30.4	50.6	60.0	61.7
V9	19.1	24.1	62.2	36.4	14.8	10.8	10.6	14.4	27.2	50.6	60.0	58.7
V10	18.8	23.8	61.2	36.4	14.3	10.8	10.6	13.2	26.9	50.2	60.0	56.4
V11	18.2	23.0	60.0	35.8	14.0	10.0	9.9	12.4	25.7	49.5	58.4	54.1
V12	17.5	22.1	57.4	34.8	13.3	10.0	9.2	11.7	22.5	48.9	57.6	54.1
V13	14.4	18.2	34.7	17.8	10.7	10.3	8.9	12.3	25.1	46.8	56.6	49.7
V14	11.8	14.8	23.6	9.9	8.0	8.9	7.3	11.2	21.7	42.9	50.7	47.2
V15	9.7	12.3	17.0	6.8	5.8	8.3	6.2	8.3	18.5	38.8	46.9	41.6
V16	7.7	9.6	8.9	3.3	3.9	6.2	4.8	6.9	13.8	33.4	43.5	39.8
V17	4.7	5.8	3.0	1.2	1.1	4.4	2.5	4.6	8.1	21.5	33.0	23.1
V18	2.4	2.9	1.3	0.4	0.3	2.7	1.6	1.8	4.8	10.0	16.3	16.8

<u>If, instead of the Henderson framework, a poverty line set at one-half of (adjusted)</u> median income is used, the overall poverty rate is estimated to be 13.6 per cent (

Table 4.5). However, the pattern of poverty rates across family types remains much the same as in the earlier estimates, suggesting that this pattern is fairly robust. Once again, poverty is highest among the single aged, followed by sole parent families and non-aged single people. When this poverty line is lowered by 20 per cent, the poverty rate declines to 5.3 per cent, but the relative risks of poverty remain unchanged (Table 4.6).

## **Poverty by Employment Status**

The profile of poverty rates by employment status (among single income unit households only) is presented in Table 4.7 through to Table 4.10. It is clear that a very strong relationship exists between poverty and employment status. For example, as implied in Table 4.7, the poverty rate for jobless families (i.e. with no employed member) is almost seven times higher (65.1 per cent) than the poverty rate among families with one employed person (8.8 per cent). Having two employed persons in the family causes a further reduction in the poverty rate (from 8.8 per cent to 3.3. per cent), although the marginal decline is far more modest that that associated with having the first person in employment.

However, the most striking feature of these results is the very large reduction in poverty associated with having not just someone in employment, but with having someone in full-time employment. In fact, the poverty rate is lower when there is one full-time worker than when there are two workers in paid employment, highlighting the fact that it is not so much access to employment that greatly reduces the risk of poverty (even though it does), but access to full-time employment. Generating high employment growth should thus be a crucial component of any poverty alleviation strategy, but generating a growing number of full-time jobs is even more critical.

These findings on to the significance of full-time employment for poverty reduction cast a warning given Australia's poor record of full-time job creation in recent decades.<sup>31</sup> Although joblessness is clearly a major contributing factor to poverty among working-age families, it does not automatically follow that any form of employment growth will produce substantial in-roads into the poverty population. Job creation is important, but creating full-time jobs is even more so.

The above patterns are even more pronounced when the Henderson poverty line (Table 4.7) is replaced by the half-median income poverty line (Table 4.9), although the poverty rate falls below 3 per cent when there is one employed person in the family. Similar patterns also exist when these two poverty lines are lowered by 20 per cent (Table 4.8 and Table 4.10) although the poverty rates themselves are obviously all now lower.

R.G. Gregory, 'It's Full-Time Jobs That Matter', *Australian Journal of Labour Economics*, 2002: 271-78.

Table 4.4: Poverty Rate Sensitivity by Family Status: 80per cent of the Henderson Poverty Line (percentages)

7/4	All households (hhs)	All single income unit hhs	Aged single	Aged couple	Non- aged couple	with 1 child	children	with 3+ children		Sole parent with 1 child		Sole parent with 3+
V1	8.9	11.1	40.5	5.5	5.1	4.7	5.2	8.7	21.8	24.5	32.1	43.2
V2	8.4	10.7	40.6	4.5	3.1	4.0	3.7	6.7	22.1	24.3	33.0	43.2
٧3	8.7	11.1	40.6	4.3	3.0	4.1	3.8	7.4	22.3	24.5	34.1	44.1
V4	4.4	5.9	30.6	0.6	0.4	1.9	1.0	2.0	13.0	19.7	17.7	18.9
V5	3.3	4.4	24.6	0.3	0.4	1.3	0.6	2.0	10.1	10.8	11.6	16.1
V6	2.4	3.1	18.8	0.3	0.0	0.8	0.2	2.0	7.3	7.6	8.2	5.4
V7	8.7	11.0	40.6	4.3	2.9	4.1	3.8	7.4	22.1	24.5	34.1	44.1
V8	8.4	10.7	40.3	4.0	2.5	3.8	3.7	6.5	21.8	24.5	34.1	44.1
V9	8.0	10.3	38.7	3.6	2.2	3.5	3.5	7.4	19.2	24.5	34.1	41.1
V10	7.7	9.9	37.7	3.6	1.7	3.5	3.5	6.1	18.9	24.0	34.1	38.8
V11	7.1	9.2	36.4	3.1	1.3	2.7	2.9	5.3	17.7	23.4	32.5	36.6
V12	6.5	8.4	34.2	2.4	0.7	2.7	2.3	4.7	15.1	22.8	31.7	36.6
V13	6.3	8.1	23.7	1.5	0.6	3.8	3.1	6.1	18.2	23.6	31.2	32.2
V14	5.4	6.9	16.6	1.0	0.5	2.7	2.6	6.1	15.9	21.9	27.4	29.7
V15	4.5	5.8	12.6	0.6	0.3	2.4	2.3	5.2	13.2	19.6	24.4	26.3
V16	3.3	4.4	5.3	0.4	0.2	1.8	1.5	4.3	9.8	14.9	23.5	24.8
V17	2.2	2.9	2.0	0.4	0.1	1.6	1.1	2.6	5.5	11.2	17.3	13.8
V18	1.1	1.5	0.6	0.0	0.1	1.6	0.4	0.9	2.8	7.9	9.2	9.8

## 4.4 Assessing the Sensitivity of Poverty Estimates

Given the vast range of alternative poverty estimates presented here, it is a virtually impossible task to summarise how they each change when the different specifications described in Table 4.2 are used to estimate poverty. For this reason, only the main points to emerge using the Henderson poverty line (Table 4.3 and Table 4.7) will be described, leaving it to interested readers to examine for themselves how the details change when the alternative specifications and poverty lines are used.

It is clear from comparing the results from specifications V4 – V6 that many households with incomes below the poverty line spend more than they report as income. For single income unit households, the poverty rate declines substantially (from 25.2 per cent to 9.1 per cent) if households who spend more than their income are no longer defined as poor. This confirms the results presented earlier (Table 4.1) which show that an expenditure-based poverty measure produces far lower poverty rates than an income-based measure.

However, a note of caution should be applied when drawing conclusions from these results. First, as noted earlier, it is possible for some households to spend more than their income but for their expenditure to still be below the poverty line, in which case they should be included as poor however it is measured. More significantly, if the poverty line really does measure the income required to meet basic needs, then we would expect those with less income to be forced to over-spend in order to meet their needs.

On this interpretation, therefore, the fact that families with incomes below the income poverty line are spending more than their income simply reinforces the reality of their poverty: how else can they be expected to meet their needs? This still leaves open the question of how this dis-saving (i.e. expenditure exceeds income) is financed and whether it can be sustained, as noted earlier. The key point is that over-spending by income-poor households can be seen as part of a rational survival strategy, rather than as evidence that the rate of income poverty is over-estimated.

The fact that the decline in poverty is greatest among families with children (particularly sole parent families with two or more children) when moving from specifications V3 to V6 suggests that over-spending is used as a deliberate strategy for protecting the living standards of children when family income is very low. In contrast, the aged experience less of a decline in poverty, even though it might be expected that they have more resources on which to draw to offset the impact of low income. Presumably, while this may be true for the aged in general, it is not so for those who are in poverty – which suggests that poverty in old age may have been preceded by poverty at younger ages. This is another area where further research is needed to explore what is actually happening in 'over-spending' households (young and old, with and without children).

Finally, it is worth noting that even after the adjustments reflected in specification V6, the poverty rate among households with no employed member, or no one in full-time employment, are still very high, at 25.8 per cent and 21.9 per cent, respectively (Table 4.7). This may reflect the fact that these households do not have access to the external

**Table 4.5: Poverty Rate Sensitivity by Family Status: Half Median Income Poverty Line (percentages)** 

V1	All households (hhs) 10.7	All single income unit hhs	Aged single 47.9	Aged couple 6.6	Non- aged couple 5.8	Couple with 1 child 6.3		Couple with 3+ children 11.6	Non- aged single 25.4	Sole parent with 1 child 29.8	Sole parent with 2 children 39.0	Sole parent with 3+ children 50.3
V2	10.3	13.1	48.0	5.5	3.8	5.6	4.9	9.2	26.0	30.0	40.1	50.3
V3	10.7	13.6	47.9	5.3	3.7	5.8	5.1	10.1	26.4	30.2	41.4	51.3
V4	5.8	7.7	36.3	1.3	0.8	2.8	1.7	4.7	15.7	23.2	23.7	23.9
V5	4.3	5.8	29.4	0.7	0.6	2.3	0.8	4.4	12.2	12.1	15.0	20.4
V6	3.1	4.2	22.7	0.7	0.1	1.5	0.5	3.6	8.6	8.7	10.8	7.6
					_	1.5				0.7		7.0
V7	10.6	13.6	47.9	5.3	3.6	5.8	5.1	10.1	26.2	30.2	41.4	51.3
V8	10.3	13.2	47.4	4.7	3.2	5.5	5.0	9.2	25.8	30.2	41.4	51.3
V9	9.9	12.7	46.0	4.6	2.8	5.2	4.6	10.1	22.8	30.2	41.4	48.4
V10	9.6	12.4	45.0	4.6	2.3	5.2	4.6	8.8	22.5	29.8	41.4	46.1
V11	9.0	11.6	43.7	4.0	1.9	4.5	4.0	8.0	21.3	29.2	39.8	43.8
V12	8.4	10.8	41.5	3.3	1.3	4.5	3.4	7.4	18.5	28.5	39.0	43.8
V13	7.7	10.1	27.5	1.7	1.3	5.5	3.9	8.5	21.3	28.6	38.6	39.4
V14	6.6	8.5	18.9	1.0	0.9	4.5	3.5	7.8	18.7	26.7	34.0	36.9
V15	5.5	7.2	13.6	0.6	0.6	3.9	3.1	6.4	15.9	23.9	30.2	33.5
V16	4.2	5.6	5.8	0.4	0.4	3.5	2.1	4.9	11.6	19.2	27.4	31.8
V17	2.8	3.6	2.0	0.4	0.1	2.5	1.4	2.9	7.2	13.9	19.9	20.2
V18	1.4	1.9	0.6	0.0	0.1	1.9	0.8	1.2	4.1	7.9	10.4	13.9

Table 4.6: Poverty Rate Sensitivity by Family Status: 80 per cent of the Half Median Income Poverty Line (percentages)

7/4	All household s (hhs)	unit hhs	Aged single	Aged couple	Non- aged couple	with 1 child	children	with 3+ children		Sole parent with 1 child		Sole parent with 3+
V1	4.9	5.9	7.3	4.5	4.3	3.4	4.0	5.8	11.4	11.3	17.4	23.6
V2	4.2	5.2	7.0	3.8	2.6	3.1	2.3	4.7	10.9	11.1	17.8	23.6
V3	4.3	5.3	6.8	3.6	2.5	3.2	2.3	5.2	10.8	11.1	18.4	24.1
V4	1.2	1.5	2.3	0.6	0.0	1.0	0.1	1.5	3.5	8.1	6.9	3.7
V5	0.8	1.0	1.5	0.2	0.0	0.6	0.0	1.5	2.5	3.4	5.1	3.7
V6	0.6	0.7	0.7	0.2	0.0	0.6	0.0	1.5	2.0	2.0	1.7	1.4
V7	4.3	5.3	6.8	3.6	2.4	3.2	2.3	5.2	10.6	11.1	18.4	24.1
V8	4.1	5.0	6.6	3.6	2.0	2.9	2.2	4.3	10.4	11.1	18.4	24.1
V9	3.7	4.6	4.9	3.2	1.8	2.6	2.0	5.2	8.0	11.1	18.4	22.8
V10	3.4	4.2	3.9	3.2	1.3	2.6	2.0	3.9	7.7	10.7	18.4	20.5
V11	2.9	3.6	2.9	2.6	1.0	1.8	1.4	3.1	6.5	10.7	16.8	18.2
V12	2.3	2.9	1.1	1.9	0.5	1.8	0.9	2.5	3.9	10.7	16.0	18.2
V13	2.9	3.7	2.9	1.3	0.4	2.9	1.7	3.9	7.9	11.0	17.2	13.9
V14	2.5	3.1	1.5	1.0	0.3	2.4	1.2	3.9	7.0	10.1	13.5	11.4
V15	2.0	2.6	0.6	0.6	0.1	2.2	0.8	3.3	5.7	9.6	12.1	9.5
V16	1.6	2.0	0.7	0.4	0.1	1.6	0.2	2.9	4.0	8.0	10.3	8.1
V17	1.1	1.4	0.3	0.4	0.1	1.4	0.2	2.1	1.9	7.1	7.7	4.6
V18	0.6	0.7	0.0	0.0	0.1	1.3	0.0%	0.9	1.1	4.1	3.7	2.3

**Table 4.7: Poverty Rate Sensitivity by Employment Status: Henderson Poverty Line (percentages)** 

	No employed persons in the household	person in the household	Two employed persons in the household	No full-time employed person in the household	At least one full-time employed person in the household
V1	64.9	11.5	7.9	55.4	6.2
V2	65.3	8.5	3.2	56.6	2.8
V3	65.1	8.8	3.3	56.9	2.9
V4	46.6	5.1	0.7	40.3	0.8
V5	36.9	3.4	0.4	31.6	0.4
V6	25.8	2.1	0.1	21.9	0.2
V7	64.8	8.8	3.3	56.7	2.9
V8	63.6	8.6	3.1	55.5	2.7
V9	62.7	8.4	2.9	54.8	2.6
V10	61.8	8.2	2.8	54.1	2.4
V11	60.5	7.7	2.5	52.8	2.1
V12	58.1	7.3	2.4	50.6	2.0
V13	47.4	6.7	1.6	41.8	1.5
V14	38.7	5.4	1.2	33.9	1.3
V15	32.4	4.4	0.8	28.4	1.0
V16	24.6	4.1	0.6	21.8	1.0
V17	15.2	2.4	0.2	13.5	0.5
V18	7.3	1.3	0.1	6.4	0.4

Table 4.8: Poverty Rate Sensitivity by Employment Status: 80 per cent of the Henderson Poverty Line (percentages)

	No employed persons in the household	One employed person in the household	persons in the household	No full-time employed person in the household	At least one full-time employed person in the household
V1	29.2	5.6	4.2	24.4	3.9
V2	29.2	3.2	1.9	24.6	1.6
V3	28.8	3.3	1.8	24.5	1.6
V4	17.1	0.8	0.0	14.0	0.2
V5	13.2	0.4	0.0	10.5	0.1
V6	9.4	0.2	0.0	7.6	0.0
V7	28.7	3.3	1.8	24.4	1.6
V8	28.0	3.2	1.7	23.8	1.5
V9	27.1	3.0	1.4	23.0	1.4
V10	26.2	2.8	1.3	22.2	1.2
V11	24.8	2.3	1.0	21.0	0.9
V12	22.6	2.1	0.9	19.1	0.8
V13	21.5	2.3	0.9	18.2	0.9
V14	18.5	2.0	0.5	15.7	0.7
V15	15.8	1.7	0.2	13.3	0.5
V16	11.9	1.4	0.2	10.0	0.5
V17	8.1	0.7	0.0	6.8	0.1
V18	4.2	0.4	0.0	3.4	0.1

**Table 4.9: Poverty Rate Sensitivity by Employment Status: Half Median Income Poverty Line (percentages)** 

	No employed persons in the household	One employed person in the household	Two employed persons in the household	No full-time employed person in the household	At least one full-time employed person in the household
V1	36.0	6.2	5.1	30.2	4.4
V2	36.1	3.8	2.1	30.6	1.8
V3	35.7	4.0	2.1	30.4	1.8
V4	22.3	1.3	0.1	18.5	0.2
V5	17.1	0.6	0.1	13.9	0.1
V6	12.4	0.4	0.0	10.0	0.0
V7	35.6	4.0	2.1	30.3	1.8
V8	34.8	3.8	1.9	29.6	1.7
V9	33.8	3.6	1.7	28.7	1.5
V10	32.9	3.4	1.6	28.0	1.4
V11	31.5	2.9	1.2	26.7	1.0
V12	29.2	2.7	1.2	24.8	1.0
V13	27.1	2.7	1.0	23.0	0.9
V14	23.2	2.3	0.6	19.7	0.7
V15	19.7	1.9	0.4	16.7	0.5
V16	15.1	1.7	0.2	12.8	0.5
V17	10.2	0.9	0.0	8.6	0.1
V18	5.3	0.5	0.0	4.4	0.1

Table 4.10: Poverty Rate Sensitivity by Employment Status: 80 per cent of the Half Median Income Poverty Line (percentages)

V1	No employed persons in the household	person in the household	persons in the household	No full-time employed person in the household	At least one full-time employed person in the household
VI	13.3	3.6	3.2	11.5	2.9
V2	13.2	1.8	1.5	11.4	1.1
V3	13.0	1.9	1.4	11.3	1.1
V4	4.4	0.3	0.0	3.7	0.0
V5	3.0	0.0	0.0	2.4	0.0
V6	2.2	0.0	0.0	1.8	0.0
V7	12.9	1.9	1.4	11.2	1.1
V8	12.4	1.8	1.2	10.7	1.0
V9	11.5	1.7	1.0	10.1	0.8
V10	10.6	1.5	1.0	9.3	0.7
V11	9.3	1.1	0.6	8.2	0.3
V12	7.2	1.1	0.5	6.5	0.3
V13	9.3	1.2	0.8	8.0	0.6
V14	8.0	1.1	0.4	6.8	0.5
V15	6.8	0.9	0.2	5.8	0.3
V16	5.4	0.7	0.2	4.6	0.2
V17	3.9	0.5	0.0	3.3	0.1
V18	1.8	0.3	0.0	1.5	0.1

resources required to support spending levels in excess of their income. If this is the case, it further highlights the perilous circumstances facing jobless households. Returning to Table 4.3, it is clear that neither of the next two adjustments – to allow for large spending items (V7 & V8) or to remove households who *may be* underreporting their income (V9 – V12) – cause much of a reduction in the overall poverty rate. While the first of these findings may come as no surprise, the latter requires further comment. Before doing so, it should be noted that the finding that poverty declines only modestly when potential under-reporting incomes are removed holds across all family types (Table 4.3) and all employment status categories (Table 4.7).

In attempting to explain these somewhat surprising findings, it is important to note that specifications V9-V12 incorporate only a very rough attempt to allow for possible under-reporting of income. Against this, the approach is likely to exaggerate the poverty impact by removing from the poverty population (and thus from the calculated poverty rate) anyone who satisfies the criteria for identifying a potential problem with reported income. It does not follow automatically from the fact that income is under-reported that the headcount poverty rate (as opposed to the severity of poverty, as measured by the poverty gap for example) is inflated.

In practice, under-reporting of income will only impact on the headcount poverty rate if it results in someone who would otherwise be above the poverty line to appear below it. The possibility that this is not an automatic consequence of under-reporting of income has not received sufficient attention among those who have jumped to the conclusion that under-reporting of income necessarily implies that the poverty rate has been exaggerated. On the basis of the estimates presented here, it would seem that the headcount poverty rate has not been greatly influenced by under-reporting of income — although this is another area that needs further examination.

# 4.5 Supplementing Income Poverty with Indicators of Deprivation

We turn now to those estimates that combine income data and other information on hardship and financial stress to produce what might be called a set of *deprivation-validated poverty estimates* in which households are only defined as poor if their income is below the poverty line *and* if they have experienced hardship, or deprivation. The first approach (based on specifications V13 – V15) utilises responses to fourteen of the financial stress indicator questions included in the 1998-99 HES (see Table 4.11).<sup>32</sup>

Each of the fourteen indicators defined in Table 4.11 provides evidence of a degree of deprivation within the family, although some are open to interpretation. The relevance of others to poverty, defined with reference to deprivation, is also questionable. For example, the inability to afford a holiday, to have a night out, or to spend on leisure

The list of deprivation indicators discussed here excludes two that were included in the HES itself. These relate to whether or not the standard of living had increased over the previous two years, and how income and spending compare to each other, on average over the last twelve months. Neither of these two indicators measure deprivation as such and they have thus been excluded.

**Table 4.11: Indicators of Hardship and Financial Stress** 

Hardship	Definition
Indicator	
H1	Cannot afford a week's holiday away from home each year
H2	Cannot afford a night out once a fortnight
НЗ	Cannot afford to have friends/family over for a meal once a month
H4	Cannot afford a special meal once a week
H5	Cannot afford brand new clothes (usually but second-hand)
Н6	Cannot afford leisure or hobby activities
H7	In the last year due to shortage of money (LYSM), could not pay gas,
	electricity or telephone on time
<i>H</i> 8	LYSM, could not pay car registration or insurance on time
H9	LYSM, pawned or sold something
H10	LYSM, went without meals
H11	LYSM, unable to heat home
H12	LYSM, sought assistance from a welfare or community agency
H13	LYSM, sought financial help from friends or family
H14	Could not raise \$2000 in a week if had to

Source: Household Expenditure Survey, User Guide 1998-99, ABS Catalogue No. 6527.0.

activities in the last year may reflect events or priorities (such as the birth of a child or the purchase of a home) that may have little to do with the adequacy of household income to support specific expenditure items.

Similar factors may explain why some people sought financial help from family or friends – to assist with purchasing a new home again being a potential prime culprit. Analysis of the financial stress data by ABS analysts confirms that a significant number of high-income households (in the top quintile of the income distribution) indicated that they had experienced a number of the indicators (although prevalence was far higher among households in the bottom quintile). <sup>33</sup>

Because of these issues, a sub-set of core indicators (shown in italics in Table 4.11) has been used to modify the income poverty estimates. Thus, specifications V13 – V15 in Table 4 are based on the full set of fourteen indicators, while specifications V16 – V18 focus on the core hardship measures only. These specifications show what happens to the poverty rate when the definition of poverty is modified so that poor households must have an income below the poverty line **and** must report experiencing at least one, two or three of each set of hardship indicators, respectively.

Before discussing the results, it is useful to make a few observations on the approach itself. The first relates to the choice of indicators. Who decides which indicators to include and on what basis? These are important questions, particularly if the results themselves are to be used to give greater credibility to the poverty estimates. Ideally, only those indicators that are seen by *a majority of the population* as reflecting unacceptable living conditions should be included. To identify these indicators would require a separate study and this should from a central part of any future agenda in the area (see **Appendix A**). Until that is done, we must work with the list that we have

McColl et al., op. cit..

that, while based on earlier research on the dimensions of deprivation in Australia <sup>34</sup> does not necessarily reflect community opinion on what constitutes unacceptable deprivation in its different dimensions.

The other issue that needs to be addressed relates to the number of indicators that should be used to identify poverty. Clearly, in general the more that are used, the more stringent the definition becomes and the lower the poverty rate. It is also important to bear in mind that the indicators are being used here to *supplement* an income measure of poverty, not to *replace* it. Many previous analysts have argued that reliance on a single indicator runs the risk of defining people as poverty on the basis of the preferences and values of those who determine the list, rather than according to clear evidence of hardship or deprivation as perceived more generally in the community.

Against this, it can be argued that if the hardship or deprivation indicators genuinely reflect unacceptable aspects of people's living conditions, then the fact that any one dimension of deprivation is present is sufficient to indicate that poverty exists. The fact that different people react differently to their poverty (or have a different attitude to what they are prepared to reveal about if in social surveys) suggests that deprivation will always manifest itself in different ways. On this argument, evidence that any single indicator is present is sufficient to denote poverty – as long as the total list of indicators is itself narrowly defined to exclude those measures that reflect preferences or whose meaning is open to interpretation, or that are likely to be quite widespread in the community (such as spending in excess of one's income, or failing to pay a bill on time).

Some of the issues raised in this discussion have been overcome to some extent by wording of the questions in ways that emphasise lack of money as the factor causing the lack of most items. This implies that they represent an *enforced* condition, as opposed to one that has been chosen when it could have been avoided. However, to overcome any remaining concerns and to be even more sure that the responses are indicative of true hardship, many analysts still prefer to base their measures on the presence of more than one indicator.

But how many more? And does not the decision about the number of indices reflect the value judgements of those who decide? And does this not in turn undermine any claim that the approach is anything other than as arbitrary as the methods used to set an income poverty line in the first place? These are again important questions that raise significant issues about the meaning of poverty and the role of poverty research.

However, the view adopted here is that the answer to these questions must ultimately be guided by what the community understands by the meaning of poverty and what it regards as being unacceptable in terms of the living conditions actually experienced by those with low resources and opportunities. To find out what these views are, it is necessary to ask people, and some of the evidence presented earlier (e.g. in Table 3.2) shows that the approach can generate useful results and insights that assist the process of developing new poverty measures.

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P. Travers and F. Robertson, 'Relative Deprivation Among DSS Clients. Results of a Pilot Survey', *Monograph No.* 2, National Institute of Labour Studies, Flinders University, 1996.

For the moment, however, it is necessary to rely on the data that are currently available and to return to the estimates presented earlier. The first set of specifications (V13 – V15) is based on all fourteen indicators shown in Table 4.11. As explained earlier, they differ in the number of indicators used to identify which of those households who have incomes below the poverty line also experience deprivation. For all single income unit households, the overall poverty rate drops significantly (from 25.2 per cent to 18.2 per cent) if only those families below the poverty line who are experiencing at least one of the fourteen financial stress indicators are counted as poor. A further decline in the poverty rate to 14.8 per cent occurs if only those who experience at least two indicators are counted, and to 12.3 per cent of the standard includes those who experience at least three indicators.

These variations affect not only the overall poverty rate, but also the composition of those who remain in poverty. Thus, for example, use of the deprivation indicators to restrict the income poverty measure results in a far greater decline in poverty rates among the aged than among younger families – particularly families with children. This suggests that many of the older people who have low incomes do not appear to experience much hardship or deprivation – at least on the basis of the indicators shown in Table 4.11.

Excluding those who do not experience hardship has the smallest impact on sole parent families and poverty amongst this group remains very high even when using the restricted poverty measure, confirming that this is an area where poverty is extreme. In terms of employment status, the results in Table **4.7** indicate that incorporating the deprivation measures does little to affect the earlier picture that joblessness and a lack of full-time employment are major contributors to poverty.

Turning to the more restricted set of 'core' hardship indicators (specifications V16 – V18), when these are used to restrict the income poverty estimates, the impact is considerable. The overall poverty rate declines from 25.2 per cent to 9.6 per cent when the experience of at least one of the core deprivation indicators is used to supplement the income poverty estimates, and when the number of indicators is increased to at least two and three, the poverty rate declines to 5.8 per cent and 2.9 per cent, respectively. However, it has been argued above that these latter measures are overly restrictive given that only the core set of deprivation indicators has been included in these specifications.

Focusing on specification V16 that incorporates only one of the core deprivation indicators, we have a measure of what might be called *severe poverty* that reflects both low income and core deprivation or hardship. On the basis of this severe poverty measure, the overall poverty rate is just below 10 per cent, and the poverty profile is now much flatter across different family types. The aged (particularly aged couples) now have below-average poverty rates while poverty among both non-aged single people and sole parent families remains high. This reaffirms the earlier conclusion that, on average at least, poverty in old age may be somewhat less of a concern than is implied by the conventional income poverty statistics.

The results in Table **4.7** also confirm the earlier finding that joblessness is associated with above average poverty rates, this now becoming an even stronger finding, because of the reduction in poverty among aged households (most of whom are jobless) when the severe poverty measure is used.

## 4.6 The Way Forward

Having examined a large number of alternative poverty measures, what conclusions can be drawn? Three features of the poverty estimates stand out as being robust across all measures:

- The group with the highest incidence of poverty is always sole parent families, whose poverty rate varies from between twice and four times the overall (national) poverty rate.
- There is a very strong association between joblessness and poverty, with a clear indication that full-time employment is required to escape poverty.
- The poverty rate among the aged is high when the conventional (income-based) measure is used, but this finding is sensitive and far lower rates are produced by many of the alternative experimental poverty measures.

What of the alternative poverty measures themselves? Four of the experimental methods described here stand out as capturing new aspects of poverty that warrant further examination. In addition to the existing measure, this gives the following five measures:

- Conventional poverty defined by comparing need-adjusted household income adjusted with a simplified version of the Henderson poverty line (specification V3)
- *Validated poverty* defined as above, but excluding all income-poor households whose level of expenditure exceeds their disposable income by 50 per cent or more (specification V4)
- Core expenditure or constrained poverty defined as a situation in which both income and expenditure (or the maximum of both) are below the poverty line (as defined in Figure 1 and estimated in Table 4.1)
- Deprivation poverty defined as having income below the poverty line and experiencing at least two of the full list of financial stress indicators identified in the Household Expenditure Survey (specification V14)
- Extreme deprivation poverty defined as having income below the poverty line and experiencing at least one of the restricted list of core financial stress indicators identified in the Household Expenditure Survey (specification V16)

According to the estimates presented above, the overall poverty rate among single income unit households in 1998-99 varied between 9.6 per cent (V16) and 25.2 per cent (V3). How poverty is conceived and identified thus makes a very big difference to how much of it is estimated to exist.

Identification of these five measures is not intended to imply that further work is not required to refine them, but rather to identify the kinds of approaches on which any further work could most usefully concentrate. The first measure, based on the existing poverty line or a simplified version of it, should always be used as the reference point when seeking to establish an alternative measure, since it is very important to know what difference any new measure will make to poverty as currently defined and measured.

The second measure combines income and expenditure information in an attempt to remove any obvious reporting errors implied by inconsistencies between the two, but also illustrates the general point that progress in identifying poverty may involve combining information on both income and expenditure in a single measure.

The third measure takes this approach further, by defining poverty on the basis of the maximum level of consumption that could be attained on the basis of either reported income or actual expenditure. This measure effectively removes from poverty all those with incomes below the poverty line whose expenditure is above it (Figure 1). Results presented in this and the previous sections illustrate the value and insight that can be gained from this and the previous approach.

The fourth and fifth measures both supplement the conventional income poverty approach with additional information on experienced deprivation or hardship. This is an approach that requires further work to make it fully operational, but the results presented here testify to its potential. Further work would need to involve further development of the indicators so that they better reflect aspects of deprivation that exist in the various dimensions of peoples material circumstances and living conditions.

This could include factors such as the quality of local neighbourhoods and the services and infrastructure available to residents and freedom from exposure to crime and other threatening risks. Such a development would bring the poverty measure closer to the notion of social exclusion that many European countries have found provides a useful framework.<sup>35</sup>

The most important consideration, however, is to develop the approach so that it includes those aspects of hardship, deprivation or exclusion that are regarded as unacceptable among the community. If this can be achieved, it would provide the basis for a new poverty measure that is soundly based on prevailing social norms and judgements and this can give the measure the credibility that is necessary for its acceptance, support and use.

### 4.7 Other Factors

The above discussion has focused on the limitations of the existing poverty measure and examined how these can be overcome using existing data. The focus has been on using an income poverty line to estimate poverty at a point in time and to compare trends over time. These are both important tasks, but there are several other dimensions of poverty that also need consideration.

See Gordon and Pantazis, op.cit and **Appendix A**.

Probably the most important among these is the need to investigate the *consequences* of poverty for those affected by it. Far too little is known in this area currently, yet much of the concern over poverty reflects the view that many of its most damaging effects only emerge after a considerable lapse of time. There is, in particular, legitimate concerns that poverty has enduring adverse effects on opportunities and choices that are permanently bad for those children who grow up in poverty.

Research that addresses these issues requires two departures from the approaches described above. The first involves the need to examine in more detail the ways in which resources are shared within the family in order to better understand the effects of poverty on individuals – adults as well as children. We need to look beyond the 'equal resource sharing' assumption that is the basis of most existing research (as reflected in the equivalence adjustment of *total family income*) in order to examine how poverty affects individuals - when it is experienced, as well as later in their lives.

Mention has been made above of ways in which poverty can be extended to encompass notions of social exclusion. Australia is currently a laggard in paying attention to these issues, yet they have a close relationship to the idea of participation that has featured prominently on the welfare reform debate.<sup>36</sup> As noted earlier, European research along the lines of that reported in **Appendix A** provides a model on which we in Australia can draw. The great advantage of moving in this direction is that it focuses attention on the processes and dynamics that expose people to the risk of financial stress and other forms of exclusion.

The whole issue of the *dynamics of poverty* has not been addressed here, although it is an important part of any future research agenda. We have been limited in the past by the lack of any data that can be used to examine poverty spells dynamics, although that situation will gradually change as successive waves of data from the *Household Income and Labour Dynamics in Australia* (HILDA) survey become available. It will be crucial to ensure that there is sufficient consistency of approach between HILDA and other household surveys to enable them to be combined to provide a more complete picture of the statics and dynamics of contemporary Australian poverty using a consistent framework.

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Reference Group on Welfare Reform, *Participation Support for a More Equitable Society*. *Full Report*, Department of Family and Community Services, Canberra, 2000.

# **5 Concluding Comments**

Concern over the methods used to identify and measure poverty have undermined the credibility of poverty research and created a hiatus that has seen poverty fall off (or be kept off) of the policy agenda. Yet poverty alleviation remains a primary goal of the Australian income-tested social security system and a raft of other public programs still use poverty status as a way of determining eligibility and targeting resources.

Any poverty measure will always be subject to controversy and contested, but this does not mean that all measures are equally arbitrary, as some have implied.

We need to be honest in accepting the limitations of the existing instruments, openminded in the search for improvements, but realistic in terms of what we can achieve. The idea that it is possible to define an absolute poverty line that is based solely on scientific research into objectively determined needs is a misleading and unhelpful mirage. Any poverty line will embody judgements, but some judgements are better than others and the aim is to find those that best reflect the available expert knowledge, are most widely endorsed and most enduring. This is a challenging, but not impossible task.

If poverty research is to be influential its findings must be able to be communicated to the community in a form that can be readily understood. The poverty line and the headcount poverty rate both meet this important condition and, for this reason, both serve a very valuable purpose. This does not mean that poverty researchers and analysts cannot (nor should not) delve behind the poverty statistics to examine the severity of poverty and its sensitivity to changes in method and assumption. However, these exercises should proceed within an agreed overall poverty measurement framework if they are to add value rather than being a source of confusion that suits the purposes of those who wish to keep poverty off of the policy agenda.

Reflecting this view, this Submission has argued that the poverty line is a very important vehicle for communicating research findings and raising community awareness about the nature, causes and consequences of poverty in general, and child poverty in particular. Furthermore, there is still an urgent need for an income poverty line, despite its many conceptual limitations and practical imperfections. Most people lives depend principally on their income and everyone can understand what poverty means in terms of income by extrapolating from their own experience.

The bulk of the previous two sections have examined various ways in which the current approach to identifying poverty can be improved. There is widespread acceptance that the existing poverty line needs to be modified to reflect some of its shortcomings and the social changes that have affected the context within which poverty emerges and is sustained.

The principal conclusion to emerge from that analysis is that while we still need an income poverty line, more attention needs to be paid to the limitations of the survey-based income measures and, more importantly, that the methods used to identify poverty must also incorporate direct observations on deprivation.

Precisely how this can be made operational still requires further work, but the approach sketched out here sets out a general framework that can be refined and extended. In doing this, it will be important to build community support for a new

approach that is based on the credibility of the assumptions, norms and judgements used to define and measure poverty.

But development of a new poverty measure must be seen as the first stage of an agenda to reduce poverty. Once a new measure is in place, it can – and should – be used to set poverty reduction targets and monitor progress towards them, as has occurred in Ireland.<sup>37</sup> In this way, poverty research can play a valuable role in helping to identify the extent of the problem and in shaping the policy response to it.

Despite its growing economic prosperity, there are still pockets of poverty in Australian society and some of these are large and enduring. No country can take comfort from its economic performance while poverty still threatens its citizens. We have the resources to substantially reduce poverty, even to abolish it altogether. But we need to present convincing evidence to support claims that poverty has immediate and enduring harmful effects before we can mobilise public support to exert the political pressure to change our current policy priorities.

In order to address these problems, we must be able to identify poverty and measure and monitor its incidence and severity in ways that resonate with community understanding of the issues. The claim that the poverty line is an historical artefact that has passed its 'use by date' represents a mistaken view of contemporary Australian society and fundamentally misunderstands the wishes of its people.

B. Nolan, 'Targeting Poverty – The Irish Example', Australian Social Policy, 2000/1: 25-41.

## **APPENDIX A**

# Severe Poverty: A Severe Problem? The Extent and Meaning of Severe Child Poverty in Britain

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Paper presented at the Eighth Australian Institute and Family Studies Conference, 'Steps Forward for Families: Research, Practice and Policy' Melbourne Exhibition Centre, Southbank, Melbourne, Australia, 12-14 February 2003.

# **A.1** Measuring Child Poverty

The UK Government is committed to ending child poverty by 2020 and halving it by 2010; child poverty being defined using an income-based definition (see below). A number of policies to tackle child poverty have been introduced including improvements to Working Families' Tax Credit, and increases in Child Benefit and in amounts allowed for children in Income Support calculations. The evidence so far suggests that the Government has had some success in reducing child poverty (Department for Work and Pensions (DWP), 2002a).

The most common method used to define, measure and analyse (child) poverty in the UK and, indeed, most other countries, is to count the number of children living in households whose incomes fall below a particular proportion of average household income. The UK Government and the European Union generally use a cut-off point of '60 per cent of median equivalised household income' to define poverty.

## The Advantages of Income Measures

Income measures of poverty have certain desirable features:

- they provide an estimate of the financial resources available to a household:
- they are easy to use; and
- they allow relatively simple cross-country comparisons to be made.

In addition, because information on income has been collected consistently over many years, in the UK at least, income provides the only measure of changes in childhood poverty over time. Income therefore is, and will remain, an important measure of child poverty for the foreseeable future.

### The Disadvantages of Income Measures

However, income measures have a number of limitations in measuring poverty, particularly in childhood. To highlight just a few:

- the poverty line is arbitrary. There is no scientific reasoning for it being placed at 60 per cent of median income, rather than 50 per cent or 40 per cent. So there may be little difference between the living standards of children just above the poverty line and children just below the poverty line:
- it assumes that children share the living standards of the family because it is the income of the whole household that is being measured if the household as a whole is poor then income measures assume that the children in that household must also be poor;
- equivalence scales used in income poverty measurement in the UK underestimate the cost of children to a family. Therefore, if more accurate measures of the costs of children were used, it is likely that the extent of child poverty would be greater;

- income poverty does not tell us what poor children go without that nonpoor children do not; how do their lives differ?; and
- income poverty cannot tell us anything about 'social exclusion'.

## A.2 The Poverty and Social Exclusion (PSE) Survey of Britain

Despite these widely acknowledged problems (including the British Government's own recent consultation document 'Measuring Child Poverty' (DWP, 2002b)), often income is the only measure of poverty that is available to researchers. However, in 1999 a new survey was undertaken: The Poverty and Social Exclusion Survey of Britain (PSE) (Gordon et al., 2000). It was developed by researchers at the Universities of Bristol, York and Loughborough, and supported by the Joseph Rowntree Foundation, one of the largest independent social policy research and development charities in the UK. The survey was designed with the specific aim of measuring different dimensions of poverty and social exclusion in the lives of adults and children in Britain going into the 21<sup>st</sup> Century.

The Survey has its roots in the earlier Breadline Britain Surveys of 1983 and 1990 (Mack and Lansley, 1985; and, Gordon and Pantazis, 1997) and the Small Fortunes Survey (Middleton et al., 1997). These measured poverty as the inability to afford items and activities perceived as necessities by the majority of the public.

The original questionnaires were expanded into a new and unique survey. Perhaps most importantly the survey attempted to operationalise the concept of social exclusion for both adults and children. This survey is the first to attempt to measure social exclusion in childhood and does so by focusing on exclusion in the following areas:

- children's services:
- social participation; and
- exclusion within education.

Services and participation were also measured for adult social exclusion, but, in addition, the adult measures of social exclusion included financial exclusion, problems with their housing and local area, civic engagement and social support.

# **A.3** The PSE Measure of Poverty

The main measure of poverty in the PSE was first developed in the Breadline Britain Surveys for adults, and in the Small Fortunes Survey for children. The PSE poverty measure was developed through a two-stage process. In a first survey, a representative sample of adults were asked to say which of a list of items and activities for children, and a second list for adults, they considered everyone should be able to afford in Britain today and which they should not have to go without.

The lists were based on extensive and careful research, including a programme of focus groups (Bradshaw et al., 1998) and included a mixture of:

• food and clothing items;

- items and activities to allow children and adults to participate in the world around them;
- environmental items; and
- for children, items to assist educational development.

All but three of the 30 children's items/activities were regarded as necessities by parents. The exceptions were: at least 50 pence a week for sweets; a computer suitable for homework; and computer games. For adults, 19 of the 54 items/activities were not regarded as necessities. These mainly consisted of social activities (for example, an evening out once a fortnight, a meal in a restaurant/pub once a month) and durable items (for example, a video cassette player, a home computer, a tumble dryer).

In the second survey, the main PSE survey, a different group of respondents was asked which of the items and activities:

- they or their children had;
- those they did not have but did not want; and
- those that they did not have because they could not afford them.

The poverty measure was calculated using just the latter items and activities i.e. *those* that they could not afford, rather than those that they chose to go without.

To construct a threshold for this measure of poverty, only items and activities that more than 50 per cent of the population in the first survey thought were necessities were included in the PSE measure of poverty – i.e. the majority of the population agreed that they were necessities (Table A.1 and Table A.2). Next the number of items and activities children (and adults) did not have because they could not be afforded were totalled.

A range of statistical tests were then undertaken to ensure reliability and validity of the lists and then to establish how many items or activities a child and an adult had to go without to be defined as poor (see Gordon et al., 2000, for details). For children, and adults, a threshold of lacking two or more items or activities was established. Eighteen per cent – two million – children were poor using this measure. This figure is much lower than the one third identified using the income measure of below 60 per cent median household income and only around one half of the PSE poverty rate for parents. The reason for these differences lies in the extent to which parents sacrifice their own consumption in the interests of their children (Adelman et al., 2002).

**Table A.1: Adult Necessary Items and Activities** 

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	An outfit for social occasions	51	4

**Table A.2: Child Necessary Items and Activities** 

	Percentage of parents regarding item/activity as 'necessary'	Percentage of children who lack the item/activity because their parents cannot afford it
A bed and bedding for self	96	1
New, properly fitted, shoes	96	2
Warm, waterproof coat	95	2
Fresh fruit or vegetables at least once a day	93	2
Celebrations on special occasions	92	4
Three meals a day	91	1
Books of own	90	0.1
Play group at least once a week (pre-school age children)*	89	1
All required school uniform*	88	2
Hobby or leisure activity*	88	3
Toys (e.g. dolls, teddies)*	85	1
At least 7 pairs of new underpants	84	2
Educational games	84	4
Meat, fish or vegetarian equivalent at least twice a day	76	4
Bedrooms for every child of different sex over 10 years*	76	3
Carpet in bedroom	75	1
At least 4 pairs of trousers	74	3
School trip at least once a term*	73	2
At least 4 jumpers/cardigans/sweatshirts	71	3
Swimming at least once a month	71	7
Garden to play in	68	4
Some new, not all second-hand, clothes	67	3
Construction toys	66	3
Holiday away from home	63	22
Bike: new/second-hand*	60	3
Leisure equipment*	57	3
Friends round for tea/snack fortnightly*	53	4
Key: * age-related items		

However, poverty for children can be very serious. In general only small percentages of children went without each of the items that the majority of parents believe to be necessary, because their parents could not afford them. But, small numbers of children – roughly one in fifty – had parents who could not afford to provide basic food and clothing, such as fresh fruit and vegetables, new properly fitted shoes or a warm waterproof coat.

The creation of such 'deprivation' measures of poverty for adults and children overcome some of the disadvantages of measuring poverty using income in that:

• they produce poverty lines specifically related to adults or children, rather than the household as a whole:

- the lines are not arbitrary; they are based on scientific methods; and
- they tell us what poor children/adults actually go without what makes them different from non-poor children/adults.

# **A.4** Severe Poverty

The children's charity Save the Children UK invited the Centre for Research in Social Policy to analyse the issue of severe child poverty. The research was commissioned because of the charity's long-term interest in the deprivation of children. In addition, they had identified that, although there has been a long history of (child) poverty research in the UK, little was known about children in the severest poverty.

The need to consider severe child poverty in Britain has also become particularly urgent in the light of research findings that, whilst the proportion of children in poverty is decreasing, some of those at the very lowest end of the income distribution are actually worse off following the Labour Government's reforms (Sutherland, 2001).

Measures of severe poverty are usually income-based and rely on arbitrary cut-off points, such as being in a household in the bottom 20 per cent of the income distribution. These measures, therefore, suffer from the same potential disadvantages as income measures of poverty as a whole, described earlier. One aim of the project therefore was to determine whether a more illuminating measure of severe child poverty could be found, one that would clearly discriminate between the experiences of children defined as severely poor and other children. The PSE provided an opportunity to consider a range of poverty measures to see which best contributed to a measure of severe child poverty. In doing so it was felt that the final measure should:

- avoid as many as possible of the disadvantages of income poverty measures:
- take into account the child's own experience of poverty or deprivation, not just whether the household as a whole was poor;
- measure the parent's experience of poverty or deprivation, separate from that of their children; and
- consider the income of the household since the contribution of low household income to the risk of poverty in childhood cannot be ignored.

Three measures of poverty were chosen:

- *Child deprivation* the child goes without one or more items<sup>38</sup> that the majority of parents in Britain believe to be necessary for children, because parents cannot afford to provide the item(s);
- Parent deprivation the parent goes without two or more items<sup>38</sup> that

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In this analysis only items, not activities, were used in the deprivation measure as we wished to use the activities separately to investigate social exclusion.

the majority of adults in Britain believe to be necessary for adults, because the parent cannot afford to provide themselves with the items;

• *Income poverty of the household* – the child lives in a household that has less than 40 per cent of median income before housing costs<sup>39</sup>.

As a whole, 17 per cent of children were income poor, 40 per cent of children had parents who were deprived, and 20 per cent of children were themselves deprived. The permutations created by these three measures produced the following results (Table A.3).

**Table A.3: Poverty Permutations** 

<b>Poverty Permutation</b>	Percentage of Children
Poor on no measures:	55
Not poor on any measure	33
Poor on one measure:	
Income poor only	2
Child deprivation only	(2)
Adult deprivation only	17
Poor on two measures:	
Income poor and child deprivation	(1)
Income poor and adult deprivation	6
Child and adult deprivation	10
Poor on three measures:	
Income poor, adult and child deprivation	8

Key: Brackets – less than 20 unweighted cases

Eight per cent of British children were identified as being poor on all three of the poverty measures. Further analysis suggested that this group of children captures those with circumstances which are genuinely different to those of other poor children because they:

- had the lowest average incomes;
- had the highest levels of deprivation of the necessities most highly regarded as such;
- lacked the greatest number of necessities both for parent and child;
   and
- had the highest levels of subjective poverty.

<sup>&</sup>lt;sup>39</sup> An after housing costs measure of income was not available in the PSE Survey.

So, in other words, being poor on all three measures clearly indicates a much greater degree of poverty than being poor on none, one or two of the measures. These children can therefore be defined as 'severely poor'.

The analysis, to be published later in 2003, goes on to investigate the characteristics of these severely poor children. Using logistic regression modelling, the most important characteristic in identifying severely poor children were their propensity to be in a household receiving Income Support or Jobseeker's Allowance, the main means-tested benefits in the UK.

The inclusion of social exclusion measures in the PSE allowed an analysis of the relationship between severe child poverty and measures of child social exclusion and household social exclusion that are likely to impact upon children (for example, access to local services, the environment and housing in which they live). In general it was found that severely poor children were also more likely to experience most of the measures of social exclusion.

### A.5 Conclusion

The research reported in this Appendix has raised three major issues in measuring hardship for children. First, by taking a child-centred approach to the measurement of poverty, it is possible to determine what it is that poor children go without in a way that income poverty measures cannot. With such a measure we can clearly appreciate how children's lives are affected by living in poverty.

Secondly, the measures call into question the current basis and construction of equivalence scales which, in turn, raises questions about the accuracy of income-based measures of the extent of child poverty. Thirdly, a survey with a number of different measures of poverty allows an investigation of: the relationship between these measures; the extent to which they overlap; and, the importance that this may have for poverty measurement.

In addition, a survey that also includes measures of social exclusion is an important step forward to understanding how, if at all, poverty and social exclusion are related. By using such measures it is possible to identify more precisely the circumstances of children in poverty and social exclusion and, therefore, target poverty reduction policies more accurately and effectively.

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