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Poor Arguments

A Response to the Smith Family Report on Poverty in Australia

Kayoko Tsumori, Peter Saunders and Helen Hughes

EXECUTIVE SUMMARY

A recent Smith Family/NATSEM report claims that poverty in Australia increased during the 1990s and that nearly one in eight Australians is in poverty today. This claim, which attracted extensive media coverage when the report was released last December, is dubious because it involves a confusion of the two distinct issues of 'poverty' and 'inequality' (inequality increased in the 1990s, but poverty did not). It also rests on data which are in some respects unreliable.

- 'Absolute' poverty exists when people have insufficient means to maintain a minimum standard of life. Sustained economic growth coupled with government welfare provision means that absolute poverty is extremely rare in Australia today. Indeed, as the Smith Family report itself notes, Australia's poorest families became *better off* in absolute terms during the 1990s—their real (inflation-adjusted) incomes rose by an average of $38 per week over this period.
- The report's claim that the poor became *worse off* refers to 'relative poverty'. People are defined as 'relatively' poor if they fall a long way short of what others in their society are receiving. Although it is widely used by poverty researchers, the concept of 'relative poverty' thus has more to do with inequality than poverty. Even if we all become a lot better off, those receiving least still get defined, implausibly, as 'poor'.
- Researchers conventionally measure 'relative poverty' as an income less than half of a society's *median* income. The Smith Family report does not follow this convention. Instead, it defines 'relative poverty' as an income less than half the *mean* income in the society. This has a major impact on its findings.
- Defined as less than half the *median* income (the more usual measure), the proportion of Australians in 'relative poverty' works out at about one in 12—and this proportion hardly changed during the 1990s. The claim that one in eight are poor, and that poverty worsened over the last ten years, rests on a definition of the 'poverty line' as less than half the *mean* income (an inferior measure which is particularly susceptible to changes in a few extreme outliers). During the 1990s, people on the highest incomes got richer, but this does not warrant the report's conclusion that those at the bottom got poorer. They did not. The report confuses increasing inequality with worsening poverty.
- The problems arising from the way the report defines poverty are compounded by problems in the way it measures poverty. It relies on data from surveys in which people were asked to report their incomes, but we know that the respondents who report the lowest incomes often significantly underestimate what they actually receive. Many of them spend much more than they claim to get, and it is probably better to look at expenditure rather than income data if we want a reliable guide to people's living standards.
- The data on which the report is based have other weaknesses too. We know that many people move in and out of 'poverty' over the course of their lives, but this data set fails to capture change over time and therefore exaggerates the extent of the problem. Added to this, the report takes no account of the value of free or subsidised government services like schooling or Medicare, yet we know that when these additional sources of income are included, the 'poor' turn out to be much better off than initially appears to be the case, and the gap between 'rich' and 'poor' narrows significantly.
- We conclude that the poorest families in Australia became better off—not worse off—in the 1990s, and that the Smith Family's estimate that one in eight Australians is living in 'relative poverty' is substantially exaggerated. The debate over the future of welfare requires more reliable data on the extent and causes of 'deprivation'.

Dr Kayoko Tsumori is a Policy Analyst at The Centre for Independent Studies (CIS), **Professor Peter Saunders** is Director of Social Policy Research, and **Emeritus Professor Helen Hughes** is a Senior Fellow at the Centre.

www.cis.org.au

A recent report on poverty claims to have found that, 'Almost one in every eight Australians live in income poverty today'.[1] It also suggests that the number of Australians living in poverty has increased over the last decade despite vigorous economic growth through most of that period.

Evidence like this plays a critical role in informing debates about social policy in Australia. It is therefore important that we are sure of our facts. In this case, however, the facts turn out to be questionable.

The report's findings will be used by those who think that poverty is a pressing and growing problem, and that the government should do more to tackle it.

The report was commissioned by The Smith Family and was prepared by the National Centre for Social and Economic Modelling (NATSEM) at the University of Canberra. The Smith Family is a highly respected charity, and NATSEM is a reputable research organisation. This is, therefore, a serious and significant report dealing with an important social issue. It has been professionally researched and painstakingly compiled and it has received a lot of attention in the media. Its conclusions are, however, misleading.

There are two basic problems with the report. One is that, while it claims to be about poverty, it is actually about inequality. It shows that the income gap between top and bottom has widened during the 1990s, but it does not show that more people are poor today than was the case ten years ago.

The second problem concerns the income data on which the report is based. It relies for its information on what people tell government researchers they are receiving, but (not surprisingly) in many cases this does not accurately reflect their actual income.

Put these two problems together, and we end up with a fundamentally flawed report, conceptually and empirically. The report's findings will be used by those who think that poverty is a pressing and growing problem, and that the government should do more to tackle it. But it would be a grave error to start basing social policy on the sorts of claims that it contains.

THE FIRST PROBLEM: INEQUALITY IS NOT POVERTY

Absolute versus relative poverty

Ask most people in this country what they think 'poverty' is, and you will probably get answers such as: 'not having enough food to put on the table', 'not having anywhere to live', 'being unable to buy clothes for your children', and so on. In the terminology of the poverty experts, these commonsense definitions all relate to an *absolute* conception of poverty.

'Absolute poverty' is said to exist when a family or an individual has barely sufficient money coming in to maintain a decent standard of life. In these days of unprecedented affluence (the national wealth has doubled since 1960), coupled with a fairly comprehensive welfare state to support those who cannot or do not support themselves (government welfare spending has increased *five-fold* in real terms since 1960), absolute poverty is pretty rare.[2] It is precisely because such poverty has become such a rarity that poverty professionals no longer talk about it.

They prefer to talk about something called 'relative poverty'. This refers to a situation where a family's or an individual's standard of living is low *as compared with* that of other families or individuals living in the same society.[3] The basic idea is that people can be said to be 'poor' if they cannot live at a standard considered 'normal' by most other people sharing their culture. If most people expect to go away on an annual holiday, for example, then you are poor if you cannot afford a holiday. If most people take for granted ownership of a car, then those who cannot afford a car are poor. And so on.

Drawing a 'poverty line'

Defining poverty in this way immediately raises an obvious measurement problem. If poverty is only 'relative', how are we to differentiate those who are 'poor' from those who are not? The solution is found in the construction of a 'poverty line'—an income level below which everybody is deemed to be 'poor'.

Many studies of 'relative poverty' nowadays draw their poverty line at half of the median (middle) income in the society. In other words, they rank everybody's income in descending order, find the income of the person in the middle of the ranking, and define the poverty line as half of what they get. This is, of course, completely arbitrary—we could equally choose to draw a line at one-quarter of the median income, three-quarters of the median income, or anywhere else we consider appropriate. Half median income has, however, become a commonly used measure of 'relative poverty' in the research community.

The Smith Family report chooses not to follow this convention. It draws its poverty line, not at half the *median* income, but at half the *mean* income. This, of course, is just as arbitrary—and it is also quite unusual. We shall see in a moment what effect this departure from normal practice has on the report's findings. For the moment, we need only note that in this report, the 'poor' are defined as all those who say they receive an income which is less than half the Australian average for their kind of household.

How improved living standards get defined as worsening poverty

It has often been noted that one of the most intractable problems in defining poverty in a relative way is that, even when those on the lowest incomes substantially improve their standard of living, they may still get defined as 'poor'. Indeed, it is possible for those on the lowest incomes to become a lot better off and yet for poverty researchers to conclude that the problem of poverty has actually *worsened!* This is exactly what has happened in the case of the Smith Family report.

The report tells us that, 'The average incomes of poor families, after taking out the impact of inflation, have *increased by $38 a week* during the 1990s'.[4] This looks like good news—the poor have become better off in real terms over the last ten years. With an extra $38 a week each on average, low income people today can buy more goods and services than they could ten years ago.

Yet the report interprets this as bad news! Rather than concluding that those with least money have become better off, it suggests they have become worse off. Rather than claiming that poverty has declined, it claims it has increased.

The reason offered for this paradoxical conclusion is that those with the very highest incomes have done even better than those with the lowest incomes. Those who make it into the top 5% of income earners, for example, have seen their after-tax incomes rise by $172 per week. To you and I, this indicates that top earners have become richer. To the Smith Family and NATSEM, however, it means that low income earners have somehow become poorer, even though they have more money than they did before.

The report is only able to reach this conclusion because it defines 'relative poverty' as an income at or below half the *mean* income. Had the authors followed the more usual practice of defining 'relative poverty' on the basis of the *median* income, they would not have got this result.

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The report itself notes that the median family income rose in real terms by an average of $37 per week through the 1990s—that is, by much the same amount as low incomes rose. This means, as the report admits, that: 'If the poverty line is set at half median income rather than half average income, poverty has remained relatively stable over the 1990s.'[5] More precisely, defined in this way, the percentage of the population 'in poverty' works out at 8.7%, which is only half a percentage point higher than the 1990 figure.

Basing estimates on the mean rather than the median produces a very different conclusion, however. This is because of the substantial increase in top incomes during the 1990s, for this had the effect of dragging the average income up, thereby raising the 'poverty line' and increasing the number of people found below it. On this definition of 'poverty' (as less than half the mean income), the percentage of the population 'in poverty' rose from 11.3% in 1990 to 13% (more than one in eight) in 2000.

The headline-grabbing findings that more than one in eight Australians is living in 'relative poverty', and that 'relative poverty' has worsened in the last decade, thus depend entirely on the (rather unusual) decision to define the (relative) poverty line on the basis of the mean income. Had the more usual median income been used as the basis for these calculations, the result would have been (a) a much lower estimate of the size of the poverty problem (8.7% as compared with 13%), and (b) a conclusion that poverty did not worsen during the Howard years. This would have given us a very different (and much less dramatic) picture of the scale and nature of 'relative poverty' in Australia.

Operationalising the concept of 'relative poverty'

The report itself admits that any 'poverty line', whether based on mean or median incomes, will always be arbitrary. Because the 'poverty line' has nothing to do with 'absolute poverty', it tells us nothing about how well or badly people who find themselves below the line are able to live. It may be that they are really struggling to keep body and soul together, or it may be that they are actually quite capable of leading a reasonably comfortable life.

The Smith Family report gives surprisingly little guidance on this.[6] Although it defines 'relative poverty' as the inability to participate fully and effectively in the society to which one belongs, it actually contains no evidence on people's ability to participate. What it actually looks at is the number of people with incomes below half the mean income, and it simply assumes that, with an income as low as this, it is not possible to participate fully in the wider society. This assumption may be justified—but it may not. The report gives us no evidence one way or the other.

Put in technical terms, this means that the report's *conceptualisation* of 'relative poverty' (as the inability to participate effectively) bears no necessary correspondence to the way it *measures* 'relative poverty' (as an income below half the mean income). Why should we assume that those below half the mean income cannot participate effectively? Where is the evidence for this? The *operationalisation* of the concept of 'relative poverty' is completely arbitrary.

Ensuring that 'the poor' will always be with us

If this report is not measuring rates of effective social participation (its definition of 'relative poverty'), then what is it measuring? The answer is that, like most of the research undertaken on 'relative poverty', what it is really measuring is inequality. Its focus is not whether everybody has enough to live decently in our society (the poverty problem), but whether some people have a lot more than others (the inequality problem). Its method of analysis rests on the comparison between those with less money and those with more. This is a concern born not of compassion, but of the all-too-familiar agenda of a politics of envy.

In any society where incomes are unequally distributed, research using a relative definition of poverty is almost bound to discover people who are 'poor'. It does not matter how well or how badly they live—whether or not they are well-fed, adequately clothed, healthy, well educated, comfortably housed—those with the lowest incomes will nearly always get defined as 'poor'. The only way a study based on a relative definition of poverty will fail to discover 'poverty' is in a highly egalitarian society where everybody receives much the same level of income. In inegalitarian societies (and *all* modern, developed societies *are* inegalitarian, to a greater or lesser degree), poverty researchers will always be able to find 'poverty', no matter how affluent the society becomes.

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This confusion of poverty with inequality is ultimately self-defeating, for it strips the idea of poverty of any serious meaning. Imagining a society of opulence, for example, Amartya Sen notes that, 'It would be absurd to call someone poor, just because he had the means to buy only one Cadillac a day when others in that community could buy two of these cars each day.'[7] This 'absurdity' is, however, inherent to any research based on a relative definition of poverty. Even when everybody gets better off, the system of measurement ensures that those at the bottom of the distribution remain 'poor'.[8]

This problem occurs whether we use the median or the mean as the basis for calculating the poverty line. In both cases, the designation of a section of the population as 'poor' will depend on how incomes are distributed within the society as a whole, rather than on what they themselves receive. The particular problem with the Smith Family's report, however, is that its decision to use the mean creates an even bigger problem than using the median would have done. This is best illustrated by means of an example.

Does my becoming better off make you any worse off?

Imagine a strongly egalitarian society consisting of just ten individuals who receive each week incomes of $175, $200, $225, $250, $275, $325, $350, $375, $400, and $425. Their median weekly income works out at $300 (the average of the two 'middle' incomes of $275 and $325), which means the poverty line is drawn at $150. Nobody, therefore, is 'poor'.

Suppose, however, that those in the middle of the income distribution manage to raise their incomes to the same as the top earner gets—$425 per week—while those at the bottom continue to receive the same amount as before. This might happen if (as has been the case in most western countries, including Australia) the number of highly skilled and professional jobs increases and the number of unskilled positions declines. The top six earners now all get $425, which means the median income is now $425. The poverty line has, as a result, shifted upwards, from $150 to $213. This in turn means that the bottom two income earners are now, all of a sudden, 'poor', even though they are getting just as much as they did before. Suddenly, as a result of improved living standards for those in the middle, this society finds that 20% of its population is 'in poverty'.

If, like the Smith Family, we construct a poverty line on the basis of the mean rather than the median income, this problem of creating 'poverty' where none previously existed becomes even more marked.

Taking the same original distribution of ten incomes in our mythical society, the mean (like the median) works out at $300, which again gives us a poverty line of $150. As before, nobody is 'poor', for nobody falls below half the mean income. But now let the individual earning $425 invent something, discover something, or just get lucky, so that his/her income skyrockets to $2000 while all the other nine stay as they are. This one individual's good fortune drags up the mean income in the whole society from $300 to $458, so the 'poverty line' also rises to $229 (half the mean). All of a sudden, three individuals have been plunged into poverty—but all that has changed is that one individual has become better off.

This illustrates how, by taking the mean rather than median income as the basis for our calculations, the calculation of the 'poverty line' becomes highly susceptible to the influence of what statisticians call 'outliers'—extreme cases at either end of the distribution.

It is crucial to understand that in neither of the examples we have considered (a rise in the median income, or a rise in the mean income) does a rise in any one person's income entail a fall in another's. Economic activity is not a zero-sum game in which some have to lose if others win—indeed, it is more likely that if some people improve their incomes, this will in time raise everybody else's standard of living too, for they are now pumping more value into the economic life of the community. In a survey of the emergence of rising incomes for the wealthy, *The Economist* concluded that wealth creates many jobs and some of the newly rich use their wealth for public benefit.'[9] It is therefore a mistake to assume that whenever one section of the population becomes better off, another must become worse off—yet this is exactly what the Smith Family's report does assume.

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Why deliberately choose an inferior measure?

Knowing the problems with using the mean rather than the median as the basis for calculating 'relative poverty', why did the Smith Family and NATSEM still choose to do it?

The answer they give is in an appendix to the report dealing with 'Data and Methodology'. Here they write: 'Fixing the poverty line at some proportion of median incomes avoids the problems created by outliers in the sample survey data underlying the studies—that is, families with exceptionally low or high incomes. However, *because of the Smith Family's commitment to work for a more cohesive society*, this report uses the half average income poverty line, as it better captures relative deprivation in times of rising income inequality.'[10]

This is the only justification they offer in the whole of the report for this crucial decision, but it is profoundly unconvincing. What they seem to be saying is: 'We know that the median is the technically better instrument for measuring poverty (because it is not susceptible to the influence of outliers), but we decided to use an inferior measure because this produces results which are more consistent with our commitment to bringing about a more egalitarian society (which we think will be more cohesive)'. It seems that the choice of measures was dictated more by what they wanted to find than by a concern to achieve the most reliable results.

These researchers knew that, relative to the incomes of those at the bottom of the distribution, middle earners had not improved their situation through the 1990s. This meant that a poverty line based on half the median income (the usual measure) would not discover large numbers 'in poverty', nor would it reveal any increase in the proportion of the population 'in poverty' during the Howard years. The only way to get these results would be to use a calculation based on the mean rather than the median. And that is exactly what they did.

There are compelling grounds for arguing that the income figures obtained from ABS surveys are so unreliable as to be virtually unusable.

THE SECOND PROBLEM: THE DATA ARE NOT RELIABLE

The report's analysis is based on data derived from the confidential unit record files of national income surveys conducted by the Australian Bureau of Statistics (the ABS). These surveys include the *Income and Housing Costs and Amenities Survey* conducted in 1990 and the *Income and Housing Costs Survey* conducted in 1994-95, 1995-96, 1997-98 and 1999-2000.

The ABS is Australia's foremost data collection and social statistics agency. Its credentials are impeccable. Nobody could ever suggest that its methods are not rigorous, that its sampling is not meticulous or that its findings are in any political sense biased or questionable. Nevertheless, there are compelling grounds for arguing that the income figures obtained from these ABS surveys are so unreliable as to be virtually unusable.

Underestimation of the incomes of those 'in poverty'

The ABS itself admits that there is a problem. Comparing its income data from these surveys with corresponding figures in the *Australian System of National Accounts* (ASNA), it concludes that there appears to be some 'underestimation of income from investment and self-employment.'[11] In other words, we know from the national accounts that some people are earning more than they say they are earning when they answer these surveys.

We can begin to investigate what is going on in a bit more detail if we compare surveys of people's reported incomes with surveys of what these same people tell us they spend. As Helen Hughes has noted, 'After tax household income estimates [by the ABS] are substantially below expenditure estimates.'[12] We can see this for ourselves in Tables 1 and 2 which show, for 1993-94 and 1998-99 respectively, the mean incomes and expenditures of samples of Australians divided into gross income quintiles (that is, respondents are ranked by their reported gross incomes and are then divided into five groups of equal size).

The last rows in these tables show the ratios of expenditures to incomes. If people report that they are earning more than they spend, this ratio will be less than 1; if they report earnings below what they spend, it will be above 1. It is clear in both tables that the lower quintiles show the higher ratios, and that the ratios for the lowest and second-lowest quintiles exceed 1. Put in simple language, the people classified as falling into the bottom 40% of income earners appear on average to be spending more than they receive, while everybody else receives on average more than they spend.

Table 1. Comparison of ABS Income and Expenditure Figures, 1993-94

	Gross Income Quintile					
	Lowest 20%	*Second Quintile*	*Third Quintile*	*Fourth Quintile*	*Highest 20%*	*All Households*
Total Goods and Services Expenditure ($)	303.39	426.16	573.07	714.39	993.59	602.11
Average Weekly Household Income ($)*	151.66	353.91	592.28	909.22	1,608.77	723.26
Expenditure : Income Ratio	2.000	1.204	0.968	0.786	0.618	0.832

Note: *Gross incomes including private incomes and government direct benefits.
Sources: ABS, *Household Expenditure Survey, Australia, 1993-94: Detailed Expenditure Items:* (Canberra: ABS, 1996), Tables 1 and 2.

Table 2. Comparison of ABS Income and Expenditure Figures, 1998-99

	Gross Income Quintile					
	Lowest 20%	*Second Quintile*	*Third Quintile*	*Fourth Quintile*	*Highest 20%*	*All Households*
Total Goods and Services Expenditure ($)	342.85	482.58	648.04	851.03	1,171.40	698.97
Average Weekly Household Income ($)*	159.62	413.96	712.31	1,115.75	1,996.29	879.22
Expenditure : Income Ratio	2.148	1.166	0.910	0.763	0.587	0.795

Note: *Gross incomes including private incomes and government direct benefits.
Source: ABS, *Household Expenditure Survey, 1998-99, Detailed Expenditure Items* (Canberra: ABS, 2000), Tables 1 and 2.

The under-reporting of incomes at the bottom end of the distribution

Although the ABS believes that 'there is no basis for making adjustments to the recorded figures',[13] it is clear that people cannot indefinitely spend more than they earn, and that the ABS income data—especially at the lower end of the distribution—are unreliable.

This problem is not unique to ABS surveys, nor even to Australia—David Green has shown that the same pattern has been found in the UK (in work by the Institute of Fiscal Studies) and throughout Europe (in research reported by Eurostat).[14] There are a number of explanations for it, but the two most significant are the deliberate under-reporting of incomes (especially by the self-employed and others with irregular or 'black economy' incomes) and the fluctuation in people's incomes over time.

Helen Hughes has elsewhere suggested that much of the disparity between income and expenditure figures occurs because 'survey respondents . . . do not report "black" incomes'.[15] According to one estimate, 'An average of $55 billion (at 1989-90 prices) in taxable income has gone unreported every year since the mid-1980s and the amount appears to be growing.'[16] In the June quarter of 1996, it was estimated that the size of this 'underground economy' amounted to approximately 15% of Australia's GDP.[17]

Much (probably most) of this unreported income accrues to the people who end up at the lower end of the income distribution in social surveys. Two groups in particular stand out: the self-employed and those reliant on government benefits. The Smith Family report shows that 14% of self-employed people claim to have incomes below its poverty line, as compared with just 3% of wage and salary earners. It also shows that 31% of those reliant on government cash benefits report incomes below the poverty line.[18]

It may well be, of course, that the self-employed and people on welfare benefits really do receive lower incomes than everybody else—but we need to remember that these are also the two groups who are least likely to tell government researchers about any additional income that they may be earning over and above that which is known to the tax or welfare authorities. The fact that they are heavily over-represented among those deemed to be 'in poverty' tells us only that they claim to receive less than other people do; it does not tell us whether or not this claim is actually true.

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Fluctuating incomes

The second reason why people appearing at the bottom of the reported income distribution are so often found to be spending more than they receive is that they are only 'in poverty' for a short period of time. When their incomes drop (for example, when they are between jobs, or when they are off work sick) they rely on things like credit cards, as well as on savings, severance pay, holiday pay and other such sources of stored wealth, to maintain their normal standard of living until such time as they are able to restore their previous level of income flow.

Australia has only recently launched a panel survey which will enable us to track what happens to people over long periods of time. In Britain, however, a household panel survey was started in 1991, and one of the most remarkable early findings was the high rate of turnover among those with the lowest incomes. In the first 12 months, for example, 39% of those in the bottom quintile of incomes at the start of the survey had moved out of it. One year after that, another 29% followed them out of the bottom quintile, while 27% of the earlier upward-movers had fallen back again. The net result after just two years was that 46% of those in the bottom quintile of incomes in 1991 were no longer there in 1993.[19]

If Australia reveals the same sort of 'churning' in and out of 'poverty' as has been found in the UK, it would indicate that 'poverty' is nowhere near the scale suggested by the report.

If Australia reveals the same sort of 'churning' in and out of 'poverty' as has been found in the UK, then this would not only explain a large part of the gap between reported earnings and expenditure at the lower end of the income distribution—it would also indicate that the problem of 'poverty' is nowhere near the scale or the durability suggested by the Smith Family report.

The report itself comes close to acknowledging this in its 'Data and Methodology' section: 'Another important issue . . . is the time period over which income receipt is measured . . . Generally speaking, longer time periods result in more equal income distributions . . . [but] we have used current weekly income as the measure of resources'.[20] Averaged over a period of months or years, many of those whom the report describes as being 'poor' would turn out to enjoy higher incomes than are apparent from a single snapshot survey based on one week's receipts, and the total number of people 'in poverty' would be correspondingly smaller.

Expenditure data are better than income data

The basic conclusion to be drawn from all of this is that income data are unreliable indicators of people's standard of living, and that a better indicator can be found by looking at how much they spend. Of course, expenditure surveys too are far from perfect—the ABS suggests, for example, that respondents tend to underestimate the amount they spend on tobacco, alcohol and gambling.[21] Nevertheless, there is not the same incentive to falsify expenditure returns that there is for incomes.

There is nothing new in the recognition that expenditure data may provide a more reliable guide to people's standard of living than income data do—Eurostat (the Statistical Office of the European Communities) found as long ago as 1990 that information on household expenditure 'better reflects the availability of both declared and undeclared resources of low-income groups' and is therefore a 'more satisfactory' indicator of 'permanent income'.[22] And in Australia, Garry Barrett, Thomas Crossley and Christopher Worswick have shown that patterns of consumption, as revealed by ABS expenditure surveys, are a more reliable guide to long-term household living standards than are income data, which fluctuate much more widely.[23]

The authors of the Smith Family report are aware of the argument that 'expenditure is a better measure of economic resources than income'.[24] The only justification they offer for their exclusive reliance on reported cash incomes is that the decision was dictated by 'data limitations'. It is difficult to understand how this can be when the ABS has run regular expenditure as well as income surveys (the most recent was in 1998/99).

Disposable incomes and final incomes

The authors of this report also recognise that the income data on which they rely completely ignore the value of irregular payments (for example, holiday or severance pay), in-kind income (for example, fringe benefits and concessions) and free or subsidised government services such as public schooling and Medicare. Having noted this problem, however, they simply ignore it for the rest of their analysis—yet we know that leaving these things out of the calculation leads to a further, major under-estimation of the resources available to those at the lower end of the income distribution.

Again, we can refer here to David Green's work in Britain. He finds that the imputed cash value of the government housing, education and health services consumed by the lowest income quintile in Britain adds another 73% to their average post-tax income (their 'disposable income'). At the other end of the distribution, these services add only 7% to the average disposable income of the richest quintile. In other words, the 'final incomes' of the less well-off groups (that is, their income taking account of the value of all services received as well as all deductions paid) are much higher than their disposable cash incomes would lead us to suppose, and the gap between the final incomes of the top and bottom quintiles is much narrower than data on disposable incomes seem to indicate.

In Australia, too, similar findings have been reported. David Johnson and colleagues found, for example, that between 1982 and 1994, the 'social wage income' (disposable income plus the imputed value of government services) 'was more equally distributed than disposable income', and that this reflected 'redistribution through the education and health services and other government benefits in kind'.[25] Measuring the degree of inequality by means of a statistic called a Gini coefficient (a figure between zero and one, nearing zero as the income distribution becomes more equal), they showed that in 1993-94, the coefficient was 0.315 for the distribution of disposable income but was only 0.244 for the distribution of social wage income.[26]

Clearly, the decision to include or exclude the value of government services when calculating people's incomes will have a huge impact on estimates of inequality and 'poverty'. When we take account of the value of things like education and Medicare, the 'poor' turn out to get a lot more than we first realise. The Smith Family report, however, chooses to exclude these services from its analysis.

Other distortions

The decisions taken by the authors of this report to rely on income rather than expenditure data, to limit the survey time period to just one week, and to ignore the value of in-kind benefits and government services, all result in a serious underestimation of the resources available to lower income groups, and therefore all help exaggerate the amount of 'relative poverty' in Australia. These distortions are then compounded by others—some of which they themselves acknowledge.

One source of distortion recognised in the report concerns the 'unit of analysis', which is basically the household (the ABS 'income unit'). Individuals are ranked against each other on the basis of the income received by the household of which they are a member. The problem with this is that higher income households tend to contain more people than lower income households do; 22% of sole parents are defined as being 'in poverty', for example, as are 18% of people who live alone, but only 12% of couples with children are deemed 'poor'. Because the report equates each household member's income with the total family income, there is an overestimate of the number of people enjoying higher incomes when all individuals in the sample are taken together. This in turn raises the mean income of the whole sample—which has the effect of raising the poverty line and increasing the number of people found to be in poverty. The report recognises this distortion but does nothing to correct it.

This problem relates to a much larger issue to do with what are known as 'equivalence scales'. The logic behind the use of equivalence scales is that different kinds of households obviously need different amounts of income in order to achieve comparable standards of living with one another. A couple needs more money than a single person, for example, but not twice as much, for they can share the cost of housing, heating and so on. A family with children needs more than one without, and older children probably cost more than younger ones. It follows that, if they are to be compared as indicators of living standards, people's incomes have to be modified—inflated or deflated—according to the type of household in which they live. Equivalence scales are the way this inflation or deflation is accomplished.

When we take account of the value of things like education and Medicare, the 'poor' turn out to get a lot more than we first realise.

In the Smith Family report, the 'baseline' household is taken to be one consisting of a household head working full-time, a spouse not in the labour force, and two dependent children (one aged under 5 and the other aged 6-14 years). People in other kinds of households then have their incomes adjusted against this baseline—for example, a couple without children is considered to require only 73% of the baseline household income in order to achieve an equivalent standard of living, so their actual income is inflated for comparative purposes before including it in the analysis so as to take account of their lower household costs. Similarly, an employed sole parent bringing up four children is thought to require 109% of the income of the baseline household, so his or her 'equivalised income' is reduced accordingly. It is on the basis of their equivalised incomes, rather than their actual incomes, that individuals are finally ranked and compared for the purposes of analysis.

Clearly, as the report itself explicitly recognises, equivalised income data are only as good as the assumptions on which the equivalence scales are constructed. Like the drawing of a poverty line, the construction of equivalence scales inevitably entails arbitrary judgements, and the report shows that different scales based on different assumptions produce quite different estimates of the extent of poverty.

In a very real sense, therefore, the income data that get analysed in studies like this are constructions of the researchers themselves. It is quite possible to shift estimates of poverty up or down simply by tweaking the assumptions you make about the equivalent running costs of different types of households. We have no particular objection to the scale used in this case—our point is rather that *any* poverty estimate calculated in this way will inevitably be arbitrary.

A final problem in this report relates to the number of respondents reporting that they had no income at all—or even that they received negative incomes. We are not told how many people claimed to have no income, though clearly this will have influenced the calculation of a poverty line based on the overall sample mean. Nor are we told how many of these responses are likely to have been valid or erroneous—they are all presumably accepted as valid and are included in the analysis. The authors do, however, tell us that they have reset all reported negative business and rental incomes to zero—that is, nobody was allowed to make a loss in the week in which they were surveyed, even if they did in reality suffer a negative income.

It is impossible to tell simply from reading the report whether or not these 'technical adjustments' to the data have had much of an effect on the final results, but it is disturbing to find that some people's reported incomes have been accepted (even when they may have been implausible) while others have been 'reset' even when they may have been valid.

CONCLUDING REMARKS

The Smith Family/NATSEM report claims that 13% of all Australians are poor (15% in the case of children), and that poverty has increased over the last ten years. We have suggested in this paper that these estimates are almost certainly wrong.

For a start, the report ignores 'absolute poverty' (presumably because there is so little of it to be found) and focuses instead on 'relative poverty' (which can always be found to exist provided there are income inequalities in the society, and you set your poverty line adroitly). This allows the authors to disregard the fact that the average incomes of those they call 'poor' have actually *risen* in real terms by $38 per week through the 1990s. Focusing on the fact that the incomes of the top 5% of earners have risen by more than this, the report claims, implausibly, that poverty has increased.

The average incomes of those they call 'poor' have actually *risen* in real terms by $38 per week.

The initial bias established by the decision to define and measure poverty in relative terms is then compounded by a series of other decisions, each of which is guaranteed to increase the final estimate of the number of people 'in poverty'. One of the key decisions is the establishment of a 'poverty line' based on the mean population income, rather than the median income. This alone succeeds in expanding the proportion of the population deemed to be in poverty from 8.7% to 13%. It also suggests that poverty has increased during the 1990s, when the more usual definition of relative poverty based on half median income indicates that no such change has in fact occurred.

Another key decision involved the use of income data rather than expenditure data. We know that actual incomes are under-reported by those clustering at the lower end of the income distribution, and that expenditure data provide a more reliable indicator of household living standards. This report, however, ignores expenditure data altogether. Had it analysed household expenditure patterns, it would almost certainly have produced a lower estimate of the number of people in poverty and it may not have found any significant increase in poverty over time. In their analysis of ABS expenditure data between

1975 and 1993, for example, Barrett, Crossley and Worswick reported much less inequality than for income data, and they found a flatter trend through time.[27]

We also know that snapshot surveys of just one week's income produce exaggerated estimates of the number of people in poverty—the report itself acknowledges as much—yet no allowance is made for this in the final estimates that it produces. And we know (and again the report agrees) that the proportion of people estimated to be in poverty is inflated when using households as our unit of measurement, since larger households tend to share higher incomes, but again no allowance is made for this in this report.

The extent and nature of the poverty problem has been hugely exaggerated.

Nor does this report make any attempt to include the value of free and subsidised services such as public schooling and Medicare when estimating household incomes, yet we know that estimates which include such items produce a very different picture of the number of people in poverty than those which ignore them.

So how many people really are in poverty in Australia today? It depends, of course, on how we define 'poverty'.

If we think of it in 'absolute' terms, as most people in the street probably do, then the answer is: very few. Anybody without an income of their own (or a share of someone else's) can claim some form of government Income Support, and this is usually enough to keep the wolf from the door.

If we indulge the poverty lobby, however, and define poverty in relative terms, then the answer is: a lot fewer than the 13% estimated in this report. Defining the poverty line as half median income (which is how it is usually defined) reduces this figure to 8.7% just for starters, and making other adjustments to take account of the various biases and distortions we have identified would shave several more percentage points off the final figure. Helen Hughes reckons the best estimate is probably around 5%.[28] This seems as good a guess as any (and we have seen that this entire field of relative poverty research is in the end based on arbitrary assumptions coupled with guesswork).

Far better than trading estimates of relative poverty levels, however, would be to devise an absolute poverty line adjusted for different kinds of households and locations. Christopher Sarlo has made a start on this in Canada where he has developed what he calls a 'basic needs poverty line' based on calculating the costs of necessities.[29] And in Australia, a group of researchers based in the Social Policy Research Centre at the University of New South Wales has calculated a 'low cost budget standard' (not, they stress, a 'poverty line' as such) which represents 'a standard of living which may require frugal and careful management of resources but would still allow social and economic participation consistent with community standards and enable the individual to fulfil community expectations in the workplace, at home and in the community'.[30]

The devil, of course, lies in the detail—what is included in the calculation as 'necessary' and what is not. But at least this sort of approach is transparent, it does not depend for its estimates of poverty on how much income those higher up the distribution are earning, and it does not muddle up the analysis of inequality with the analysis of poverty.

The Smith Family's report is admirably clear about how it did its analysis and how it came to its conclusions, and it also recognises many of the problems in the analysis on which it is based. Indeed, it is a tribute to the intellectual integrity of both the Smith Family team and the NATSEM researchers that their report contains sufficient detail to enable critics like ourselves to pinpoint their weaknesses and attack their assumptions. As we noted at the start of this paper, the report is a professional piece of social science research which deals with a crucial topic. The fact remains, however, that the decisions that were taken in producing this report *were* misleading, and the extent and nature of the poverty problem *has* been hugely exaggerated.

It is important for the research community in Australia to reflect on these problems in order to develop more reasonable estimates of trends in poverty (and income distribution). We understand that the Smith Family itself intends to produce a follow-up *Briefing Paper* based on its survey report, and we hope that this will address some of the key criticisms we have made so that we can all make further progress. The development of reliable poverty estimates is an essential precondition for any reasoned debate over the direction that social policy in Australia should take in the years to come.

Endnotes

1 A. Harding, R. Lloyd, and H. Greenwell, *Financial Disadvantage in Australia 1990 to 2000: The Persistence of Poverty in a Decade of Growth* (Sydney: The Smith Family, 2001), 4.

2 For data on increases in national wealth and welfare spending, see M. Warby and M. Nahan, 'From Workfare State to Transfer State', *IPA Backgrounder* 10: 3 (Melbourne: Institute of Public Affairs, 1998).

3 See, for example, P. Saunders, *Welfare and Inequality*, (Melbourne: Cambridge University Press, 1994), 223-30. Note that this was written by the Peter Saunders who heads the Social Policy Research Centre, who should not be confused with the Peter Saunders who is co-author of this *Issue Analysis* paper.

4 A. Harding, R. Lloyd, and H. Greenwell, *Financial Disadvantage in Australia*, 5 (emphasis added).

5 As above, 6.

6 The report does claim that the 'depth' of poverty (that is, how far below the poverty line people's incomes fall) increased in the late 1990s. Thus, not only did more people find themselves below the poverty line, but more found themselves a *long way* below it (according to the report, in 2000, 19.5% of the 'poor' were $200 or more below the poverty line—an increase from 15.4% in 1996). What is never clear from the report, however, is at what income effective participation ceases to be possible.

7 A. Sen, 'Poor, Relatively Speaking', *Oxford Economic Papers* 35 (1983), 159.

8 The authors of the report seem themselves to be uneasily aware of the fact that they are really looking at inequality rather than poverty, for in the appendix on 'Data and Methodology' they explicitly warn in relation to their findings that: 'It is probably safer to discuss "financial disadvantage" rather than "poverty".' Throughout the body of the report, however, they repeatedly ignore their own warning and show no hesitation in referring to the 'increase in poverty' which they claim to have documented. Indeed, the Executive Summary that opens the report states explicitly that its aim is to provide 'estimates of trends in poverty over the last decade' (page vii), and it concludes that, 'Australia did not manage to make any progress in the fight against poverty' during the 1990s (page viii).

9 *The Economist*, 'Does Inequality Matter' and 'The New Wealth of Nations: A Survey of the New Rich' (16 June 2001), 9-10 and 3-22 respectively.

10 A. Harding, R. Lloyd, and H. Greenwell, *Financial Disadvantage in Australia*, 26-27 (emphasis added).

11 Australian Bureau of Statistics (ABS), *Government Benefits, Taxes and Household Income, 1998-99* (Canberra: ABS, 2001), 44.

12 H. Hughes, 'The Politics of Envy: Poverty and Income Distribution', *Policy* 17: 2 (Winter 2001), 14.

13 ABS, *Government Benefits*, 44.

14 D. Green, *Benefit Dependency: How Welfare Undermines Independence* (London: IEA Health and Welfare Unit, 1998).

15 H. Hughes, 'The Politics of Envy', 14.

16 C. Bajada, 'Estimates of the Underground Economy in Australia', *The Economic Record* 75: 231 (1999), 369.

17 As above, 378.

18 A. Harding, R. Lloyd, and H. Greenwell, *Financial Disadvantage in Australia*, Table 3.

19 D. Green, *Benefit Dependency*, 25.

20 A. Harding, R. Lloyd, and H. Greenwell, *Financial Disadvantage in Australia*, 28.

21 ABS, *Government Benefits*, 44.

22 See D. Green, *Benefit Dependency*, 25-27.

23 G. Barrett, T. Crossley, and C. Worswick, 'Consumption and Income Inequality in Australia', *The Economic Record* 76: 233 (2000), 116-38.

24 A. Harding, R. Lloyd, and H. Greenwell, *Financial Disadvantage in Australia*, 27.

25 D. Johnson, I. Manning, and O. Hellwig, *Trends in the Distribution of Cash Income and Non-cash Benefits* (Canberra: Australian Government Publishing Service, 1995), 107. See also P. Raskall and R. Urquhart, *Inequality, Living Standards and the Social Wage During the 1980s*, Study of Social and Economic Inequalities Monograph No. 3 (Kensington: The University of New South Wales, 1994); A. Harding, 'The Impact of Health, Education and Housing on Income Distribution in the 90s', *Australian Economic Review* 111, 71-86.

26 As above, Table 3.2.

27 G. Barrett, T. Crossley, and C. Worswick, 'Consumption and Income Inequality'.

28 H. Hughes, 'The Politics of Envy'.

29 C. Sarlo, 'Measuring Poverty in Canada', *Critical Issues Bulletin* (Vancouver: The Fraser Institute, July 2001).

30 P. Saunders, J. Chalmers, M. McHugh, C. Murray, M. Bittman, and B. Bradbury, *Development of Indicative Budget Standards for Australia*, Research Paper No. 74 (Canberra: Department of Social Security, 1998), 63-64.

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