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Should poverty researchers worry about inequality?

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Creating and sharing knowledge to help end poverty
Abstract

The paper constructs a case for arguing that poverty researchers need not worry about inequality (as poverty researchers). It reviews conceptualisations of poverty as essentially relational, a particular reflection of prevailing inequalities. In this approach, people are in poverty because they are less well off than others along important dimensions of wellbeing. As against this view, the paper constructs a case for studying poverty as non-relational. In this approach, people are in poverty because they are worse off than they might have been along important dimensions of wellbeing. The argument is developed in the space of justice, and by reference to prioritarian approaches. Some implications of adopting a prioritarian perspective on poverty are briefly discussed. A Note discusses counterparts to this argument in poverty analysis.

Keywords: poverty, inequality, priority, sufficiency

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1. Introduction

In development theory and policy, poverty and inequality are usually taken to be ‘twins’, sharing a common ‘genetic structure’ but with the capacity to develop independently. At the core of this common ‘genetic structure’ is the widely shared view that poverty is essentially relational, a particular reflection of prevailing inequalities. Consistent with this view, being in poverty is associated with being located at particular segments in the distribution of resources (say, income or political influence). Poverty applies to those at the bottom of the distribution, because they are at the bottom. This paper considers instead possible grounds for viewing poverty as non-relational, and makes a case for arguing that people are in poverty not because they worse off than others, but because they are worse off than they might have been. In this view, being in poverty is non-relational. If the grounds for analysing poverty as non-relational are sufficiently strong, it becomes possible to consider poverty separately, and possibly independently, from inequality. An implication from this argument is that researchers need not (as poverty researchers) worry about inequality.

Because attempting to separate ‘twins’ is likely to attract considerable opprobrium, I hasten to add that it is not the intention of the paper to deny that poverty and inequality are related to each other in important ways. I am persuaded that there is an empirical relationship existing between poverty and inequality (Bourguignon, 2004: 2-3). I am also persuaded that, 

inter alia,

inequality is important in explaining why people fall into poverty, stay in poverty, or escape from it (Hulme and Shepherd, 2003; World Bank, 2006). In a policy context, I am persuaded that a reduction in (income) poverty reduces (income) inequality, and that a reduction in (income) inequality could work to reduce (income) poverty (Agell, 1999; Ravallion 2005). However, I take these to be contingent relations. What the paper seeks to challenge is the view that poverty is in essence relational, a particular form of inequality. In this view, poverty would not arise in conditions of equality. As against this view, the paper considers carefully whether there are reasonable grounds for viewing poverty as non-relational.

A relational perspective on poverty chimes with the concerns of social scientists, who often criticise poverty research for having a one-sided focus on income poverty, and who advocate a broader approach grounded on inequality (Green, 2007). The fact that non-economists are especially vocal about these issues does not mean that economists have ignored them. In poverty analysis and poverty measurement, ‘distribution sensitive’ poverty measures have provided the focus of important developments since the pioneering work of Sen (1976a; 1983). The scope and significance of this area of research is often missed by social scientists, due to the rather technical form of presentation favoured by economists. Ideally, a paper contrasting relational and non-relational poverty should strive to reach both groups of researchers. In this paper, I have opted to locate the discussion within the context of notions of justice. Notions of justice are a foundation for all social sciences, and should provide a shared and direct entry point into the issues at the core of the paper. The Note includes a summary of Sen’s ‘distribution sensitive’ index, and some of the key developments it has generated, in a less technical way.

1 See Sen (2006) for a reminder.
2 In poverty research, this issue often comes up in discussions on the relative merits of absolute and relative poverty measures (Townsend 1979). Relative measures of poverty naturally accommodate relational factors. It also comes up in discussions of relative deprivation (Ravallion 2008).
Distinguishing relational and non-relational perspectives of poverty has several implications for policy, not least in addressing often heard complaints about ‘poverty reductionism’. They are present in arguments that the Millennium Development Goals (MDGs) constitute a rather narrow and unambitious policy target, crowding out a wider inequality and growth perspective (Collier and Dercon, 2006; Saith, 2006). In the context of Latin America, they are embedded in arguments that the recent focus of social policy on poverty reflects a minimalist agenda imposed by the dominant neoliberal model, deflecting us from a broader and more fundamental focus on reducing inequality (Molyneux, 2006). The core complaint is that a narrow focus on the lower segment of the distribution of welfare risks blindness with respect to the rest of the distribution. Making a case for a non-relational perspective on poverty would throw light on the weight of these complaints.

The paper divides into three main sections. Section 2 considers different settings in which poverty is taken to be unquestionably relational, and in doing so clarifies the nature and scope of the relational view of poverty. Section 3 presents and examines possible grounds for viewing poverty as non-relational, and presents and discusses the priority and sufficiency views and their relevance to poverty. Section 4 identifies and discusses some of the implications for poverty analysis and policy of adopting this view. A final section summarises the main conclusions.

2. Poverty as relational

This section presents perspectives on a relational notion of poverty. It is not intended as a critical or comprehensive review of these perspectives. This is outside the scope of the paper. Instead, the point of this section is to clarify what a relational perspective entails, and to show relational notions of poverty in what I understand to be their strongest formulation. There are many valuable perspectives on relational notions of poverty, but in this section I focus on three: Wood’s (2003) view of poverty as adverse incorporation, Green’s (2007) discussion of chronic poverty and destitution; and Sen’s (1979, 1983) classic discussion of the significance of relative poverty. My abridged presentation below will inevitably fail to do full justice to these contributions.

Social scientists working on development show empathy with relational approaches to poverty. Wood (2003) identifies adverse incorporation as an important explanation of poverty persistence. He argues that lack of control over one’s future in the context of significant levels of risk and uncertainty is a commonly experienced dimension of poverty. This has a relational component, because to ‘...be poor means, inter alia, to be unable to control future events because others have more control over them’ (Wood, 2003: 456). For those in poverty, a measure of control over their future can be achieved by surrendering autonomy to those with greater control of events, for example powerful and predatory warlords. Protection comes at a price, in terms of autonomy and opportunities for advancement. Where the price of security is high, it may result in poverty persistence. Persistent poverty could be, in certain circumstances, preferable to acute insecurity. ‘Perversely, therefore, we encounter the deliberate strategy of choosing a coping level of poverty as the social condition of securing a sustained, albeit low, level livelihood’ (Wood 2003: 456). The justification for a non-relational notion of poverty is not dependent on perceived shortcomings of relational approaches.
unequal distribution of power and control is the fold within which adverse incorporation might be a chosen alternative. A more equal distribution of power and control could well foster alternative institutions, such as risk-sharing forms of insurance, which enable permanent exit from poverty. This is a good example of relational poverty, as 'people are poor because of others' (Wood, 2003: 456).

In a recent paper, Green discusses the view that poverty, and chronic poverty specifically, cannot be understood simply as deficits in resources, but instead must be studied as the outcome of specific social orderings (Green, 2007). The fact that some find themselves in poverty is a direct consequence, and reflection, of their standing within this social ordering. Poverty is intrinsically relational. In looking for an explanation for chronic or persistent poverty, Maia draws out a contrast between notions of persistent poverty, on the one hand, and notions of destitution, on the other. Destitution is described as ‘sanctioned harm through a recategorisation of a person away from previous entitlements’, which has the effect of situating those affected ‘very differently in relation to others’ (Green, 2007: 14). Green acknowledges that destitution is qualitatively different from poverty, but she argues that the contrast serves to highlight the ‘centrality of social relations in determining how people live, that is their deprivations and entitlements’ (Green, 2007:15). Destitution is an extreme form of social exclusion and represents a ‘crisis in social relations’. The point of looking at destitution is that it magnifies the role of social relations in fixing the status of different groups and households. By extension, ‘intractable poverty is also the result of social relations and ordering’ (Green, 2007: 26). Relational dimensions are therefore essential to explaining poverty.

The extent to which poverty is relational has also been discussed by Sen and others in the context of relative and absolute concepts of poverty (Sen, 1979; 1983; 1997a). Sen argues that poverty analysis needs to pay attention to relative poverty. It will be helpful to highlight the relational dimension of relative poverty in more detail. Sen tracks the relational dimension of poverty down to Adam Smith’s often cited passage describing the basic necessities of a labourer:

> By necessaries I understand not only the commodities which are indispensably necessary for the support of life, but whatever the custom of the country renders it indecent for creditable people, even of the lowest order, to be without. A linen shirt, for example, is, strictly speaking, not a necessary of life. The Greeks and the Romans lived, I suppose, very comfortably, though they had no linen. But in the present times, through the greater part of Europe, 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 degree of poverty, which, it is presumed, nobody can well fall into without extreme bad conduct (Smith, 1905: 402-403).

There are several aspects of relative poverty one could find in this passage. Different societies will have different views of ‘necessaries’. Less prosperous societies will have a restricted view of ‘necessaries’ compared to more prosperous societies, and their perceptions of ‘necessaries’ will
change over time. But these are relatively unproblematic for the notion of poverty.\(^4\) The aspect to focus on is the relational one. The passage is interpreted to support the view that poverty is relative in a relational sense. The fact that the day-labourer is less well off than others, in respect of his shirt or shoes, makes him unable to participate fully in the life of the community. This is because not having a linen shirt, in conditions where many do have them, prevents him from appearing in public because his appearance would be mistakenly associated with extreme bad conduct, the outcome of which is that his views would not be listened to.\(^5\) This underlines a relational dimension of poverty.\(^6\)

While Sen was keen to incorporate relative, and especially relational, dimensions of poverty in poverty analysis, he urged researchers to avoid reducing the concept of poverty to just relational dimensions. He distinguished the resources space (what a person has at her disposal) from the space of functioning and capabilities (what a person is able to do or be). It then becomes possible for relational factors (relative differences) in the space of resources to be associated with absolute poverty in the space of functioning. 'The temptation to think of poverty as being altogether relative arises partly from the fact that the absolute satisfaction of some of the needs might depend on a person's relative position vis-à-vis others' (Sen, 1983: 333). The labourer needs a linen shirt 'not so much to be less ashamed than others but simply not to be ashamed' (Sen, 1983: 333). He concludes that, 'ultimately, poverty must be seen to be primarily an absolute notion' (Sen 1983).\(^7\)

The paper will argue below that absolute poverty is in essence non-relational.

The main aim of this brief section was to present relational approaches to poverty. In these approaches, poverty is determined by relational factors. In Wood's argument people are poor because, in an uncertain world, others have more power and control. In Green's terminology, poverty reflects (changes in) social orderings. In Sen's view, poverty is primarily an absolute notion, but relational factors are also important, for example where (absolute) poverty depends on enjoying a particular relation or position relative to others. No doubt, other perspectives on the relational

\(^4\) The distinction here is between a fixed or an evolving notion of poverty, a different issue from that of whether poverty should be seen as relational or non-relational. See Foster (1998) for a discussion of the many different interpretations of the absolute-relative notions of poverty.

\(^5\) Note that several separate points appear to be conflated here: resources; self-respect as reflection of oneself in others; conditions for social participation; but also thresholds in resources and participation. For example, should the response be: to provide him with a linen shirt or a minimum wage which would enable him to buy one? Persuade him that linen shirts should not matter that much for his self-belief? Agitate for increased informality in social and political life? Advocate for a lower threshold for participation, e.g. cotton vests?

\(^6\) Sen integrated concerns with relative poverty dimensions into his analysis in at least three different areas. These will be covered later on in the paper. Firstly, relational dimensions are important in the space of resources. This is especially important, and an obvious point, in the context of positional goods. Inequalities of access in education, health, and employment, for example, are important here. The fact that a majority of those entering the labour market have a postgraduate qualification means that a minority with only school certificate will find it hard to get a job, even if they are fully qualified for the kind of jobs available. Secondly, crossing the poverty line acquires significance. This is explicit in the context of absolute poverty, but as can be seen from the discussion above, it is also relevant in the context of relative poverty. The discussion above suggests that having a shirt which is 80 percent nylon and 20 percent linen, in a context where upright members of the community have 100 percent linen shirts, will not do. This has implications for poverty analysis and policy. Thirdly, concerns with relational factors informed Sen's development of 'distribution sensitive' measures of poverty, which stimulated a very significant literature (Sen, 1976a; Zheng, 1997). See the Note on this point.

\(^7\) The nuanced changes in emphasis on the primacy of absolute poverty through Sen's work would benefit from close scrutiny.
aspects of poverty are available, emphasising discrimination, exclusion or power differentials (Runciman, 1966; Mosse, 2007). However, the review of the three perspectives above demonstrates a shared basis in the view that people are in poverty because of the character of their relationships to others in their community, which entails being worse off than others in important dimensions of wellbeing.

3. Poverty as non-relational

The previous section presented different perspectives on poverty as intrinsically relational. In this section we focus instead on possible grounds for viewing poverty as non-relational. As noted in the Introduction, there are several possible terrains and points of departure, but the argument is developed within the context of notions of justice. Theories of justice provide normative characterisations of a fair society. There are advantages in focusing on justice: theories of justice are a basis for all social sciences and therefore an inclusive entry point; the approaches reviewed in the paper themselves emerged in this context; and a focus on justice includes attention to poverty and inequality. In particular I am interested in notions of justice that focus on characterising the kind of institutions that could ensure social justice.

It might be helpful to signpost the argument which follows. The section begins by outlining prioritarian theories of justice, arguing that an improvement in the wellbeing of the worst off has priority, in the sense of having greater value. Priority perspectives apply more or less directly to poverty. The discussion then moves on to sufficiency variants of the priority view. The sufficiency view argues that what matters is that those who are worse off have enough. The discussion assesses the strength of this view and its parallels in poverty analysis. The section ends with a restatement of the main findings.

3.1 Priority

Prioritarians argue that priority should be given to helping the worst off because an improvement in their wellbeing, say as a result of a benefit or transfer, has greater moral value.8 Parfit (1991; 1997) provides a compelling discussion of the priority view. In the context of the paper, the significance of this view comes not from its focus on the worst off, as this is shared with other notions of justice, but from the fact that this focus is not grounded on relational concerns. The priority view does not depend on a prior acceptance of some form of egalitarianism. Parfit writes,

8 By ‘moral value’ it is not meant here the value that helping others might have for specific individuals (should I help my neighbour?), but the value of this assistance in a society with a shared sense of justice (should a just society assist the worst off?). This can be a source of confusion, as political philosophers often use ‘moral value’ and ‘ethical value’ to refer to one or other of these interpretations idiosyncratically. In the paper, the focus is on the second sense of ‘moral value’, as the implicit question is why should a society assist the worst off? My preference would be to describe this sense of value as ‘ethical’ and apply this distinction throughout, but this may be a source of confusion, especially when referring to the literature. For a discussion of the morality of individual assistance, see the papers in D. Chatterjee (Ed.) The Ethics of Assistance, Morality and the Distant Needy (2004), which adds to a possible confusion by using both ‘ethics’ and ‘morality’ in the title.
…on the priority view, we do not believe in inequality…We do of course think it is bad that some people are worse than others. But what is bad is not that these people are worse off than others. It is rather that they are worse than they might have been (Parfit, 1991: 22).

At the risk of repeating the quotation, it is important to underline that there are two related claims here. The first claim is that priority does not rely on egalitarianism to justify a focus on the worst off. The second claim is that priority is grounded on the fact that people are worse off than ‘they might have been’, a non-relational justification. The weight of the literature on priority has focused on assessing the first claim. The essential points of this literature are reviewed briefly below. For my purposes, it is the second claim that holds the greatest interest. I would argue that that it encapsulates priority as a distinctive approach, one which can support a non-relational approach to poverty and the main point of the paper.

Given its significance, it will be helpful to flesh out this point a bit more. Parfit suggests it:

…may help to use this analogy. People at higher altitudes find it harder to breathe. Is this because they are higher up than other people? In one sense, yes. But they would find it just as hard to breathe even if there were no other people who were lower down. In the same way, on the Priority View, benefits to the worse off matter more, but that is only because these people are at a lower absolute level. It is irrelevant that these people are worse off than others. Benefits to them would matter just as much even if there were no others who were better off (Parfit, 1991: 23).

Some could counter that Parfit’s reference to the ‘worst off’ and/or ‘worse off’ smuggles back in a comparative element, but he disputes that this comparative element necessarily entails a relational interpretation: ‘On this view, if I am worse off than you, benefits to me are more important. Is this because I am worse off than you? In one sense, yes. But this has nothing to do with my relation to you’ (Parfit, 1991: 22-23)

This assertion can be transposed to a poverty context in an uncontroversial way. Absolute poverty reflects substantial deficits in wellbeing, independently of whether others are richer, or indeed poorer.

Returning to the first claim, a literature has developed assessing the claim that priority need not rely on egalitarianism (Vallentyne, 2000; McKerlie, 2003; Tungodden, 2003; Petersen and Hansson, 2005; Brown, 2006; Holtung and Lippert-Rasmussen, 2007; Broome, forthcoming; Fleurbaey, forthcoming; Hausman, forthcoming). It is well beyond the scope of this paper to review this literature in detail, and it was established above that my interest is in the second claim, but reprising some of the main points might be useful for the argumentation below.

Making a case for the priority view without reference to egalitarianism strengthens a focus on the worst off. Parfit believes that justifying a concern for the worst off based on priority will be stronger than if justified by a version of egalitarianism. Egalitarians believe that social states in which people are equal are better. This variant of egalitarianism finds the ‘levelling down’ objection to be

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9 It should be noted that Parfit does not endorse the priority view.
especially problematic. Egalitarians who find equality to have intrinsic value will be persuaded that a social state in which everyone’s welfare is at the level of those who are worse off, is better than one in which inequalities prevail. The ‘levelling down’ objection is less problematic for ‘instrumental’ egalitarians. Egalitarians who are persuaded that equality has an instrumental value – believing for example that greater equality ensures better governance, happier workers, lower crime – will not necessarily be persuaded that levelling down is an acceptable state, because the instrumental advantages of equality may then not materialise.\textsuperscript{10} However, ‘instrumental’ egalitarians will need another principle or value, in addition to equality, to reject the ‘levelling down’ objection.

‘Instrumental’ egalitarians are in favour of equality, but they are also in favour of other things, such as maximising welfare. Maximising welfare enables them to reject the ‘levelling down’ objection to egalitarianism. This inevitably implies the presence of potential trade-offs between equality and maximising welfare, and/or other values. ‘Instrumental’ egalitarians would unquestionably agree with the priority view in circumstances where the improvement of the worst off leaves others unaffected. Taking social states x and y, ‘instrumental’ egalitarians would argue that \textit{if the worst off are better in x than in y, while everyone else is the same in x than in y, then x is better than y.}\textsuperscript{11} Improving the wellbeing of the worst off in these circumstances can be justified by the priority view and the egalitarian view. It gets more complicated in circumstances where the improvement in the wellbeing of the worst off comes at the expense of others. This is because in this situation the two principles, equality and welfare maximisation, might not change in the same direction. ‘Instrumental’ egalitarians could find that a small improvement in the welfare of the worst off comes at the expense of a large loss in welfare for others. They could then come to the conclusion that the reduction in inequality is not justified. In these circumstances, prioritarians and ‘instrumental’ egalitarians will go separate ways.

It is not possible to do full justice to the substantial literature on this point (see the references above), but this briefest discussion provides some context on the Parfit’s first claim, namely that the priority view is not grounded on egalitarianism, and throws light on why he finds there are important advantages from this separation of the priority view and egalitarianism. The priority view avoids the ‘levelling down’ objection which affects egalitarianism.\textsuperscript{12}

We can now turn to the second claim, that the informational basis of the prioritarian view is non-relational. In the priority view, a strong ethical value attaches to assisting the worst off. This is not because of the relation of the worst off to others, but because some people are worse off than they

\textsuperscript{10} Some have argued that an instrumental version of egalitarianism requires the context of a single community, to enable the effects of inequality to be transmitted. The priority view has no such requirement. Suppose that citizens in the USA are unaware of the existence of a group of developing countries and vice versa. USA citizens have a very high standard of living, while citizens of developing countries have a very low standard of living. An ‘instrumental’ egalitarian, with a relational perspective on poverty, would have no grounds for complaining about the existing inequalities, but a prioritarian would. The prioritarian view has universal scope, ‘it is irrelevant whether these people are in the same community, or are aware of each other’ (Parfit, 1991: 23).

\textsuperscript{11} This is Broome’s version of the Pareto principle, the Principle of the Personal Good, which replaces utility with wellbeing.

\textsuperscript{12} From a poverty-in-development perspective, this is very much a live issue. Recent cross-country studies on the relationship between growth, poverty and inequality in developing countries find empirically that changes in inequality are not correlated with rates of economic growth, while growth rates are found to reduce poverty incidence (Bourguignon, 2004; Ravallion, 2005).
might have been. The discussion that follows shows that this provides an informational basis, and metrics, for assessing the value of assisting the worst off.

Parfit takes up, and rejects, alternative informational bases for judgements about the value of focusing on the worst/worse off. Utilitarian views recommend helping the worst off in circumstances where doing so maximises the sum of utility, for example where income has diminishing marginal utility. In Parfit’s description, ‘[u]tilitarians claim that we should give these people priority when, and because, we can help them more, … [instead, the priority] view claims we should give them priority, even when we can help them less’ (Parfit, 1991: 19). Others recommend justifying a focus on the worst off on an assessment of the greatest or more urgent need (Nagel, 1991). Parfit points out that this view ‘implies that we should give priority to needs rather than persons. The more urgent needs of someone who, on the whole, is better off, take priority over the less urgent needs of someone who is worse off’ (Parfit, 1991: 21).13 Priority places value directly on assisting the worst/worse off, instead of placing value on the benefits (utilitarianism) or the satisfaction of urgent needs. The informational basis for the valuation is the welfare of the person.

A crucial, but often ignored, point about welfare, as the informational basis used in notions of justice, is that welfare applies to whole lives, not to segments of lives (childhood, old age) or spells (unemployment, sickness or poverty) (Barrientos et al., 2003). The basis for evaluation is not people’s welfare today or tomorrow, but people’s welfare through their whole lives (McKerlie, 2002, 2003). A focus of notions of justice is that people’s whole lives go as well as they might. This applies to the priority view too.

The priority view claims that there is greater value in helping the worst off. Who are the worst off? They are those whose lives, taken as a whole, are worse than they might have been. On first thought, this may appear an elusive basis for evaluation, but with some simplifying assumptions it is possible to pin this down a bit more. Let us assume that we can measure welfare cardinally (in common units of a single indicator),14 both in terms of achieved welfare and potential welfare. In Chart 1 a simplistic view of a metrics for the priority view is presented. In the Chart, the welfare for five individuals (households or groups would do as well) is represented as a line over a welfare scale. The lines represent the welfare of each individual ‘life’, where the solid segment represents achieved welfare and the broken segment represents the welfare which could have been achieved (that is, a representation of ‘what lives might have been’). The lines do not start on the same point in the welfare scale, reflecting the diversity in human capital and (inherited) assets. They end at different points on the welfare scale, reflecting the diversity in potential welfare achievements. For our purposes, the solid segments of the lines are of little import (this is perhaps an issue in the priority view, as the focus is not on ‘how lives have gone’ but on ‘what lives might have been’).

On this, admittedly simplistic, depiction of the priority metric, it becomes possible to rank the individuals according to the shortfall existing between the welfare in their ‘lives’ and what their ‘lives’

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13 The urgent needs view can also be undermined by the problems involved in adjusting for the influence of ‘expensive tastes’ (rich folks who desperately need caviar at breakfast) and ‘cheap tastes’ (poor folks who can do with corn flakes). The point about differentiating current urgent needs from badly off lives is discussed below. The value attaches to whole lives.

14 Fleurbaey argues that the priority view necessarily relies on cardinal measures of welfare (Fleurbaey, forthcoming).
might have been. On this metric, B is the worst off, because of the length of her broken segment. B is followed by A and D, respectively. C is fourth in the ranking, because although her starting point is further to the left than D, her shortfall is small. The best off individual is E, who has only a marginal shortfall. In line with the priority view, helping B would have the greatest value, followed by A, D and C, respectively. There is no value in helping E.

It is important to note that the ranking compares individual/household/group welfare shortfalls, but this comparison does not smuggle in relational concerns. The fact that B is the worst off is because her life, taken as a whole, could have been significantly better. It is not to do with B’s relation to the others. Indeed B would still be worst off if any, or all, of the others are eliminated from the Chart.

Chart 1. A simplistic view of the metrics of priority

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Note: ‘Welfare’ is measured in common units of a single indicator; A to E are individuals (or households, or groups); the solid segment of the line represents achieved welfare, while the broken segment of the line represents what lives might have been.

The discussion above could help with identification of the worst off. The issue of aggregation comes up when alternative social states need to be compared – for example, the ethical value in assisting the worst off in different ways or amounts. Priority identifies the least advantaged or worst off as that individual or group who has the largest deficit, but in order to assess different benefit schedules, the deficits need to be aggregated across individuals in some way. This is the aggregation issue. The existing literature suggests that, in the context of a social state, the priority view is best represented by the sum of the weighted welfare of the components units (Tungodden,
Defining the welfare indicator $y_i$ of individual $i$ as $y_i (i = 1, ..., N)$ with weights $w$, a priority valuation of a social state $S_1$ is given by:

\[
S_1 = w(y_1) + w(y_2) + ... + w(y_N)
\]

More accurately, and in line with the discussion above, the welfare indicator is not lifetime achieved welfare, but the deficit between potentially achieved welfare $y_i$ and achieved welfare $\bar{y}_i$, over whole lives. Therefore, $y_i = y_i - \bar{y}_i$. In the priority view, $w$ is an increasing, and strictly concave, function of welfare, and $S_1$ is an additive function.

Several objections have been raised against the priority view. It has been objected that priority is too demanding. The priority view demands priority be given to the worst off, even where this requires that substantial benefits to the better off be foregone. This echoes similar objections relating to maximin versions of Rawls difference principle, even in the lexicographic version proposed by Sen (1976b). Arneson voices this concern in the context of international assistance: 'the priority view appears much too demanding and open ended in the obligations it imposes on us to improve people’s lives around the globe' (Arneson, 2002: 177-178). If the appropriate informational basis for priority is kept in mind, some of these objections fail to apply. To an extent these complaints simply highlight the fact that the priority keeps to a single focus on welfare, and rejects the possibility of trade-offs with alternative values.

3.2 Sufficiency

Sufficiency presents a different justification for ascribing moral value to assisting the worst off. The core sufficiency view was encapsulated by Frankfurt as follows: what 'is important from the point of view of morality is not that everyone should have the same but that each should have enough' (Frankfurt, 1987: 21-22). The moral concern can therefore be restricted to assisting those who are below a basic threshold, and the implication for policy is the use of 'available resources in such a way that as many people as possible have enough or, in other words, to maximize the incidence of sufficiency' (Frankfurt, 1987:31). Sufficiency is often billed as a more moderate form of the priority view (Tungodden, 2003), especially as giving priority to those below a minimum threshold could be read as a weaker version of the priority view. In fact, as the discussion below demonstrates, there are important differences between the sufficiency and priority view.

Central to the sufficiency view is the claim it makes on the moral uniqueness of the basic threshold. Whether people are above or below this threshold has special moral significance. Maintaining the focus on welfare as the informational basis for assessing the moral value of benefits, the sufficiency view implies a welfare function which is discontinuous at the threshold. Assisting those at or above the threshold holds no moral value.

15 Moreno-Ternero and Roemer interpret the priority view as operating in between two egalitarian spaces: resources and outcomes. Equal resource allocations ignore the ‘differential ability of individuals to convert the resource into the desired outcome’; while an equal outcome allocation ‘seems too extreme: it may require giving the lion’s share of the resource to very “handicapped” individuals, ones with poor outcome functions’ (Moreno-Ternero and Roemer, 2005: 2). This interpretation voices widely shared concerns with the apparent demandingness of the priority view, but it wrongly identifies the informational basis of the priority view, that is ‘what lives might have been’. Moreno-Ternero and Roemer redefine priority as the principle that no one should dominate on both the resources and the outcomes spaces.
How could the particular significance of the threshold be justified? Some variants of sufficiency justify the threshold by reference to some substantive level. Crisp argues that ‘80 years of a good quality life’ defines a reasonable threshold (Crisp, 2003).\textsuperscript{16} Arneson justifies a threshold by reference to the resources needed to ensure full participation in society as suggested by Walzer, ‘a person has enough when poverty does not block her from being a full member of a democratic society’ (Arneson 2002:173). Waldron discusses a variant of this basic threshold in Rawls’ work, as the level necessary to ensure continued commitment to cooperation in economic and social life (Waldron, 1986).\textsuperscript{17} Frankfurt defines the threshold as the point at which people are contented with their lives, that is as the level of wellbeing above which there is no reason to complain (Frankfurt, 1987). Nussbaum describes a capabilities-based threshold as the capability to function at an acceptable level in all the ways that are individually necessary and together sufficient for a decent quality of human life.\textsuperscript{18} A substantive threshold can also be defined in terms of self-respect.\textsuperscript{19} In poverty analysis, nutritional requirements are often used to define a monetary poverty line (Ravallion, 1996). Thresholds can also be defined by reference to a point in the distribution of wellbeing, such as the two-thirds of median earnings used by the European Union as a poverty line, or the ILO’s decent work standards. Some define the basic threshold by reference to a legitimating process. Nagel, for example, suggests that the threshold should be arrived at by discussion leading to unanimity on the least acceptable outcome, while Crisp is prepared to rely on an impartial observer (Nagel, 1991; Crisp, 2003).

As can be seen from this trawl, definitions of the basic threshold abound. If anything, the issue is how to discriminate among these different thresholds. A grounded approach could look for a justification of alternative thresholds in underlying ethical frameworks. For example, it is possible to trace the substance of Nussbaum’s threshold to the underlying capability approach. However, it is hard to find an ethical justification for the thresholds themselves. In a sense this could well be an impossible, or misplaced, task to attempt. If it is better that lives go as well as they might, how could a threshold be justified? There is a large measure of arbitrariness to the thresholds proposed. Why is 80 years of good quality life the threshold and not 79 years, or 81 years? Acknowledgment of the inherent ethical arbitrariness of the thresholds proposed leads Arneson to suggest that sufficiency can be better understood as an unavoidably rough and ready guide to policy than as an ethically grounded level. As will be discussed below, this applies with some force to poverty lines in common use.

\textsuperscript{16} How we interpret the sufficiency view in the context of a whole life is an interesting and important issue. According to Arneson, ‘one judges whether someone is at the sufficiency level by assessing that person’s entire life. The aim that is proposed is that the person’s life, taken as a whole, should meet the sufficiency level’ (Arneson, 2002:192). There are, of course, alternative interpretations of what this implies in practice. It could be argued that the principle implies that at no time in someone’s life should welfare be allowed to fall below the threshold. Alternatively, it could be proposed that averaging good and bad times, the principle implies that lives on average should reach the threshold.

\textsuperscript{17} Waldron’s depiction of the threat of poverty is worth repeating: acute need ‘in the despair that characterises, the defiance it excites, and the single minded violence it may occasion, …poses a simmering threat to the viability of the societies it afflicts. There is therefore a prima facie reason why any society should avoid the situation in which significant numbers of people are in need’ (Waldron, 1986:30).

\textsuperscript{18} This description is from Arneson (2002: 174).

\textsuperscript{19} Hegel takes self-respect as defining a basic standard of living (Moon, 1988).
3.3 Sufficiency and priority

The sufficiency view is has been described as a moderate version of the priority view (Arneson, 2000; Brown, 2006; Holtung, 2007; Fleurbaey, forthcoming). From the standpoint of priority, the ethical arbitrariness of the threshold is not the only problematic aspect of sufficiency. There are substantive differences between priority and sufficiency, especially in a poverty context.

Sufficiency denies that the wellbeing of those above the threshold has moral value. This assessment might coincide with priority under certain circumstances – for example when the worst off are precisely those below the threshold, and the difference in welfare existing between those below and those immediately above the threshold is sufficiently large that there is no moral value in helping the latter. In this particular case, giving priority to the worst off and giving priority to those below the threshold appears to be the same thing. The sufficiency view has much in common with poverty approaches, for example in the use of the poverty line as the threshold for poverty status and entitlement to assistance. This is especially true when poverty status is based on a discrete poverty headcount measure. These are limiting cases.

In contrast to priority, sufficiency attaches no significance to changes in wellbeing among those below the threshold, as long as they remain below it. Whereas priority will attach value to improvements in the welfare of the worst off which leave them worst off, sufficiency denies any significance to these changes, as positive moral value gains only attach to changes in wellbeing that ensure people cross the threshold.20 This difference is very important in the context of assessing alternative schemes for assisting the worst off. The sufficiency view has nothing to say on a scheme of assistance that benefits the worst off who nevertheless remain worst off; the priority view does.

In view of the use of thresholds in poverty analysis, perhaps a more interesting question to address is whether sufficiency constitutes a reasonable restriction on the priority view, whether adding a sufficiency threshold to the priority view is helpful. The priority view does incorporate thresholds, namely ‘what life might have been’. In the priority view there is no moral value in assisting those whose lives have gone as well as they might have been. However, this threshold is of a different quality to the threshold in the sufficiency view. The threshold in the priority view is not intrinsically relational. It is unlikely to be the same across different individuals or households, as Chart 1 shows. Unless we assume ‘cloned’ individuals, there is no guarantee that a unique threshold will describe ‘what life might have been’ for all individuals in the worst off group. Indeed, one of the main difficulties involved in setting a sufficiency level is the fact that it must apply uniformly to a community.21 Setting a minimum common welfare threshold as proposed by the sufficiency principle can only fit with the priority view with ‘cloned’ individuals.

20 This complication has led to further differentiation in the sufficiency view. Brown develops several variants of the sufficiency view which aim to incorporate more explicitly some dimensions of the priority view (Brown, 2006). For example, a variant of sufficiency could apply weights across the full distribution of a wellbeing measure, rising for levels of wellbeing further away, and below, the threshold. Applying weights to those above the threshold could also allow for some trade-off in terms of the benefits to the benefits to the worse off and the better off. However, sufficiency lacks a clear ethical foundation, and the ad hoc nature of these hybrid sufficiency specifications fail to make good this deficiency.

21 This is well understood in poverty analysis, that poverty lines in welfare terms may require different individual-specific resource levels. This applies, for example, in the context of population heterogeneity in
In sum, the priority view attaches value to assisting the worst off, where the worst off is defined in terms of welfare, and particularly the deficit in welfare with respect to what might have been achieved. The worst off are so not because their lifetime welfare is lower than that of a reference group or individual, but because their lifetime welfare is less than it might have been. Both priority and sufficiency can be non-relational, in the sense that the moral value of assisting the worst off is solely dependent on the welfare of individuals. Sufficiency can be relational, but priority cannot be so. Sufficiency is not necessary to priority, and it was rejected as a reasonable restriction of the latter. The next section discusses some of the implications of this approach for poverty analysis and policy.

4. Priority and poverty: some implications

The discussion in the last section introduced and examined priority and sufficiency views. The priority view argues that benefits to the worst off have greater ethical value. The sufficiency view argues that there is no ethical value in benefits that go to those above a basic threshold, and positive ethical value to benefits that go to those below the threshold. Although the sufficiency view is commonly presented as a reasonable restriction on the priority view, the discussion above suggested that the differences existing between priority and sufficiency are substantive. The aim of this section is to draw out some of the implications arising from adopting a priority view of poverty.

4.1 Priority and poverty: identification and aggregation

The priority view provides a perspective on justice. It is a response to the question: what is the ethical value of assistance in a just society? A just society would give priority to assisting the worst off, defined as those for whom life has not gone as well as it might have done. The worst off are not, in the priority view, necessarily the same as those in poverty, as identified in poverty analysis. In poverty analysis, people in poverty are commonly identified as those experiencing welfare at levels below the poverty line, an approach which owes more to the sufficiency view than to the priority view. Replacing the sufficiency view with the priority view as the basis for poverty analysis could greatly strengthen it. In many ways, recent developments in poverty analysis can be interpreted as a move in this direction.

Adopting the priority view would entail an extension of the informational basis of poverty. This can be readily observed in advances in poverty analysis achieved in the last three decades. The priority view is consonant with a shift in poverty analysis away from ‘resourcist’ measures of welfare and towards ‘capability’ type measures. Capability could capture ‘what life might have been’ better than resources or utility. The shift in poverty analysis away from a one-sided reliance on headcount measures of poverty and towards poverty-gap-based measures is also consonant with the priority view and not with the sufficiency view. A shift towards multidimensional measures of welfare, paying especial attention to the duration dimension, is also consistent with the priority view and with converting income into capabilities. ‘If we wish to stick to the income space, these variations in the conversion of incomes into capabilities would require that the relevant concept of poverty be that of inadequacy (for generally minimally acceptable capabilities) rather than absolute lowness (independently of the circumstances that inform the conversion). The poverty line income can be then specific to a community or a family, or even a person’ (Sen, 1997b).
extending poverty analysis to take in whole lives rather than spells or segments of lives. A priority-influenced poverty analysis would give special emphasis to chronic poverty.

Adopting the priority view as the basis for poverty analysis could have far-reaching implications. Taking the priority view seriously entails abandoning a focus on poverty lines, as a hard external threshold. The ad hoc, pragmatic, and to an extent arbitrary nature of poverty lines is widely acknowledged in the poverty literature, for both developing and developed countries (Atkinson, 1987; Kakwani, 2003). In sidelining poverty lines, the priority view does not lead to any weakening of the focus of poverty analysis on those in poverty, and especially the poorest, but the opposite. The priority view suggests a stronger focus on the worst off, and therefore attention to the depth and intensity of poverty, and to the distribution of poverty deficits among the worst off. It also suggests a progressive attention to deficits in welfare without the artificial upper limit imposed by a poverty line. It reflects more accurately a developmental perspective on poverty.

The extent to which priority can provide an ethical foundation for poverty analysis can be gauged by considering its relevance to addressing issues of identification and aggregation (Sen, 1979). The identification of those in poverty asks the question ‘how much poverty is in x?’ Here x stands for individuals, households or communities. The priority view provides sound guidance on this, especially through an extension of the informational basis needed for this identification. In the priority view, the worst off can be identified as those with the largest deficits in achieved welfare. Lifetime welfare provides the informational basis, the gap between achieved welfare and how life might have been. As discussed above, this is a non-relational informational basis. Comparison of poverty across social states requires some aggregation of those in poverty. The priority view also provides sound guidance on this issue. The ethical valuation of social states described in (1) above indicates an appropriate way of aggregating deficits. Social states can be ordered on the basis of the weighted deficits of individuals or households within them.

4.2 Priority and poverty: assistance schemes

Employing the priority view to underpin poverty analysis also has implications for poverty policy. There is a small but important literature studying the optimal allocation of a fixed but insufficient anti-poverty budget. The main finding from this literature is that the optimal allocation of a fixed budget depends on the objectives of the policy maker, as embodied in the poverty measures that guide selection of beneficiaries. If the policy makers choose to minimise a poverty headcount measure of poverty, allocating the poverty budget on those closest to the poverty line is likely to be most effective. If, on the other hand, policy makers choose to minimise a poverty gap measure, then it is immaterial which group among the poor is targeted, providing that none of the budget spills over to the non-poor. If the policy makers choose to maximise a poverty measure which takes

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22 See also Sen (1997). ‘To have inadequate income is not a matter of having an income level below an externally fixed poverty line, but to have an income below what is adequate for generating the specified levels of capabilities for the person in question...A “poverty line” that ignores individual characteristics altogether cannot do justice to our real concerns underlying poverty, viz, capability failure because of inadequate economic means. Often, it will make sense to group individuals into particular categories (related to class, gender, occupational group, employment status, and so on)’ (Sen, 1997a: 111).

23 This is discussed in more detail in the Note.

24 See, inter alia, Bourguignon and Fields (1990); Subramanian (1992); Bourguignon and Fields (1997); Chakravarty and Mukherjee (1998); Subramanian (2004).
account of the intensity of poverty, for example by weighting each individual’s poverty gap with the poverty gap itself (this is the squared poverty gap measure), then a fixed poverty budget will be most effective in reducing this poverty measure if it is allocated to the poorest of the poor, that is those with the largest poverty gaps. Bourguignon and Fields explore the case where the poverty measure chosen includes a mix of objectives, for example a poverty measure which focuses on both the poverty gap and the poverty headcount (Bourguignon and Fields, 1997)\textsuperscript{25} In this case, hybrid budget allocations – that is where some part of the budget is allocated to those closest to the poverty line and part of the budget is allocated to the poorest – will be optimal. The point is that the optimal budget allocation is therefore dependent on the ethical assumptions of policy makers.

The priority view, when applied to poverty policy, provides clear guidance on this issue. Giving priority to the worst off is consonant with allocating a fixed but insufficient poverty budget starting with those showing the greatest deficits with respect to ‘what their lives might have been’.

\section*{4.3 Priority and poverty: cosmopolitanism and the divided world}

In the priority view, the ethical value of assisting the worst off is essentially non-relational, and priority does not require reference to some form of egalitarianism. Applying this approach to poverty has considerable advantages over relational approaches when applied in a cross-national context. The main difficulties with cosmopolitan approaches to poverty measurement, exemplified in the methodological disputes over the US$1 a day poverty line (Chen and Ravallion, 2004; Reddy and Pogge, 2005) are more easily circumvented in a priority-influenced perspective on poverty. The informational basis of a priority-influenced poverty measure can be applied more readily in a cosmopolitan context because poverty lines are sidelined, and the poverty metrics is non-relational. In addition, the difficulties involved in applying relational poverty approaches in a divided world context fall away.\textsuperscript{26}

This section has raised some implications of adopting the priority view as the ethical basis of poverty analysis. The discussion has been highly selective and partial as regards the potential implications for poverty analysis from applying a priority view. The objective was to indicate the potential advantages from adopting the priority view, but a more comprehensive and critical assessment is due. The discussion does illustrate the fact that a non-relational approach to poverty is possible, and perhaps justifiable.

\section*{5. Conclusions}

The main objective of the paper was to show that a non-relational approach to poverty can be successfully grounded on plausible notions of justice. It began by describing relational approaches

\textsuperscript{25} The Sen Index (see the Note) has this property.

\textsuperscript{26} Parfit uses the following ‘divided world’ example to demonstrate the distinctiveness of the priority view with respect to egalitarian views: suppose you have a world with two groups, unaware of each other’s existence. In (1) one group is at 100, and the other at 200; in (2) one group is at 140 and the other also at 140. Egalitarians would not be in a position to order (1) and (2), because they are unaware of each other. Prioritarians would say that (1) is worse than (2) (Parfit, 1991). He concludes that it ‘would be coherent to claim that inequality is in itself bad, but only when it holds between related groups. But though coherent, this view does not seem plausible’ (Parfit, 1991: 7).
to poverty, including poverty as adverse incorporation, poverty as the outcome of social orderings, and poverty as relative (in the space of resources). Relational approaches to poverty provide important insights into the nature and causes of persistent poverty. They also ensure that poverty is conceptualised as a dimension of inequality. If poverty is relational or positional, then poverty is a special case (or concern) of inequality. Poverty is defined with respect to others.

The paper then sought to construct a case for studying poverty as non-relational. It focused initially on notions of justice, and particularly on the priority view. The priority view argues that there is value in assisting the worst off. This concern is shared with other notions of justice, but the priority view is distinctive, in that the worst off are identified not with respect to others, but with respect to what ‘their lives might have been’. In the priority view, there is ethical value in assisting those whose lives are not what they might have been. In attaching value to assisting the worst off, the priority view is intentionally non-relational. The discussion then covered the sufficiency view, which argues that what is important is that people have enough, that they are able to achieve a minimum level of welfare. The sufficiency view is commonly presented as a moderate form of the priority view, and has particular relevance to poverty analysis. However, the paper carefully distinguished the priority view from the sufficiency view.

The paper then moved on to claim that the priority view could provide a sound and effective ethical basis for a non-relational approach to poverty analysis. This was further illustrated by a partial discussion of some of the implications for poverty analysis of adopting this notion of justice. It was argued that a priority-influenced poverty analysis would need to jettison the use of externally imposed poverty lines, and focus instead on the informational basis and metrics of welfare at the core of the priority view, namely the deficits in welfare with respect to what ‘lives might have been’. It was also argued that sideling poverty lines involved no loss in focus on those in poverty, but the opposite, a fruitful extension of the informational basis of poverty. It was also pointed out that recent developments in poverty analysis can be interpreted are consonant with the priority view. A non-relational approach is not only possible as the basis for poverty analysis, but could prove to be important in facilitating its development.

A non-relational approach to poverty could be an advantage in development policy. It challenges often heard complaints that a poverty focus in international development implies some form of poverty reductionism. The discussion above underlined the fact that recasting the informational basis of poverty in the light of the priority view results in a more developmental view of poverty.

Should poverty researchers worry about inequality? The gist of the argument in the paper suggests that as poverty researchers they need not worry about inequality. A priority-influenced poverty analysis need not rely on some form of egalitarianism. Poverty cannot be reduced to some special case of inequality. However, as well rounded development researchers they should worry about inequality too, and also about growth and other stuff.
Note: Relational and non-relational poverty measures

In the literature on poverty measures, both relational and non-relational approaches have been followed. This Note is explores parallels existing between the discussion of priority and sufficiency in the text and poverty analysis. In particular, the Note distinguishes between relational and non-relational poverty measures, and discusses direct counterparts to the priority and the sufficiency views embedded in different strands of poverty measures. As this is an alternative entry point into the discussion in the paper, I have chosen to place it in a separate Note.

We shall focus on $y_i$ as a wellbeing indicator for unit $i$ ($i = 1,2,...,N$). In the discussion below we shall refer to the wellbeing indicator ‘$y$’ as ‘income’ and to the unit ‘$i$’ as a ‘person’ for short. We define a poverty line $z$, taken to describe a minimum living standard in that particular community. The set of poor persons is $Q = \{i \mid y_i < z\}$, with $q$ denoting the number of poor persons. We can describe the poverty of a person by the function $p_i(y_i, z)$ representing the poverty of unit $i$ in regime $(y, z)$. We can describe the poverty in the community by aggregating the poverty in each person, and then standardise for the total population $N$, that is

$$P(y; z) = \frac{1}{N} \sum_{i=1}^{q} p_i(y_i; z)$$

A family of poverty measures describes the amount of poverty in a person by her poverty gap, i.e. the difference between the income of the person and the poverty line, that is $p_i(y_i; z) = g_i(y_i; z)$; where $g_i(.) = (z - y_i)$. The issue then arises how to combine the poverty gaps of each person in the community so that an aggregate measure can substantively describe how much poverty there is in a community. It will be useful to normalise this aggregate measure to enable comparisons across communities.

Relational poverty measures

Sen (1976a) proposed the following poverty index:

$$P_{Sen}(y; z) = \frac{2}{(q + 1)Nz} \sum_{i=1}^{q} g_i r_i(y_i; z)$$

where the first term on the right hand side normalises the second term. In the second term, we have the poverty gap of person $i$ as $g_i$. The poverty gaps are weighted by $r(.)$. In Sen’s poverty index, $r(.)$ represents the ranking of a poor person among the poor associated with regime $(y, z)$. The ranking of the poor is defined as a one-to-one function $r:Q \rightarrow \{1,2,...,q\}$ which satisfies $r(i) > r(j)$ whenever $g_i(y; z) > g_j(y; z)$ (Foster, 1984). In the ranking, the poorest of the poor has a rank $q$ and the richest of the poor (nearest the poverty line) has a rank of 1. Where two persons have identical income, one is arbitrarily ranked below the other. $P_{Sen}$ is therefore a normalised weighted sum of poverty gaps, the weights being the ranking of poor persons.
The interesting point for our purposes is that in the Sen measure, poverty in a person is influenced by her relation to other poor persons, as the ranking attached to the person is the weight attached to her poverty gap. This is a poverty measure counterpart to relational poverty approaches. The amount of poverty experienced by a person depends on her relation or position to other persons in poverty. Foster (1984) finds two separate justifications for the use of this weighting scheme in the Sen index.

Firstly, Sen argues that in the absence of convincing alternatives, the position of the person in the ranking of poor persons could be used to generate a numerical weighting reflecting a relational dimension of poverty. To construct this weighting scheme it must be assumed that the distances between two contiguous rankings are identical, say the distance between a person ranked 11 with respect to a person ranked 10 is the same as that of a person ranked 24 with respect to a person ranked 25. The ranking of a person represents the relative deprivation they experience relative to the richest of the poor. This has the advantage of ‘cardinalising’ what is in effect an ordinal measure, following Borda’s voting scheme (Sen, 1976a).

Secondly, Sen justifies this weighting by reference to Runciman’s description of relative deprivation. This is explained in the context of promotion in the military. Relative deprivation is thought to depend on the relation of an individual to his or her reference group, so that for someone who is not promoted, her perception of relative deprivations is dependent on the number of others in the reference group who are promoted (Runciman, 1966). Taking persons in poverty as a reference group, the number of other persons with higher incomes can be taken as a measure of relative deprivation.

These two justifications for using ranking as a weighting scheme are open to criticism (Foster, 1984; Seidl, 1988; Zheng, 1997). Atkinson suggests that ‘the arguments about relative position and ranking are more persuasive for inequality measurement than for poverty measurement’ (Atkinson, 1987: 755). It also seems wasteful to use rankings as a proxy of relative deprivation where information on income and poverty gaps is available. Furthermore, restricting the reference groups to poor households alone misses significant demonstration effects from the consumption and behaviour of the better off (Seidl, 1988). In the context of this paper, the most searching criticism relates to the ‘cardinalisation’ of what is intended as an ordinal comparison of those in poverty. Seidl notes that ‘[s]uch cardinalistic aggregation procedures contradict the chosen ordinal approach to measurement. By this approach, more information is admitted that would allow us to go beyond the mere rank information of the Borda rule’ (Seidl, 1988: 109).

Subsequent work on Sen’s index sought to address perceived weaknesses with this measure – in particular, the fact that the Sen index does not satisfy the transfer axiom. This is the requirement that a transfer from some poor person to a less poor person leading to the latter exiting poverty should, other things being equal, be reflected in a rise in the poverty measures. However, Sen’s measure could well show a reduction in aggregate poverty. Kakwani suggested this weakness could be resolved by raising each weight to a power k, as in

\[
P_k(y; z) = \frac{q}{\phi_k(q)Nz} \sum_{i=1}^{q} g, r_i(y_i; z)^k
\] (3)
Where $\phi_k = \sum_{i=1}^{K} \delta_{ik}$ (Kakwani, 1980). This replaces Sen’s ranking as the weight of the poverty gaps with a more flexible formulation. Kakwani suggests that it will always be possible to find a $k$ large enough to ensure that transfers of this type produce a rise in the poverty measure. Thon suggested instead replacing the normalisation in Sen by

$$P_t(y; z) = \frac{2}{N(N+1)z} \sum_{i=1}^{\delta} g_i(r_i(y_i; z) + N - q)$$

This now satisfies the requirement that transfers from poor to less poor persons which take the latter above the poverty line are reflected in a rise in poverty (Thon, 1979). The Thon measure can achieve this by including the non-poor in the ranking of persons, so that the ranking of a poor person is not now the ranking among the poor, but the ranking in the population as a whole. This ensures that if a poor person crosses the poverty line, the denominator remains constant.

Takayama suggested instead replacing the truncated income variable used in the calculation of $P_{Sen}(y,z)$ with a complete but censored income variable. This takes care of the discontinuity in the income variable used in $P_{Sen}$, and precludes any distorting effect on the index from poor persons crossing the poverty line. The income variable truncated for the non-poor is replaced with a censored variable in which incomes above the poverty line are replaced by the poverty line itself, while leaving all other incomes unchanged (Takayama, 1979). For a vector of income $y$, a continuous version of the poverty function $P$ is $P^*(Foster$ and Sen, 1997). That is, $P^*(y, z) = P(y^*, z)$, where $y^*$ is a censored distribution as explained above.

Shorrocks (1995) version is

$$P_{SST}(y; z) = \frac{1}{Nz^2} \sum_{i=1}^{\delta} g_i(2N - 2i + 1)$$

Unlike the Sen index, Shorrocks’ version is consistent with the transfer axiom, and it is also continuous and replication invariant. It has the additional advantage that it can be decomposed as

$$P_{SST}(y; z) = \mu(g_i)(1 + G(g_i))$$

where $G(.)$ is the Gini index of normalised poverty gaps.

We now summarise the main points arising from this discussion. Relational approaches to poverty have exerted a strong influence on poverty measurement and analysis, especially through discussion of the Sen index. Sen uses ranking as a weight on poverty gaps, to take account of ‘distributional’ dimensions of poverty. There are some difficulties posed by the ranking approach, and its ‘cardinalisation’. In the subsequent literature, the Sen index has been improved and extended.
Non-relational poverty measures

The Foster-Greer-Thorbecke class of poverty functions (Foster et al., 1984), referred thereafter as $P_\alpha$, embodies a non-relational poverty approach. In this class of poverty functions $g_\alpha(y_i ; z) = (y_i-z)^\alpha$ or in its normalised version $g_\alpha / z = (y_i-z/z)^\alpha$, that is the poverty of unit $i$ is defined as a power function of their poverty gap, or alternatively as a power function of a normalised poverty gap. The $P_\alpha$ poverty function can be written, for the discrete case, as

\[(6) \quad P_\alpha(y_i ; z, \alpha) = \frac{1}{N} \sum_{i=1}^{N} \left[ \frac{(z-y_i)}{z} \right]^{\alpha}, \alpha \geq 0\]

where $\alpha$ is the power applied to the poverty gap, and it is usually interpreted as reflecting ethical preferences concerning poverty, as a measure of the policy maker’s ‘aversion to poverty’. When $\alpha=0$ the poverty function yields the poverty headcount. When $\alpha=1$ the poverty function yields the per capita poverty gap, the aggregate of the poverty gaps of the poor, standardised as a fraction of the poverty line, normalised by the population $N$. When $\alpha>1$ the poverty function is increasingly sensitive to the size of the standard of living shortfalls among the poor. In the limit, as $\alpha \to \infty$, the poverty function converges into a Rawlsian ‘maximin’ measure, in which the standard of living of the poorest unit alone determines the value of $P_\alpha$.

The FGT family of poverty measures can straightforwardly accommodate prioritarian concerns. For our purposes, the focus is on $P_\alpha$ where $\alpha=2$, that is, the weight applied to the poverty gap is the poverty gap itself. In this case, the poverty of a person is not influenced by the wellbeing of others, it is not relational. As Foster notes, in the FGT poverty measure, the ‘deprivation of each person is made to depend on her own income $y_i$, relative to the poverty line $z$, and the poverty measure for each group is built up from the individual deprivation measures without any interdependence… The relative position of person $i$ does not come into the evaluation of her deprivation’ (Sen, 1997b). In line with the priority view, persons are in poverty because they themselves are not as well as they could be, and their poverty is described by their deficit with respect to that benchmark. In line with the priority view, the wellbeing of others is not a factor determining their poverty status.

In so far as both the relational and non-relational poverty measures rely on an external poverty line, they necessarily reflect a specific version of the sufficiency view. This merits a brief discussion, especially in the context of our point made above, that the priority view entails sideling the poverty line. The implication from the sufficiency view that there is no value in assisting those at or above the threshold has a direct counterpart in the poverty measures, especially with the Takayama proposal to use a censored income distribution in the calculation of the poverty function. In this proposal, incomes above the poverty line are replaced by the poverty line itself, while leaving all other incomes unchanged. This is in line with the sufficiency view recommending zero value is attached to benefits to those above the threshold. The censored distribution $y^*$ in poverty function analysis has the technical advantage of ensuring the distribution of income retains the properties of continuity, but it also carries with it a dimension of the sufficiency view. Focusing now on the value of assisting those below the threshold, the sufficiency view has little to contribute where assistance does not take them above the poverty line. On the other hand, the poverty measures above are sensitive to changes in the poverty gaps of persons who remain in poverty. In this sense, the
poverty measures reviewed above are at odds with the sufficiency view. The significance of persons in poverty crossing the (external) poverty line, is in line with the sufficiency view.²⁷

There is a distinction to be made between two features of a poverty measure: its ‘distribution sensitivity’ and its ‘relational’ basis. The two are sometimes juxtaposed. In the poverty measures above, both \( P_{Sen} \) and \( P_2 \) are ‘distribution sensitive’, in the sense that the way in which incomes are spread (distributed) among the poor influences the aggregate poverty measure. Other things being equal, a social state in which the majority of the poor are to be found in the poorest segment will have a higher poverty measure than a social state in which most of those in poverty are closer to the poverty line. However, the \( P_2 \) measure lacks a ‘relational’ basis, while the \( P_{Sen} \) measure has such a basis in the use of rankings as the weights applied to the poverty gap.

²⁷ This point could be elaborated further.
References


Brown, C. (2006). 'Priority or sufficiency... or both?' Economics and Philosophy, 21(2), 190-220.


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