

EQUIVALENCE SCALES AND THE WELFARE OF CHILDREN:
A COMMENT ON "IS THERE BIAS IN THE ECONOMIC
LITERATURE ON EQUIVALENCE SCALES?"

by M. Luisa Ferriera, Reuben C. Buse, and Jan-Paul Chavas
in *Review of Income and Wealth*, 44(2), 1998

BY HILDE BOJER

University of Oslo

AND

JULIE A. NELSON

University of Massachusetts, Boston

In a recent issue of this journal, M. Luisa Ferriera, Reuben C. Buse, and Jan-Paul Chavas argue that the equivalence scales implicit in the official U.S. poverty line and in public welfare programs overcompensate parents for their children, with resulting negative distributional and incentive effects. We show that their analysis is based on a very particular, and ethically unappealing, assumption about the importance of children's well-being.

Household equivalence scales measure the relative income needs of households of varying size and composition. In the economics literature, "household" preferences are generally explicitly stated, or, more often, implicitly understood, to be some amalgam of the preferences of the two adult parents. Ever since the article by Robert Pollak and Terence Wales (1979) on "Welfare Comparisons and Equivalence Scales," economists have further distinguished between conditional and unconditional household equivalence scales, and conditional and unconditional household cost functions. The conditional cost function is based on "household" preferences given that children are present, while the unconditional cost function is based on a wider preference function that includes the adults' preferences directly related to the presence of children. Much of the literature on equivalence scales and income distribution has taken for granted, since 1979, that the unconditional scales are the true or unbiased scales, in the sense of giving the best measure of household welfare. In a recent article in the *RIW*, M. Luisa Ferriera, Reuben C. Buse, and Jan-Paul Chavas (1998), not only state this position in very clear terms, but proceed to make conclusions regarding poverty populations and specific income maintenance policies. We believe that while these views are widespread, they are fundamentally misleading, and would therefore like to use their article as a point of departure for addressing these misconceptions.

Our main point is very simple, and has been made before, notably by Pollak and Wales themselves in their 1979 paper, by Deaton and Muellbauer (1983)¹

¹In chapter 8.4: Equivalence scales in perspective, and notably on page 211, in the paragraph beginning: Consider the welfare of the children.

and by Julie Nelson (1993). Concern for distributional issues in general, and for poverty in particular, very often stems from concern for the welfare of children. Yet in contemporary economic literature on equivalence scales, children's own welfare is ignored. While Ferreira, Buse and Chavas (henceforth, FBC) claim that their article "[abstracts] from the problems of value judgments and ethical standards," (183), the truth is quite the opposite. They make the very crucial, and we believe ethically shocking, value judgment that the welfare of children should not count in any academic or social calculus! That this view seems to be widespread among economists (perhaps because we are used to dealing only with models of autonomous, rational agents), makes it no less a value judgment, nor any less repulsive.

FBC write, as many economists do, as if measurement of poverty and poverty-alleviation policies have only to do with maintaining the welfare of the parents or adults:

Yet, welfare comparisons across households require unconditional preferences. This can be seen by comparing households with different numbers of children, with the possibility that each household may have different preferences towards children (p. 184),

and

Assume that households behave as if they have a neoclassical utility function where the utility that parents enjoy from children is an argument (p. 187).

The point of anti-poverty policies is taken to be "compensating" families (read: parents) for the extra expenses they incur when they have children (p. 197). Then such policies are criticized for ignoring parent's "pure utility" from children, which, it is supposed, should at least partially if not fully yield a non-tangible utility "compensation" for the cost of children, to the extent that the parents' freely choose their fertility.² FBC conclude that official poverty lines are erroneous, and "programs such as WIC and AFDC" may induce excess fertility, because the equivalence scales used "overcompensate" parents for the cost of children once the "pure utility" is taken into account. The connection, if any, between household welfare and the welfare of the children themselves is nowhere mentioned in the paper.

As pointed out by Nelson (1993), such a focus on parental subjective, all-encompassing utility moves away from the interesting policy question of children's material well-being in two ways. First, in moving from material well-being

²The framing of the equivalence scale question in terms of fertility choice (e.g. FBC, p. 190) is also rather misleading, when it comes down to actual estimation. We know that children do not enter households as one-period consumption goods, but rather enter and exit in their own natural time. Presumably, some of the subjective "pure utility" one gains from being a parent should continue (and perhaps even increase!) when one's offspring leave the household and become adults in their own right. Yet empirically, when we observe households in data like the U.S. Consumer Expenditure Survey, we tend to assume that the number of minor children in the household at that point in time tells us all about the parental fertility decision, and that adults with no minor children in the home are not parents. Obviously, since some children are yet to be born while others have moved out, these assumptions are false. These misspecifications in FBC's equation (3a), however, are somewhat extraneous to the main point of this comment.

derived from consumer goods and services to an all-encompassing subjective happiness, we lose the sense of material deprivation that drives most concern with economic (as opposed to, say, spiritual) poverty. Secondly, and most importantly for this current essay, children's own material welfare is completely written out of the picture.

FBC state:

... As stated previously, since the official [equivalence scale] does not take into account that parents may enjoy utility from their children, it inflates the number of children living in families in poverty (p. 196).

True, the authors do not write "inflates the number of children living in poverty." Quite rightly, since the number of children living in poverty does not concern them. True, the authors also write on p. 194 that their concept "welfare" is not the same as another concept "standard of living." Strictly speaking, "poverty" in the above quotation must therefore not be taken to mean "inadequate material standard of living". But how many policy-makers would understand the above quote as different in meaning from the statement ... "inflates the number of children living in material poverty"? And how many policy-makers would find the statement interesting if they knew what it really means?

In order for equivalence scales to give information about children's welfare—material or more all-encompassing—some assumption about internal distribution in the household must be made. Some authors (e.g. Blackorby and Donaldson, 1994) assume that internal distribution within the household ensures equal utility for all household members. The welfare of one, say of one parent, therefore might be taken to be a measure of the welfare of all. Recent investigations into intra-household distribution gives reasons for seriously questioning the realism of such an assumption (e.g. Agarwal, 1997). While such an assumption may be false in detail and in many applications, it at least makes some intuitive sense. It may work as a rough approximation in the case where we are considering material well-being, since except in the most extreme cases of abuse one would expect some positive correlation among material living standards within the household.

When one moves to questions of "pure utility," however, even this rough equivalence does not, logically, transfer. The parents' pure utility from having children cannot be redistributed. Nor may we reasonably deduce that children have an equivalent pure utility from having parents or siblings, since the children have had no choice in these matters. There may be happy children living in material poverty, but we have no data to prove or disprove this fact, let alone to make reasonable an assumption that children living in poor, large households are partly compensated by their happiness in having siblings. As far as the standard of living of children is concerned, the notion of the "conditional" scale seems much more near the policy issue than that of the "unconditional" scale.

In their concluding paragraphs, FBC draw conclusions about incentive effects that we find ethically disturbing:

If eligibility for these welfare programs were to be based on a revised poverty line that would take into account that parents enjoy "pure utility" from their children, in the long run we would expect choices to respond to different incentives (p. 197).

Again, it is not the children, but the parents, that may be expected to respond to different incentives. But the children, with no choice in the matter, would still have to live in poverty. Ethically, such a proposal is qualitatively different from demanding people to bear the consequences of their own free choice. Here, the children are commanded to bear the consequences of their parents' free choice. FBC make no statement of which ethical framework, if any, would make their proposal acceptable. There are certainly many that would deem it unacceptable, to say the least.

As stated approximately twenty years ago by Pollak and Wales, "But are comparisons of [the equivalence scale] sort the principal basis of the widespread belief that it is appropriate to treat different family types differently in income tax or family allowance schedules or in income maintenance programs? We think not. For example, differences in treatment might be justified in terms of effects on the children's present or future welfare?" Isn't it about time that the rest of the economics profession caught up with the sophistication of *this* part of Pollak and Wales' influential article?

REFERENCES

- Agarwal, B., Bargaining and Gender Relations: Within and Beyond the Household, *Feminist Economics*, 3(1), 1–51, 1997.
- Blackorby, C. and D. Donaldson, Measuring the cost of children: a theoretical framework, in R. Blundell, I. Preston and I. Walker (eds.): *The Measurement of Household Welfare*, 51–69, Cambridge University Press, 1994.
- Deaton, A. and J. Muellbauer, *Economics and Consumer Behaviour*, Cambridge University Press, 1983.
- Ferreira, M. L., R. C. Buse and J.-P. Chavas, Is There Bias in Computing Household Equivalence Scales, *The Review of Income and Wealth*, 44(2), 183–198, 1998.
- Nelson, J., Household Equivalence Scales: Theory vs. Policy? *Journal of Labor Economics*, 11(3), 471–93, 1993.
- Pollak, R. A. and T. J. Wales, Welfare Comparisons and Equivalence Scales, *American Economic Review*, 69, 216–21, 1979.