## Children, well-being and taxes and benefits: Part I

Stuart Adam and Mike Brewer. Stuart and Mike are economists at the Institute for Fiscal Studies

The current Labour Government wants to reduce the level of child poverty in this country. In 1999, Tony Blair, the Prime Minister, declared: "our historic aim will be for ours to be the first generation to end child poverty" (Beveridge Lecture, May 1999). Partly to achieve this aim, the Government is also increasing the amount of financial support that it directs to parents through the tax and benefit system. Can economic analysis add anything to these important aspects of public policy?

Well, yes it can (although you might think that we have to say that!). Decisions on how much to redistribute to households with children require an accurate assessment of whether households with children are more or less likely to be poor than those without. And defining and measuring poverty usually involves making comparisons of income or well-being between households of different sizes, something which utility functions - a fundamental concept of economists - make a lot easier.

In this article, we explain how governments can compare standards of living in households of different sizes, and how this relates to measuring poverty. In the next edition, we discuss how the UK government actually measures child poverty, and how poverty and the amount of cash support given to households with children have changed since 1975.

The Government has made the issue of child poverty a priority, and has made major changes to the way the tax and benefit system supports households with children since 1997. But why does it consider households with children to be in need of support?

One reason for supporting children is an efficiency argument: if supporting children's development has external social benefits that are not reaped by the family concerned, then society has an interest in supporting children over and above the parents' own interest. There is increasing evidence that children who grow up in low-income households in the UK are more likely than better-off children to become unemployed, to become low skilled, to become unhealthy, to commit crime and to be a teenage parent when in adulthood. Most of these outcomes impose costs (both financial and social costs) on society in future years. Since higher taxes, lower spending and social problems will be felt by the whole of society, it is sensible for society to make some investment in supporting children now in order to avoid some of those problems in years to come. It also makes sense for society to take some steps to ensure children have access to some
resources because children themselves have little or no control over their household circumstances.

But, of course, the main reason for supporting households with children is an equity argument. Some sense of seeking natural justice or fairness leads most governments, to varying degrees, to redistribute money from the well-off to the less well-off. Supporting households with children and tackling child poverty is an important part of this general redistribution. This is because households with children tend to have lower incomes than households without children, because some parents work less when they have children. But as well as having lower incomes, households with children have higher needs, in general, than those without. For example, although there is widespread disagreement on how to define and measure poverty, most people would agree that it is not a matter of income alone. In particular, a single person earning $£ 15,000$ per year might be considered better off than a family on $£ 18,000$ per year but with five children to house, clothe and feed. Need is as important a concept as income when thinking about poverty amongst different households. Unfortunately, it is much harder to measure.

What we are really trying to measure is the economic concept of utility of households, as we would ideally like to provide help for households with the lowest levels of well-being, bearing in mind that this depends on the costs that households face as well as the income they have. In order to find out what costs different households face (or, equivalently, what their needs are), we need to answer the question "how many extra resources does a household need in order to reach the same standard of living, or utility, as it would have had without the child?". If we could find two households with the same standard of living, one with and one without children, then we could compare their incomes, and say that the difference in their incomes was the "cost" of a child, a monetary measure of the extra needs of households with children.

One difficulty that arises in trying to answer that question is that parents derive utility from having children. Indeed, since parents have usually chosen to have children, we might infer that the benefits outweigh the costs, and that the family does not need any further compensation for their extra costs. But since it is impossible to measure the utility parents gain from their children, it is usually ignored, and we concentrate on the drain on the parental purse that children provide.

So, even ignoring the non-material source of utility that children provide, how can we tell whether two households have the same standard of living? We cannot just compare their incomes, for the very reasons that we started thinking about this issue! One suggestion, put forward by a $19^{\text {th }}$ century German economist called Engel (not to be confused with Engels, the collaborator of Karl Marx), was to look at the proportion of a household expenditure that went on food. Engel observed that, because food is an inferior good, rich households spend less on it
than poor households as a proportion of their total consumption. The proportion of spending that goes on food can therefore be used as a measure of a household's well-being. Large households need more food than small households, but they spend more on other things too, so the ratio of food expenditure to total consumption is a good way of comparing the well-being of households of different sizes. So, to return to our example, if we observed two households, one with and one without children, but each spending $15 \%$ of their expenditure on food, then we would say that their standard of living was identical. If the household with a child had an income of $£ 25,000$ a year and the one without a child had $£ 20,000$, then we could say that a child costs $£ 5,000$ a year. Or we could express this as a ratio, and say that a household with a child needs $20 \%$ more to achieve the same standard of living. These method give one way to estimate the costs of extra individuals in a household (we could, of course, use the method above to compare households with one adult with those with 2 adults).

Other methods have also been proposed, but, whatever method is used, the results are traditionally summarized in 'equivalence scales', and are widely used to adjust household incomes so that we can more sensibly compare the well-being of households of different sizes, and in particular, those with and without children (we will show examples of this in the next edition).

In this article we have seen that governments might support households with children because there are benefits to wider society and because poverty is particularly prevalent in households with children, which have both lower incomes and higher needs. We have also seen how these higher needs can be accounted for by policymakers who wish to reduce child poverty by concentrating support where it is needed most. In the next edition we will look at how governments have used the tax and benefit system to support households with children since 1975, and what has happened to child poverty (as defined by the current Labour Government) as a result.

