

Child Labour: A Microeconomic Perspective

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(This is a non-technical summary of some of my research on this topic)

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The last decade has witnessed a renewed interest in child labour. International organizations, primarily the ILO, UNICEF and the World Bank currently have fairly large programmes intended to reduce its prevalence. This is an area in which policy has run ahead of research. There is an urgent need to identify which of a number of intuitively plausible policies is likely to be most effective.

Child labour today is concentrated in developing countries. A similar prevalence of child labour was seen during the industrialisation of today's "developed" countries but with the progress of economic growth, this has almost been eliminated. The geographic distribution of child workers today and the economic history of specific regions thus demonstrate a negative association of child work and aggregate income (or GNP). However, this does not say much about *why* children work. In particular, it does not support the common perception that child work is compelled by household poverty. This is because the growth in aggregate income may be unequally distributed, with little increase in the incomes of those households that supply child labour. In such cases, it may not be household poverty but, rather, the development of legal and political infrastructure or the evolving social norms associated with growth that are instrumental in the reduction in child labour. In the last decade and a half, household survey data for developing countries have become widely available, and these make it possible to disentangle household poverty (which differs across households) from factors like new laws or changed norms (which apply equally across households). This article describes recent research I have conducted on this and related questions using large and representative household survey data from rural areas of Pakistan and Ghana. Since the vast majority of working children in developing countries live in households (and are not vagrants or street children), and child labour is more prevalent in rural than in urban areas, these data paint a fairly reliable "average" picture.

In societies where child labour is prevalent, parents face a choice between sending a child to work and to school. An economist's way of thinking can be applied to structure the choice problem in terms of preferences, incentives and constraints. Rather different policy solutions emerge depending upon which of these three factors dominates in explaining the outcome: (1) If parents make the choice and children are subject to the outcome, there is a potential **agency** problem. The standard assumption in economics is that parents are altruistic. If, however, altruism were limited then child labour might be reduced by legislating against it or making education compulsory. (2) Turning to **incentives** or rewards, in the absence of binding constraints, the child's time is allocated to the activity with the higher relative return. So policies that make schooling more attractive by improving its quality or relevance or reducing its cost will discourage child labour. (3) If, on the other hand, a **survival constraint** forces children in very poor households to work, then this dominates any consideration of relative returns. Now, however attractive the schooling option, families cannot afford the opportunity cost of sending the child to school i.e. they cannot survive without the child's contribution to

household income. In this case, the appropriate policy will attempt to relax this constraint by, for example, offering cash transfers to very poor households (that, in practice, are often conditional upon their children attending school).

[*Is Child Work Necessary?*]: The first leg of my research offers and illustrates a method for investigating the hypothesis that household-level poverty compels child work. In this case, the child works to a target income defined as the shortfall between subsistence needs and adult income. A testable implication is that a drop in the child wage results in an increase in child hours of work and *vice versa*. Since, in the absence of constraints, economic theory would predict the converse (that people respond to a lower wage offer by working less), this is a good test of the role of **survival constraints**. To capture this, a theoretical model of labour supply is constructed from which a behavioural empirical equation is derived. This suggests which possibly confounding factors it is important to take account of in the statistical implementation. Applied to children in wage work drawn from 2400 households in Pakistan, the test suggests that boys work when necessary for household survival. The results are more ambiguous for girls, indicating that they work even when their income contribution is not critical. This may be due to parental favour for boys or to the perception that girls' schooling is associated with lower returns.

[*The Wealth Paradox*]: Previous research by economists has been preoccupied with establishing the strength of the correlation between household income and child labour. This is often surprisingly small and, for some regions, positive. In collaborative research with Chris Heady (Bath and OECD), I argue that this is in part because income is not adequately distinguished from wealth and, in particular, land. A simple tabulation of data from rural areas of both Ghana and Pakistan shows, remarkably, that children from land-rich households are more likely to work and less likely to attend school than are children from land-poor households. We call this the wealth paradox as it seems to fly in the face of the popular presumption that child labour is less likely in wealthier households. The paradox is resolved by appeal to imperfections in the markets for land and labour. Households that own more land do tend to generate more income which, by itself, depresses the extent to which they use the labour of their own children. However, where it is difficult to sell land and to hire labour, this effect may be overwhelmed by the fact that the extra hour is more productive on a larger plot of land, giving larger landowners a greater incentive to employ child labour. The force of this incentive effect is investigated using survey data from the very different environments of Ghana and Pakistan. The main result is that the "wealth paradox" persists for girls but, for boys, it vanishes once we take account of variation in income and demographics. In other words, controlling for all other observable influences on child labour, we find that girls are more likely to work rather than attend school in households that own or operate relatively large plots of land !

[*Investigating Separability of Parent and Child Labour*:] We know that, when parents work more, household income increases and, other things equal, children are less likely to work. But does the participation or hours of work of the mother or father have any influence on child labour *other than* this income effect? This previously neglected question is investigated for the Pakistan data. Parents' work seems to have only income effects on boys' work. In the case of girls, father's work has only income effects too.

However, the labour supply of girls appears to be complementary to that of mothers. So, at any given level of household income, if the mother works, the girl is more likely to work. This is an important, if puzzling, result as it drives a wedge between two common policy objectives. Policy would like to encourage women in developing countries to work and gain economic independence but this would appear to conflict with the objective of getting more girls into school. The precise mechanism involved merits further research.

[Parent Altruism]: So far we have assumed parent altruism although the wider social science literature contains anecdotal evidence that can be marshalled against it. In a further development of the research on child labour, I use economic theory to devise a test of parent altruism that can be applied to large-scale data to produce an “average tendency”. The basic idea is that, if parents are altruistic, then child consumption (or expenditure on child schooling) increases as adult consumption increases, holding relative prices constant. Intuitively, if we looked across households in a village and saw that in some households adults bought more clothes or tobacco for themselves then, assuming altruism, we would expect children in these households to be more likely than others to attend school rather than work. Results for Pakistan decisively reject parent selfishness. However, at the same time, they indicate that households in which at least one adult smokes systematically spend less on children, other things being equal.

Overall, the findings of the different strands of my research are consistent with the view that boys work under poverty compulsions whereas the engagement of girls in work is best explained in terms of the rewards from work being perceived as greater than the rewards from school attendance. In Pakistan, there is a remarkable gender gap in schooling, with only 31% of 10-14 year old girls enrolled as compared with 73% of boys. Girls in this age group are twice as likely to be in wage work and a bit more likely to be working on the household farm as compared with boys. In Ghana too, girls are relatively disadvantaged in schooling although the gap is smaller. We have discussed above, which policy alternative is relevant under which circumstance. A further insight that the results indicate is that policies targeted at closing the gender gap will substantially lower the overall incidence of child labour.

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