Fertility and Wealth in Sri Lanka: Are Children Normal Goods?

The paper by Weerasinghe and Parr resurrects a long-standing debate over the causal role of wealth in fertility reductions of the past centuries (1). Malthus, who did not foresee any negative correlation between wealth and fertility, wrote, "That population does invariably increase where there are the means of subsistence, the history of every people that have ever existed will abundantly prove" (2). For Malthus, the desires of the rich are just like those of the poor. Why then would wealthier people, who can have more of anything they want, have fewer children? He basically believes that all human beings like to have sex and will take any opportunity to start engaging in sex and reproduction as early and as often as they can. Malthus's unified account of human motivation is a very satisfying feature of his theory. His theory does appear to hold true in his own era. There had been fluctuations in the 'means of subsistence' prior to Malthus time, and the historical data on these populations indicate that they did indeed seem to behave the way that Malthus theorizes. Galloway describes over 100 years of population dynamics in Rouen, France, prior to 1787 and finds that abundant grain harvests significantly increased the numbers of marriages and births with opposite effects in bad times when grain prices rose (3).

The Sri Lankan findings that wealth and fertility are negatively correlated challenge us again to explain how economic prosperity can be associated with lower fertility, without sacrificing a unified account of human motivation such as the one that Malthus set forth? Wealth can be used for proxying lifetime income and ought to correlate with the opportunities of earnings and socioeconomic status of women. Finding a negative correlation between fertility and economic status is hardly new, having been documented repeatedly in developed-country data (4-8). The contribution of Weerasinghe and Parr is to leverage asset data from a developing country into a wealth index that permits assessment of fertility patterns by wealth in a non-western setting. Heretofores, most studies of socioeconomic status and fertility in developing countries used parental education or urban-rural residence to assess socioeconomic status (9). A recent exception is work by Montgomery et al. which uses living standards data from Ghana, Guatemala, Jamaica, Pakistan, Peru, and Tanzania to test the effect of expenditure per adult and education of women to predict children ever born (10). In the study of Montgomery et al., economic status significantly reduces fertility for urban populations in all countries, except Peru. Economic status increases fertility for rural populations in all countries, except Jamaica. Unlike the study of Weerasinghe and Parr, significant effects of schooling on fertility remain for Montgomery et al., despite the inclusion of the economic status indicator. The Sri Lankan study in this issue of the journal is a welcome addition to the empirical literature on economic status and fertility.

From a theoretical perspective, the old debate continues regarding how to account for a negative correlation between wealth and fertility. Weerasinghe and Parr offer a set of three explanations that could be consistent with an underlying positive effect of income on fertility:

- Wealthier people know more about contraception than poor people do
- Wealthier people face higher opportunity costs to raise children
- Wealthier people do not need children much to support them in their old age

A fourth explanation cited by the authors would overturn Malthus’s unitary theory of motivation:

- Wealthier people have different tastes and preferences about the quantity and quality of children

Malthus anticipated none of these obstacles. In his world, children were without exception a normal good—a consumer durable*. The more money a person had, the more children a person would have. Humans in Malthus’ day played by the same rules governing all birds and

* A normal good is one in which the quantity demanded (controlling for all prices) increases with income. A consumer durable is a normal good which lasts for many years
beasts—more resources equalled more biological fitness. To population economists since Malthus, children appear cute, cuddly, and innately desirable—part of the good things in life. Why would not rich people use their wealth to have more of them, just as they devote their wealth to acquiring more of so many other good things? Do we really need to believe that wealth changes the way people feel about the innate desirability of children?

Scholars since Becker have struggled and succeeded in developing a theory wherein children could still be considered ‘normal goods’ despite the great number of studies showing unadjusted correlations to the contrary (11). The first three explanations tendered by Weerasinghe and Parr have been readily espoused by many, as consistent with the original belief of Malthus that there is always a positive effect of income on fertility. Economists and others have made it clear that the confounding variables, such as contraceptive knowledge, wages, and old-age support, will make it difficult to detect an underlying positive correlation between wealth and fertility (12).

In this case, Weerasinghe and Parr are able to eliminate the first explanation (conceptive knowledge) as a contender. They found that contraceptive use was 62.3% in the highest wealth quartile and 61.8% in the lowest wealth quartile. Other authors have questioned the completeness of reporting of traditional contraceptive methods in Sri Lanka (13), but traditional methods are more likely to be used and under-reported by the poor, not the wealthy.

To properly test the assumption that children are normal goods, the Sri Lanka study would have had to control for the opportunity cost of time to the parents, and the availability of old-age support. Both these factors lead to lower fertility, and both are confounded with wealth. A final confounder, not mentioned in the study, would have to be a measure of the price of child quality. Indeed, the thing that economists agree upon as a normal good is not just the number of children, but the quality-adjusted quantity of children (14,15). Here quality might be a composite measure of the schooling and health of children. It is quite plausible that, in Sri Lanka, the wealthy face a lower price of child quality than the poor. They are more likely to exert the necessary political power to have schools and clinics located close by. They are more likely to have the wherewithal to derive greater benefits for their children from the same dollar investment in schooling and medical care (16). When the price of child quality goes down, parents are able to improve quality-adjusted quantity of children by curtailing their fertility and using the savings to buy up the now-discounted child-quality investments (schooling and child health) at a bargain. The increased quality can make up for the reduced quantity of children. Tests of the quality-quantity tradeoff use data on the price of child quality and have so far found a positive income effect on the quality-adjusted quantity of children (8,17). The policy implication of this strand of literature is revolutionary: investments in child schooling and health infrastructure lower the price of child quality and change the economic calculus underlying desired family size. Attempts to ‘market’ family planning without changing the economic forces that make large families rational will be far less effective than providing for better child well-being according to this view.

In summary, Weerasinghe and Parr are to be congratulated for contributing to our understanding of the raw correlation of wealth and fertility. They have solid evidence that availability of modern contraception is unlikely to account for the differences, which will lead some to look deeper into the data on traditional fertility-lowering practices (13). Readers looking for the paper that will prove to economists and Malthusians that children are NOT consumer durables will have to remain disappointed (18). Whether the Sri Lankan reductions in fertility are mediated by wealth itself or by confounding on the price of child quality, parental wages, or old-age support must remain a mystery. Since all of these factors will tend to move together, it is safe to bet that Sri Lankan fertility will decline further in the future. Policy-makers interested in accelerating fertility decline in Sri Lanka may be interested in policy options other than spreading wealth and higher wages. We remain in dire need of further research on the fertility-reducing role of more widely available child schooling and healthcare.

REFERENCES
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