Does Women's Relative Income Predict Contraceptive use in Ghana? An Assessment Using Bargaining Theory

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Introduction

Bargaining theory posits that women harbour a "threat point" in which decisionmaking and power in the household increases when they have more portable resources (Lundberg and Pollak 1993, England 1992, Sober and Wilson 1998). Women's power is often measured by the amount of income or resources that they earn or have. If a woman earns a higher income relative to her husband, her "threat point" of bargaining is likely to be higher than if her income is relatively low. According to this notion, the "threat point" is defined by woman's willingness to risk spousal conflict with regard to household decisions depends on the amount of income or resources that she can control. As relative resources or income increase, women are empowered to stretch bargaining "threat points." In the extreme case, when spousal disagreement results in divorce, she can provide for herself and her children outside of marriage.

This paper utilizes bargaining theory to interpret contraceptive decisionmaking among women who express a desire to limit or space children. We expect women with more resources or income relative to spousal income to be more empowered to implement their demand for fertility regulation than women who command a lower share of familial resources or income. Thus women with higher incomes can risk adopting contraceptives even if their husbands are opposed to it, knowing very well that they can fend for themselves if spousal discord ensues or be able to support themselves should there be a divorce. This analysis applies bargaining theory to predict contraceptive use in Ghana among respondents in the 1998 Ghana Demographic and Health Survey (GDHS).

Background

Contraceptive use rates remain relatively low in Ghana despite increased awareness among the population of the availability of various modern methods of contraception. For instance, while about 91 percent of married women knew at least one method of modern contraception in 1993,

only 10 percent were using modern contraceptives (Ghana Statistical Services and Macro International Inc. 1994). The 1998 Demographic and Health Survey (DHS) reported just a modest increase from the 10 percent level in 1993 to about 13 percent in 1998 (Ghana Statistical Services and Macro International Inc., 1999). These low levels of contraceptive prevalence more than 30 years after the adoption of an explicit national population policy (with a strong family planning component) have generated skepticism among researchers and academics as to the efficacy of the policy.

Although the 1998 GDHS report showed that contraceptive use rates are increasing, wide discrepancies exist between husbands and wives with regard to their respective motivations and desires for contraceptive use. Husbands not only desire more children than their wives, but are also less likely to want to use contraceptives. The reasons often given for the differences between husbands and wives with regard to their differential fertility desires and contraceptive use mostly center on their different conjugal responsibilities with regard to child-bearing and -rearing or care and the demand for children. It is often argued that because women bear the burden of childbirth and care, they tend to want fewer kids. Despite this latent demand among women for contraception, they are often unable to translate it into use because of opposition from their husbands.

Previous research in Ghana has documented spousal influences over reproductive preferences and behaviour (Dodoo and Landewijk 1996, Ngom 1996). However, available research has yet to examine decisionmaking dynamics within households, especially with respect to women's ability to negotiate with their husbands in order to have their desires fulfilled. For instance, the decision to have children, the number and the time to have them are often presumed to be joint decisions between husbands and wives. In practice however, although there is evidence that women sometimes do not want to have any more children, they are unable to fulfill their desires because of pressure from their husbands.

It is important therefore, to estimate the extent to which women's relative income as an index of power can positively predict their ability to influence decisions within households. This is important in view of the fact that women's views have always been subordinated to those of men in spite of their central role in all aspects of domestic life, including reproduction. This research therefore aims at testing the relative power of women's ability to positively influence

their contraceptives desires using their relative income as a predictor variable. Other factors will be controlled for as well.

Data

Data for the proposed research will come from the 1998 GDHS. The GDHS is a nationally representative sample of randomly selected women ages 15-49, and their co-resident husbands (i.e those married or cohabiting). Data collected include information on demographic characteristics of respondents, their reproductive status and intentions, breastfeeding practices, contraceptive use (both current and past), and a series of KAP-type (Knowledge, Attitudes and Practice) survey questions. Information on incomes of men and women within households was also gathered.

Variables

The dependent variable is a binary measure of current use (or non-use) of modern contraceptives among married women. The independent variables will include the ratio of women to men's income, men and women's education and a set of other controls, including ages of both men and women, and the respective desires of men and women with respect to contraceptive use.

Methods

Since the dependent variable is binary (use or non-use of contraceptives), a logit model will be estimated. The model is specified as:

$$\log it(P_i) = Ln\left(\frac{p_i}{1-p_i}\right) = \sum b_i x_i$$

Where the vector b represents the coefficients and x represent the various variables specified above (including women's income, husband's income, and spousal income interactions, differences between spousal levels of income, husband's and wife's education, their respective desires for contraceptive use, and other demographic control variables including the differences in the wife's and husband's age). The net effect of the ratio of wife to husband's income, controlling for spousal income levels and interactions, tests the bargaining hypothesis.

3

The dependent variable is interpreted as the log odds of modern contraceptive use and it is expressed as the sum of the products of the regression coefficient (*b*) and the means of the covariates (*x*). Exponentiation of the coefficients interpretation of results in the familiar log odds metric. Unmarried women and women who indicate that they are married, but temporarily separated from their husbands will also be excluded from the analysis. Women who indicate that they are infecund will also be dropped since they unlikely to use contraceptives for fertility control.

References

Dodoo, F. Nii-Amoo and P. van Landewijk. 1996. "Men, women and the fertility question in sub-Saharan Africa: an example from Ghana." *African Studies Review* 39(3): 29-41.

Elliot Sober and David Wilson. 1998. "Theories of motivation," in *On to Others: The Evolution and Psychology of Unselfish Behavior,* Cambridge: Harvard University Press.

England, P. 1992. *Comparable Worth: Theories and Evidence.* New York: Aldine de Gruyter, pp. 91-124.

_____ and Budig, Michelle J. 1993. "Gary Becker on the family: His genius, impact, and blind spots." In Dan Clawson (ed.), *Required Reading: Sociology's Most Influential Books.* Amherst, MA: University of Massachusetts Press, pp. 99-111.

Ghana Statistical Service and Macro International Inc. (1994), *Ghana Demographic and Health Survey 1993*, Demographic and Health Surveys, Macro International Inc., Calverton, MD.

Ghana Statistical Service and Macro International Inc. (1999), *Ghana Demographic and Health Survey 1998*, Demographic and Health Surveys, Macro International Inc., Calverton, MD.

Lundberg, S and Pollak, R. 1993. "Separate spheres bargaining and the marriage market" *Journal of Political Economy,* 101(6): 988-1010

Ngom, P. 1997. "Men's unmet needs for family planning: Implications for African fertility transitions," *Studies in Family Planning* 38(3): 192-202.