Who Adopts: An Economist's View

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Abstract

Dr. Bonham's article offers insight into the motivation of adoption. It is this author's belief that the economic literature on fertility, quantity and quality of children, and the value of the time of women give added insights. It is hypothesized that relative income is an important variable. Data on adoption were collected from an urban social agency involved in the adoption process to test the hypothesis. A model is proposed to illustrate the adoption process.

Introduction

An article by Gordon Scott Bonham(1979), "Who Adopts: The Relationship of Adoption and Social-Demographic Characteristics of Women" uses descriptive statistics to analyze the adoption process. The author uses cross-sectional and time series data as well as previous scholarly research in drawing his conclusions. Independent of these efforts, economists have been studying the economic variables that affect fertility, quantity and quality of children, and the value of time of women [Becker and Tomes(1976), DeTray(1973), Freedman(1963), Namboodiri(1974), Simon(1975,1975), and Snyder(1978)]. An excellent overview of the economics of the family and what we have learned is provided by Robert Willis(1987).

This paper integrates the results of these economic studies to Bonham's findings about the characteristics of adopting families, the resultant hopefully adding additional insight on who adopts and illumination on some of the perplexing trends in adoption patterns as presented in Bonham's article. Second, data is presented to support a hypothesis that the process of adoption is primarily influenced by economic variables. The hypothesis is tested by taking a sample of adoption petitions from mid-1977 to mid-1978 and trying to predict if the petitioner will be acceptable to the adoption agency based upon such variables. Third, this paper suggests an alternative approach through modeling to illuminate on the adoption process.

In the adoption process, as well as fertility decisions, the key economic variable will be relative or permanent income instead of measured or absolute income of the family. Permanent income of a family in a given year is determined by its expected or anticipated stream of future earnings that the family will receive over a long period of time discounted to the present. Relative income of a family in a given year is based on families'

historical income trends and where they lie on the income distribution. Economic variables that help identify ones' relative income and/or permanent income are historical income, race, education, wealth, etc. Although the economic implication of relative and permanent income are not identical, the measurement of both gives similar results and for our purposes will be considered synonymous [Dornbusch and Fischer(1978) and Evans(1969)].

Review of the Literature

Bonham(1979) notes a difference between black and white families with respect to adoption behavior as income increases. Using 1973 cross-sectional data, he shows that at the low end of the family income distribution that black women are more likely to adopt than white women. Second, as family income increases, the reverse is true. The answer to this puzzle may be found in Freedman(1963). Freedman's study of economic status and fertility shows that it is not only absolute income but relative income that determines fertility decisions. Relative income in this study is the ratio of the husband's income to what one would expect given his occupation, age, and education. The Population Profile of the United States(PPUS): 1977(1977) shows that from 1970 to 1976 in real terms that mean family income rose 3.6%. For white families, the increase in real mean family income over the same period was 3.9% while for black families the real mean increase was 3.3%, i.e., on the average white family relative income is rising while black family relative income is falling. Freedman's study and the PPUS statistics illuminate on the importance of relative income, not absolute income, in analyzing trends. Bonham's statement shows that absolute income increased for both white and black families but does not reflect changes in relative income for black families and white families. In

conclusion, a decrease in demand for children by the black families and increase in demand for children by the white families should be analyzed by studies of changes in relative income rather than absolute income.

Reconciliation of the adoption pattern exhibited by white and black families as income increases can be found in Becker and Tomes (1976). The authors endeavor to integrate social interaction with the quality and quantity of children. In the context of the study, the quality of children is affected by inherited abilities, household expectations, public investment, "luck", and other variables. An interesting result of this study is that the relationship between income and the quantity and quality of children is dependent upon intergenerational mobility in economic position and rate of growth in income over time. An increase in the rate of growth in income, i.e., an increase in relative income, will increase the family responsiveness to quantity of children and reduce the responsiveness in the quality of each child. An increase in intergenerational mobility has just the opposite effect, a decrease in family responsiveness to quantity of children and an increase in quality. When applied to the adoption patterns of the two races, increases in growth of incomes for whites and blacks favor the white race [PPUS(1977)], therefore encouraging white families to increase the demand for adopted children as income increases. The intergenerational mobility in economic position for blacks has increased [Haworth, Gwartney and Haworth(1975)], therefore decreasing their demand for quantity of children but increasing their demand for quality of children.

Education is a variable that affects income and therefore the fertility decision [Becker(1971)]. Bonham's article states that women who have graduated from college are more likely to adopt than women with less educational achievement. This information is confusing based on a priori economic logic [Becker and Tomes(1976)]. A priori, one would expect that educational attainment of women would raise their earning potential. Therefore, higher educational attainment would increase the cost of time that women would have to allocate if additional children are demanded. The resulting conclusion is that the price of children rises as women's educational attainment rises, causing a decline in the quantity demanded of children. Bonham's evidence seems to contradict this premise. A study by Dennis DeTray(1973) reconciles these seemingly contradictory positions. Dr. DeTray used the 1969 United States Census of Population in his study to show that the simple correlation between female educational attainment and male earnings ($r = .73$) and housing value ($r = .62$) are significantly greater than the simple correla-

tion between female educational attainment and female earnings ($r = .46$). The inference is that female educational attainment is a better proxy for male earnings and housing value, a measure of relative income, than female earnings. Bonham's statement would be better integrated into the literature if stated that the educational attainment of women implies higher relative family income and therefore an increased demand for children.

Donald Snyder's(1978) study generates additional insight into the demand for children and educational attainment of women. His study separated the effects of husband's permanent income, the wife's earnings, and the wife's educational attainment on the demand for children. For black and white families, the wife's educational attainment has a small positive effect for the demand for children but quickly turns negative as family size increases. Women's earnings have a negative impact. Husband's permanent income has a strong positive effect for small families but turns negative as family size increases. Once again, husband's permanent income seems to be the dominant force and is highly correlated with women's educational attainment, a proxy for many economic variables, especially permanent income of the family, and cannot readily be interpreted.

Willis(1987) reiterates that the majority of research has surprisingly shown the persistence of traditional sex roles and the failure of intra-family time allocation in household services to change as female labor force participation has grown. The fact that men are not taking on more responsibility in the home as economic conditions dictate increases in female labor force participation, suggest a decline in the demand for children and a change in adoption patterns.

Economic Variables and Adoption

As stated in the introduction and reiterated in the previous section, economic variables, especially relative income, play an important part in the demand for children. It seems possible and highly probable that these economic variables play an important part in the process of adoption. The adoption process is different when compared to married couples demanding their own children. The differences are two-fold: the demanders and suppliers are independent entities; and there is a third party involved (court, social worker, social agencies, lawyers, etc.),

When the third party is a social agency, the adopters apply and after a given period of time are either accepted or rejected as potential adopters. This process of adoption is hypothesized to be influenced by economic variables, i.e., the agency views the economic variables

and is influenced to accept or reject based upon this information. This is not to state that economic variables are the sole criterion but are one important criterion in the third party decision process.

Data and Methodology in Testing Hypothesis

To test out this hypothesis, the records of one urban area social agency that acts as a third party in adoption was studied from the beginning of 1977 to mid-1978. The active files were completely canvassed and all applications initiated and completely processed for acceptance or rejection within the study period were tabulated. Although there were many applications, only 141 were initiated and completed in the time period under study. Of the 141, 88 of the adopters were deemed acceptable by the social agency for adoption. In the early stage of the adoption process, the potential adopters were required to fill out a form that contains social, economic and demographic data¹. If the hypothesis presented here is valid, these economic variables would give a priori insight into which of the potential adopters will be accepted or rejected by the social agency as they complete the entire investigative process.

Discriminant analysis was applied to the 141 completed cases to determine the predictability of acceptance or rejection based upon the initial application containing social and economic data. The data were separated into two groups, accepted or rejected, and these two groups were used to build a discriminant function based upon the economic and social data presented in the early stages of the adoption process. The information processed caused some problems because of missing data, proportionally more in the rejection group than in the acceptance group, and were assumed to be equal to the mean of the combined groups when encountered. This approach neutralizes the missing data in the predictability of the group but may not capture the human aspect of the decision process because of the inability of the adopter to complete the form.

Data Analyses

The average of the husband's earnings and purchase price of house in the acceptance group are higher than the rejection group, the reverse is true in all other variables measured in dollars. For the variables measured in years, the acceptance group averages are all higher than the rejection group's. The results are summarized in Table 1.

In applying discriminant analysis to the variables listed, the Statistical Package of the Social Sciences (SPSS) program was used. Using the direct method and

all variables, the ability to predict which group (acceptance or rejection) that a petitioner would be placed in based upon the variables in Table 1 is presented in Table 2.

The percent of grouped cases correctly classified is 64.54% with a significance level of .0379 with ten degrees of freedom. These results give validity that economic variables within the model do discriminate between the two groups and enables the agency to predict which group the petitioners will be placed in based upon the nine economic variables and one social variable on the application form.

Using Wilk's stepwise discriminant analysis with the eleven variables studied and the standard default in the SPSS program, the percent of grouped cases correctly classified is 63.83% with a significance level of .0026 with 5 degrees of freedom. The variables chosen in order of selection in the stepwise selection process are Income of Husband, Net Wealth, Years Married, Education of Husband and Debt. Income of Husband, Net Wealth, and Education of Husband combined give a measure of relative or permanent income in which the third party translates into the acceptance and rejection process. Debt is a measure of current economic ability to support a family. The years married variable measures stability of a marriage and its expected longevity [Ferris(1970) and Glick and Norton(1971)] and is the only non-economic variable included in the stepwise discriminant function. The ability of the discriminant function to predict with the selected five variables is summarized in Table 3.

In both methodologies, the economic and social variables give a higher degree of predictability in the acceptance group than the rejection group. The contention is that the critical decision of acceptance or rejection made by the agency based upon non-economic criteria are greater for the rejection group. The reason for poorer predictability in the rejection group may be due to emphasis on the decision process. When a family is perceived well by the agency due to social and economic information provided by potential adopters, the decision process is less critical of other variables that enter in the screening process. On the other hand, when the prior social and economic information is questioned, these other variables become more critical in the decision process.

Conclusion

It has been shown that economic variables for the demand for children give insight into the adoption process when analyzing aggregate data. A key econom-

Table 1

Means of the Acceptance, Rejection, and Combined Groups
by Economic and Social Variables.^a

	Accepted Group	Rejection Group	Combined
Earnings of Husband	\$21,722	\$18,359	\$20,458
Education of Husband	15.1 years	14.2 years	14.7 years
Education of Wife	14.5 years	13.6 years	14.2 years
Age of Wife	30.8 years	29.7 years	30.5 years
Years Married ^b	7.5 years	6.5 years	7.2 years
Savings	\$13,265	\$16,836	\$14,607
Debt (Excluding House Mortgage)	\$ 3,132	\$ 3,707	\$ 3,348
Value of House	\$60,472	\$64,188	\$61,869
Purchase Price of House	\$53,665	\$46,100	\$50,822
Mortgage on House	\$29,708	\$30,267	\$29,918
Net Wealth ^c	\$40,897	\$47,049	\$43,210

^aIn all categories, the group with the highest average has the greatest variability.

^bYears married is only variable listed that has no apparent economic interpretation.

^cNet Wealth = Savings + Value of House - Mortgage - Debt

Table 2

Discriminant Function Predictions, Based Upon Social
and Economic Variables.

		<u>Predicted Group Membership</u>	
		Acceptance	Rejection
Actual Group	Acceptance	67%	33%
	Rejection	39.6%	60.4%

Table 3

Discriminant Function Predictions Using Income of Husband,
Net Wealth, Years Married, Education of Husband, and Debt.

		<u>Predicted Group Membership</u>	
		Acceptance	Rejection
Actual Group	Acceptance	68.2%	31.8%
	Rejection	43.5%	56.6%

ic variable in interpreting the statistics on adoption is relative income. The analyses of adoption files from a social agency show that the major criterion for being deemed as acceptable parents is relative income, with other economic and social variables, such as years married and debt, having an influence. The conclusion is that a motivating factor for adopting children is high relative income of the family, and high relative income from the pool of applicants is an important criterion for allowing the family to fulfill their desire as adopters.

Furthermore, it is suggested that studies of adoption statistics be analyzed in terms of relative income and attempts should be made to separate the effects that relative income has upon the demand for children and the adoption process itself. In the modeling process, this can be accomplished by functionalizing the demand for adoption, assuming the supply in the short run is given, and functionalizing the third parties decision process. Realizing that measured family income is endogenous to the entire adoption process, it should be made exogenous by substituting relative income for measured income[Freedman(1963) and Snyder(1978)]. The resultant should be an illumination of the motivation factors for adopting and/or the third party decision process.

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Footnote

1. It is important to note that the data banks reported in Bonham's article are not homogeneous. Some of the data are summarized from petitions to adopt while other data are summarized from data banks from finalized adoptions. The former is an independent act of family units who desire to increase their family size and the latter contains information contained in the former plus public or private screening processes, and the availability of adoptees. In interpreting the two data banks, the petition to adopt data banks are more analogous to the demand for children than the latter.

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