ESTIMATING THE COST OF CHILDREN AND SOME RESULTS FROM URBAN UNITED STATES*

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ABSTRACT. The testing of economic theories of fertility has been hampered by the absence of suitable data on the direct (versus opportunity) costs of children. This study hopes to help remedy this deficiency, first, by proposing a new method of estimating the magnitude of money expenditures parents make on their children. This method is then applied to the urban sample of the 1960-1961 U.S. Consumer Expenditure Survey to estimate the total money expenditure costs of children to age eighteen. The distribution of these costs by income level, by birth order, by age of the child, and by components of cost (food, housing, clothing, and so on) is considered. The impact of the number and age of children on family living standards is also explored.

Recent years have witnessed a proliferation of economic theories of fertility. The tradition established by Okun (1958) and Becker (1960) has been extended by Mincer (1963) and subsequently embellished by Blake (1968), Easterlin (1969, 1971, 1972), T. Paul Schultz (1969), Cain (1971), Preston (1971), Robinson and Horlocher (1971), Tabbarah (1971), Cain and Weininger (1973), DeTray (1973), Willis (1973) and others.¹ Both opportunity cost (income foregone) and direct cost (money expenditure) aspects of the cost of children have played an important role in the development of these theories. The empirical testing of economic theories of fertility, however, has relied almost exclusively on the opportunity cost concept because of the general inadequacy of data on the direct costs of children.² To some extent the source of this inadequacy is the fact that many estimates of the direct costs of children are now out of date. More importantly, the methods used to produce the estimates have themselves been unsatisfactory. Specifically, most methods assume not only that costs are independent of the birth order of the child in the family but also that the family's standard of living remains unchanged while the children are growing up.³

This paper elaborates a new method for estimating the direct costs of children (defined in terms of money expended), one which avoids the two assumptions commonly found in most other studies. This method is then...
applied to household income and expenditure data to derive estimates of
the cost of raising children to age eighteen in urban U.S. families.4

1. DESCRIPTION OF THE DATA

The data used in this study come from the urban sample of the 1960–61
Consumer Expenditure Survey conducted by the U.S. Bureau of Labor
Statistics. From the over 9000 urban consumer units sampled, 3888 were
selected for this study. Those selected were either of the husband-wife
with own children type where all children were under age 18 or of the
husband-wife with no others present type where the age of the head did
not exceed 45 yr. The former selection was made in order to study the
costs of children to age eighteen in families with both husband and wife
present. A cutoff point of 45 yr for the age of the head of childless
couples was intended to eliminate those couples whose grown children
had left home, since their expenditure patterns would probably be quite
different from those of couples who had never had children.

2. A NEW METHOD FOR ESTIMATING THE COST OF CHILDREN

We define the cost of the nth child in a family whose standard of living
we denote by S as the difference in after tax money incomes required by
n child and n − 1 child families to maintain the same standard of living S.
The logic of this definition is that if a one-child family whose after tax
income is currently $10,000 a year could maintain the same standard of
living without the child with an after tax income of only $7,500 a year,
then the difference of $2,500 can be thought of as income needed for
the child.

2.1. Choice of Standard of Living Index

One immediate question raised by this definition is how are we to compare
the standards of living of families differing in income, family size, and
ages of the children. Previous studies involving standard of living
comparisons have tended to rely upon one of the following alternatives:
equating the living standards of (1) families with the same income, Council
of Economic Advisors (1964) in their discussion of poverty levels, (2)
families with the same income per capita, Indian Institute of Public