Introduction

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The concerns behind the papers in this volume are as old as economics itself. Like the present authors, the classical economists wrestled with the causes and consequences of population change in the course of economic development. What is different here is the absence of simple answers. To some this will be a disappointment, but to others it will seem a mark of progress. In the study of population, as in many other areas of economic inquiry, growing awareness of the variety of human experience has had a chastening effect. What is common to the papers assembled here—as befits an NBER volume—is a respect for facts and an effort to match theory with reality.

Peter Lindert’s study “Child Costs and Economic Development” provides an appropriate point of departure. It starts with the most challenging subject in the whole field of population, which appears and reappears throughout this volume, the “demographic transition”—the shift from high to low mortality and fertility repeatedly observed in the history of developing areas. It focuses on the possible role in this transition of the variable most natural to an economist’s viewpoint, the cost of children. Lindert utilizes the sophisticated theoretical notion of cost that has emerged particularly from recent advances in what has been called “the new home economics.” Unlike most of this work, however, Lindert’s paper takes seriously the problem of measuring costs, thus fusing theory and measurement.

Lindert’s paper, in its stress on cost considerations in fertility determination, conforms to economic orthodoxy. The paper by Easterlin, Pollak, and Wachter, while not rejecting the possible relevance of costs,
advances, so far as economists are concerned, some less orthodox views—
the need in the study of fertility behavior for fuller attention to deter-
minants of preferences, and to factors relating to the fecundity or repro-
ductive capacity of women. A broader framework encompassing such
factors is presented. This framework, the authors claim, makes more
tractable such problems as the postwar American baby boom and the
variability of fertility in less developed countries. Perhaps most distur-
bing to orthodox economic precepts is the argument and evidence ad-
vanced that in many times and places, observed fertility is not a product
of deliberate choice.

In the standard formulation of the demographic transition, the decline
in mortality leads that in fertility. Causal inferences have frequently
been drawn from this pattern—for example, that if, in a regime of high
mortality, parents view high fertility as necessary to compensate for
child deaths, a reduction in child mortality will reduce the fertility re-
quired for replacement purposes. Yoram Ben-Porath's paper makes it
clear that the possible analytical links between child mortality and ferti-
licity are much more complicated than this simple replacement notion
suggests. The Israeli immigration experience, providing a dramatic
change in the environment of different population groups, offers an
unusual opportunity to explore some of the issues, drawing on both
cross-sectional and time-series data. Of special interest is the comparison
between immigrants of Afro-Asian origin and those of European origin.

Most empirical research on the economics of fertility in the last dec-
ade has focused on developed countries. The paper by T. Paul Schultz
seeks to adapt a widely used “value of time” model to the experience
of a less developed country undergoing the demographic transition.
Schultz sets himself a more ambitious goal than the usual cross-sectional
explanation—he seeks to account for the actual declines over time in
age-specific fertility rates. Supporters of this model will be pleased at
the consistency of his results with prior research on the relation of fer-
tility to husband's and wife's education. As Schultz carefully notes, how-
ever, interpreting education's effect solely in terms of the “price of time”
is questionable, and we need to get directly at the mechanisms by which
education influences fertility.

The central issue in the first four papers is the determinants of human
fertility. Although the revival of economic research on this topic is new
—dating only from the 1950s—economic research on mortality is even
newer. Samuel Preston's paper is one of a few recent attempts to apply
economic analysis to the study of mortality. The result is impressive. In
the subject of economic growth a standard conceptual approach is to
partition the growth in productivity into movements along a “production
function” and shifts in the “production function” itself, these shifts often
being identified with technological change. Preston utilizes an analogous
framework to derive a quantitative answer to an issue that has long
beguiled students of mortality—the comparative roles in life expectancy
improvement of higher per capita income (movement along a function)
and improvements in public health and medicine (shifts in the function
due to “technological change” in the biomedical area). Whether or not
Preston’s specific answer stands up to future scrutiny, his paper repre­
tsents an important breakthrough from qualitative speculation to quanti­
tative analysis of this problem.

Michael Todaro’s study shifts attention to the remaining component
of population change, migration. Here the volume enters terrain more
customary for economists. Todaro provides a major service in distilling
the extensive migration-model literature, summarizing the results of em­
pirical tests, and, on the basis of this, identifying major priorities for
research on internal migration.

With the paper by Allen Kelley, the volume turns its primary focus
from the causes of population change to its effects. Kelley’s paper deals
specifically with the effects of alternative family sizes and structures on
saving and income in urban Kenya. One might suppose that investiga­
tion of such effects of demographic variables would require no more
than harvesting the results of earlier work, for there is a long history of
economic speculation on such topics. But that is the catch—economic
speculation, yes; systematic empirical study, no. Whereas econometric
study has become the hallmark of most areas of economic research,
questions of the effects of population change have heretofore been left
largely to a priori theorizing. Kelley’s paper represents an important
departure—a rejection of preconceived answers and an attempt to match
theory to the facts. This includes an attempt to recognize the possible
interdependence between household decisions about saving and fertility.
As with Preston’s paper, Kelley’s contribution lies not only in the spe­
cific answers he obtains, but in the approach he suggests for future re­
search on the subject.

In contrast to Kelley’s paper, where the approach is new but the
problem is old, Simon Kuznets’s paper takes up a subject that economists
(the classical economists aside) have seriously neglected—the distributive
implications of demographic change. That developing nations experience
a demographic transition is well established; surprisingly little thought,
however, has been given to the effects of this transition on income
inequality within a country. Kuznets’s concern is whether the size and
incidence by class of the dramatic mortality and fertility declines during
the demographic transition tend to heighten or reduce income inequal­
ity. As befits a pioneering venture on this topic, his paper is particularly
concerned with establishing the facts, and in so doing it identifies impor­tant gaps in empirical knowledge. It also offers some suggestive specula­
tions on the subject, some of which challenge one’s initial predilections.
Ronald Lee's paper is perhaps the most ambitious one in the volume, for it seeks to bring together causes and effects of population change in an econometric model of economic-demographic interrelations. The empirical focus is premodern England, and the question is whether there may have been a self-regulating mechanism that made for a balance between population and economic resources. If, for example, an exogenous decline in mortality set in motion more rapid population growth, did the economic effects of this growth feed back on fertility or mortality in a way that brought population growth to a halt? Although his results are not necessarily definitive, Lee shows how theory and data may be used to move such questions from speculation to serious analysis. He notes that international economic interdependence and rapid technological change in the contemporary world caution against automatically extending his results to today's less developed areas.

In the original conference plan, each paper was to be written by an economist and commented on by both an economist and a demographer (the two categories, of course, are not wholly mutually exclusive). The intent was to retain in some degree the interdisciplinary flavor of a predecessor U-NBER conference on population and economic change (in developed countries) some two decades ago. As it turns out, there is less representation of demographers' views in this volume than was hoped for, but the distinctive flavor of their contribution is well illustrated in several comments. To speed publication, the editorial committee precluded authors' replies. This committee, the same as the conference planning committee, consisted of Allen Kelley, T. Paul Schultz, Robert Willis, and Richard A. Easterlin, chairman. Christine Mortensen provided extensive help in organizing the conference, which was held at the University of Pennsylvania Population Studies Center, 30 September through 2 October 1976.

As a whole the papers and accompanying comments demonstrate what economics brings to the study of population—new theoretical ideas, greater logical consistency, fuller perception of interrelations, more precise specification of problems, and a methodology that fosters confrontation of theory and the quantitative record. If one takes the earlier conference volume as a benchmark, the papers show that economic research on population has moved from fledgling status to become full grown. One may note, too, a growing sensitivity of economic research to the value and importance of demographers' contributions.