

CHAPTER 9

Distributional Analysis of Period Fertility

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9.6. Conclusion

We have four basic contentions about the analysis of fertility levels and trends in countries of low and controlled fertility:

- (1) Analysis should begin by focusing on parity and birth order, age being introduced with other control variables as required.
- (2) The appropriate fertility measures are, or are derived from, life table probabilities of the sort proposed by Henry or Whelpton.
- (3) The liabilities that have been attributed to period fertility statistics apply to age-specific birth rates, not to period measures as such.
- (4) Our stock of empirical data on these modestly more elaborate fertility measures is much less than it could be, both in absolute terms and in relation to what is available for life tables and age-specific birth rates; it should be greatly expanded.

We have not attempted to argue these points, partly for lack of space, but mostly because we expect that the most telling arguments will be substantive analyses of particular demographic situations that are more than usually illuminating and convincing. We have rather tried to indicate briefly, but reasonably comprehensively, the data and methods available for such analyses and the difficulties they encounter. The applications sketched are intended to suggest, without presuming to establish, the potential of the methods; and we have, of course, referred to such detailed studies as have been made to date.

The arguments for fertility measures that recognize parity and birth order are not new, and the infrequency with which they have been acted upon is doubtless due in part to the difficulty of computing them. We are accustomed to complex estimation procedures when dealing with limited data in developing countries, but we tend to expect the statistical systems of developed countries to provide what is needed directly. This simply is not the case, at present, with respect to parity-specific birth probabilities.

The availability of data is only part of the explanation, however, for demographers play an active and influential role in deciding what data will become available. If the study of fertility has developed along unduly narrow lines, a more important influence is probably the neo-Malthusian insistence on addressing demography as a whole to the study of population growth. It would be foolish to deny the continuing power of this tradition, which touches deep social nerves, but we may nonetheless suggest how limiting it has been. Human fertility is a fundamental aspect of human society, not merely a formal component of population growth. To study fertility is to study society, and demography has a contribution to make to the larger enterprise. To realize this contribution, however, we must pursue the formal demography of fertility in its rich complexity.

Human beings are prone to ask what the future holds, whether the prognosis is favorable, and, if not, what may be done to change it. Observers of human fertility, so often dissatisfied with what they see, are no exception, but the ambition to know the future is tempered by the imperfect record of past attempts to do so. It is sometimes suggested that the conflict be resolved by forsaking predictions of the future for attempts to influence it. That possibility is illusory, for to assert that desired future conditions will result from particular actions is precisely to predict the consequences of these actions. Policymaking presupposes the ability to predict. Conversely, if prediction is held to be impossible, policymaking as

conventionally understood is futile.

Current concerns about below-replacement fertility derive from a prediction, often implicit but best made explicit, that current low fertility will persist in the absence of government policy initiatives. For prediction over the short term, simple extrapolation of recent experience is effective on two conditions. The first is that “recent experience” be captured in numerical time series that can be sensibly extrapolated. Fertility measures derived from the parity-specific birth probabilities improve on age-specific rates in this respect, just as age-specific rates improve on crude rates. The second condition is that the numerical series show a reasonably well-defined trend. Abrupt and unexplained changes in the recent past may defy extrapolation. While it is natural to feel this as a disappointment, it is in fact a salutary indication of the uncertainty of future fertility. Elaborate mathematical extrapolations are to be avoided, as a rule, for they are unlikely to give better results and can be perniciously distracting. Sophistication is better spent on the development of time series of fertility measures that allow one to discern whether extrapolation of any kind makes sense.

If we wish to look further into the future, anything over a decade or so, we must be prepared to address questions of an entirely different nature. To what extent does modern social structure delimit the range of fertility behavior? Is sustained, below-replacement fertility a necessary feature of developed societies? Do socio-demographic relationships make modern society, viewed in historical perspective, an intrinsically transient affair? Thus far, at least, neither our literature of theoretical ruminations about the demographic transition nor the extensive research on the ineptly named “determinants” of fertility provides much aid here. There is little doubt that modern society is incompatible with genuinely high fertility, but this is distinctly unhelpful. What we typically need to know is the likelihood of fertility movements of several tenths of a child per woman above or below replacement levels.

The statistical record of past behavior has an entirely different and more indirect significance here, for extrapolation as prediction is meaningless in the long term. The role of fertility statistics is rather to assist us in judging whether there is any theoretical basis on which long-term predictions may be made. Once again, statistics that draw us closer to the underlying behavior have a compelling advantage.

Assessments of the effectiveness of particular policies are, finally, an important component of the policy discourse. Studying the effectiveness of policies tried elsewhere is useful when considering alternatives, and one will want to know whether policies, once adopted, are having the desired effects. We have seen an example of the value of parity-specific fertility measures by evaluating the impact of pronatalist policies in East Germany. The individuals and families that pronatalist policies aim to influence are not a homogeneous mass, and marital status and number of existing children are among the most important characteristics that differentiate them. Policy analysis in this area would do well to pay more attention to demographic detail than it has in the past.

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