An Intervention Analysis of the Effects of Legalized Abortion Upon U.S. Fertility

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Abstract
Models of time series data on births in the United States are used to assess the impact of the 1973 decision of the U.S. Supreme Court invalidating statutes that seriously restrict access to abortion. The decision of the Court is found to have no discernible impact on births for the nation as a whole. Models of state-level data suggest that the legalization of abortion by states prior to the decision was satisfying the demand for abortion.

Introduction
Demographers have shown considerable interest in the impact of changes in U.S. abortion laws upon fertility. Some researchers have evaluated these effects by examining the experience of a single state (Tietze, 1973; Sklar and Berkov, 1973; Rosenwaike and Melton, 1974; Quick, 1978; Tu and Herzfeld, 1982), while other studies have analyzed the impacts in a national context (Sklar and Berkov, 1974; Tietze, 1975; Bauman et al., 1977; Hansen, 1980).

Most of these studies have based their analysis upon the presentation of data in graphical and/or tabular form to demonstrate changes in fertility trends associated with legalization of abortion. Some analysts have attempted to quantify the impacts by estimating the level of natality in the absence of changes and comparing the estimate with the actual level (Sklar and Berkov, 1974, or Tietze, 1975, for example).

This study uses an alternative statistical approach known as intervention analysis to assess the impact of abortion legalization upon fertility trends in the United States. It looks first at the role played by the 1973 U.S. Supreme Court decision in the decline of U.S. fertility during the 1970s. The study also examines the impact of the legalization of abortion in four individual
states and compares the findings of this investigation with the results of previous analyses.

Previous Research

Individual states began to revise statutes dealing with abortion in the late 1960s, and by the end of 1972—just prior to the Roe v. Wade decision in January 1973—seventeen states had liberalized their abortion laws. A number of studies have examined the impact of changes in state laws upon fertility trends within these states.

CALIFORNIA

Although California enacted its liberalized abortion law in November 1967, Sklar and Berkov (1973) actually evaluated the impact of legalized abortion upon California fertility on the basis of 1970–1972 data. Projecting the 1966–1970 trends in age-specific illegitimate birth rates to the population of unmarried women in 1970 and 1971 and comparing the results with actual illegitimate births for the two years, the authors derived an approximate estimate of the decline in illegitimate fertility—8,800 in 1971 and 11,700 in 1972. Sklar and Berkov were not able to estimate the impact upon legitimate fertility but suggested that the larger decline in fertility in California vis-à-vis the nation as a whole in 1971 was evidence that legal abortion also had an impact on marital fertility. They asserted that legalized abortion led to a sharp decline in both illegitimate and legitimate fertility in 1971 but had little incremental effects in 1972.

MARYLAND

With a descriptive analysis of time series data on fertility and abortions, Rosenwaike and Melton (1974) found that, after Maryland legalized abortion in 1968, the state experienced higher abortion rates and greater decline in fertility than the nation as a whole. While providing no formal tests or quantifying such effects, they asserted that part of the reduction in fertility could be attributed to the legalization of abortion.

OREGON

Comparing expected numbers of births with actual numbers of abortions and live births, Quick (1978) estimated that one-fourth of the decline in Oregon fertility levels during the 1970–1975 period resulted from liberalization of abortion laws in 1969.