How Fertility Changes Across Immigrant Generations

Current population projections indicate that California could add more than 10 million new residents over the next 20 years. The sheer size of this increase would have important implications for education, welfare, transportation, and natural resource policies. Yet the population projections themselves are the subject of some uncertainty. Because most of the new growth is expected to result from natural increase, or the excess of births over deaths, small changes in birth rates could change these projections and the shape of policy planning. The state therefore has a compelling policy interest in projecting these rates as accurately as possible.

In *Understanding the Future of Californians' Fertility: The Role of Immigrants*, Laura Hill and Hans Johnson seek to inform the state's population projections by offering a fine-grained analysis of California's fertility trends. Such an analysis is needed for three reasons. First, current projections treat each of California's four major racial and ethnic groups as homogeneous. However, Hispanics and Asians have large immigrant populations whose fertility rates differ from those of U.S.-born Hispanics and Asians—including their own descendants. If fertility rates decline as immigrants and their descendants adjust to life in California, current population projections for these groups may be too high. Second, the precise relationships between personal characteristics (such as income and educational attainment) and fertility are unclear. Analyzing them may permit a more thorough understanding of fertility rates and thereby inform the state's population projections. Third, the relationship between fertility rates and neighborhood characteristics is likewise unclear. For example, if the high concentration of immigrants in particular neighborhoods affects the birth rates in those areas, this information could help demographers refine the state's population projections.

The report focuses on two questions: How much does fertility vary by immigrant generation in California, and what are the relationships between personal characteristics, neighborhood characteristics, and fertility rates among the state's immigrant population and their descendants? The authors use several data sources, measures of fertility, and research methods to answer these questions. The data come from the California Vital Statistics Birth Records for 1982 through 1997, four years of the June Fertility Supplements to the Current Population Survey, and the 1990 Decennial Census. The authors also use several measures of fertility, including children ever born (CEB), current fertility (CF), and total fertility rate (TFR). The methods include descriptive statistics as well as statistical modeling.

Personal Characteristics Dominate—But Immigrant Generation Is a Useful Predictor

The authors found that fertility does indeed vary by immigrant generation, with significant declines between the first and subsequent generations for groups with large immigrant populations (Figure 1). Fertility rates are much higher for immigrant Hispanics than for their U.S.-born counterparts, whose rates exceed the overall state average. For Asians, these rates are relatively low for immigrants but extremely low for U.S.-born mothers. Among whites, fertility rates for immigrants are slightly higher than those for the U.S.-born, and among African-Americans, there is virtually no difference between the two groups. These results indicate that immigrant generation is strongly associated with fertility outcomes for the groups in California with the largest immigrant populations.

Yet the authors also found that personal characteristics—such as educational attainment, marital status, and income levels—are much more important than immigrant generation in understanding fertility outcomes. In fact, generations are not independently important once these personal characteristics are controlled for. The authors maintain that declining fertility levels among the descendants of Mexican and Central American immigrants are primarily the result of higher educational attainment levels, lower rates of marriage, and lower poverty. Of these personal characteristics, educational attainment is particularly important. A four-year

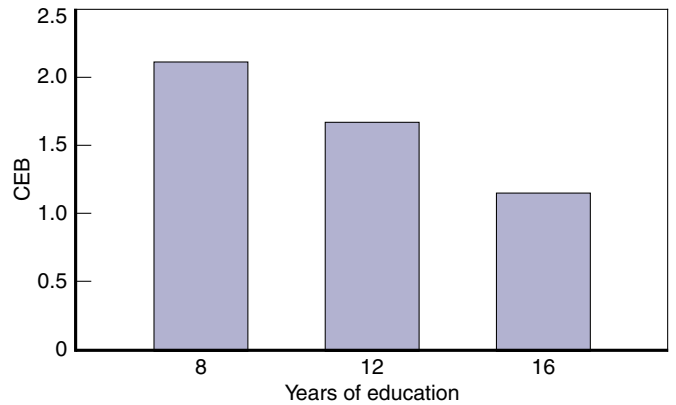**Figure 1—Total Fertility Rates in California by Nativity, 1982–1998**
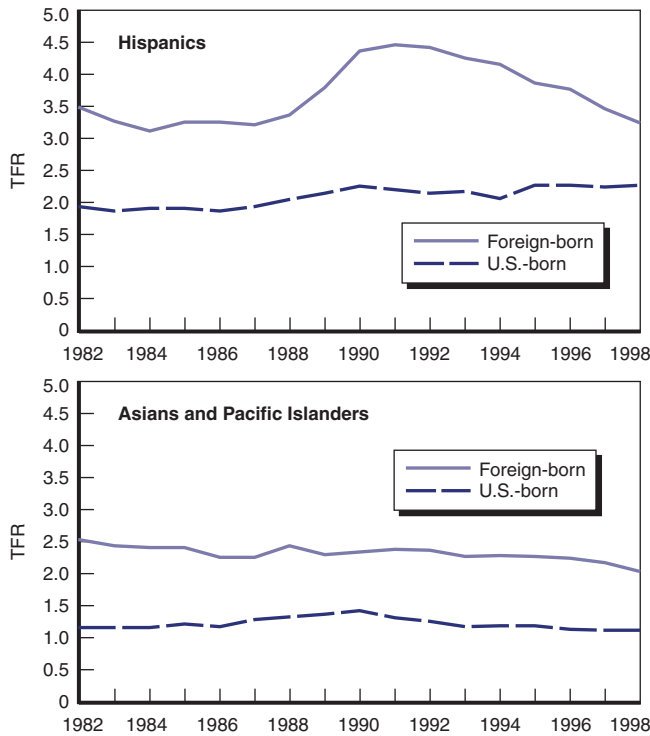
In California, fertility rates are significantly higher for Hispanic and Asian immigrants than for their U.S.-born counterparts.

Figure 2—CEB for Average Mexican/Central American Women Age 15 to 44 by Educational Attainment

SOURCE: Authors' simulations using coefficient estimates and sample means.

Declines in fertility between the first and subsequent generations of immigrant families are primarily the result of changing personal characteristics, especially educational attainment.

increase in educational attainment decreases CEB by half a child (Figure 2). The authors conclude that immigrant generation serves as a proxy for changes in other personal characteristics that decrease fertility.

Neighborhood characteristics have some bearing on fertility, but the correlations are relatively weak. Among Mexican and Central American immigrants and their descendants, the most consistent predictor of CEB at the neighborhood level is the percentage of Hispanic adults. However, no neighborhood characteristics bear any statistical relationship to CF, the measure that emphasizes recent births. This pattern of evidence suggests that the observed relationships between neighborhood characteristics and fertility are based on selection into the neighborhood rather than on neighborhood influences as such.

Should Declining Fertility Rates Be Considered in Population Projections?

The results of the study indicate that current population projections for California may be too high because they do not consider declines in fertility as immigrants and their descendants adapt to life in this country. In considering ways to refine these projections, the authors suggest adjusting fertility rates to incorporate declines among second and subsequent generations of Hispanics and Asians. Although immigrant generation itself does not explain lower fertility levels, its predictive value is still useful for projecting fertility changes. Neighborhood characteristics lack this predictive value, and the authors conclude that they should not be used to refine population projections.

These refinements may be consequential. Under current projections, the number of children under age 10 is expected to grow by 305,000 over the next decade, but moderately lower fertility rates for Hispanics would result in a *decrease* of 305,000 children from 2000 levels—a net change of 655,000 from current projections. A more dramatic but still reasonable decline in fertility among Hispanics would lead to a decrease of 585,000 children from the 2000 population. Revised population projections could alter the course of state planning in several key policy areas.