

Fertility Assimilation: The Role of Culture

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Abstract

This paper examines the role of child-sex composition preferences on fertility assimilation outcomes for Chinese, Indian, and South Korean women in the United States. Unlike other immigrant groups, socioeconomic factors poorly explain fertility assimilation for these women. First-generation women from these countries maintain the preference for sons after migration. They are significantly more likely to stop having children if a son is achieved at earlier parities. Second-generation women do not exhibit a bias toward sons. Once second-generation immigrants adopt the native preference for mixed-sex children, their childbearing behavior becomes similar to natives and fertility assimilation occurs. This is the first paper to use culturally driven child-sex composition preferences to explain fertility assimilation across generations.

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The elimination of the United States' National Origin Quota System in the 1965 Hart-Cellar Act spurred large-scale immigration from non-European countries. The rapid influx of immigrants greatly impacted local labor markets and institutions, inspiring a large body of research on immigrant assimilation.¹ In particular, many studies examined fertility assimilation, defined as the convergence between immigrant and native fertility levels across generations, as an indicator of immigrant well-being. The fertility assimilation model from the sociology literature predicts that as women assimilate in other aspects, including education, intermarriage, or ethnic enclave residence outcomes, then their fertility levels will decrease or increase to meet native fertility levels (Goldstein and Goldstein, 1983; Kahn, 1988; Ford, 1990; Lucas, 1994). On the other hand, economic fertility theory models a couple's demand for children as a function of female (potential) wages, male income, and the price of fertility regulation. It predicts that the demand for children decreases as the opportunity cost of the mother's time increases.² In this paper, I show that socioeconomic factors poorly explain fertility assimilation for certain immigrant groups. I suggest an alternative explanation for fertility assimilation: convergence in culturally driven child-sex composition preferences. Intuitively, as immigrants adopt the native preference for mixed-sex children, their childbearing behavior will become similar to natives and fertility assimilation will occur.³

To show that fertility assimilation is strongly linked to child-sex composition preferences, I study women from China, India, or South Korea because they make up the largest group of immigrants from countries in which son preference is a well-documented phenomenon.⁴ As Clark (2000) describes, "the term *son preference* refers to the attitude that sons are more important and more valuable than daughters" (p. 95). I first evaluate if the preference for sons is sustained after migration. Similarly, I determine child-sex composition preferences for second-generation and native women. Second, I explore if preferences evolve across immigrant and

¹ For example, assimilation studies have analyzed labor market outcomes like earnings and unemployment (Schmidt, 1995; Bauer and Zimmermann, 1997; Schoeni, 1998; Chiswick et al., 1997), and transfer program participation. (Baker and Benjamin, 1995; Hu, 1998; Borjas and Hilton, 1996; Riphahn, 1998).

² Becker (1981) models a couple's demand for children as a function of prices and income. The effect of husband's income are ambiguous. The supply side determinants of fertility include the price of fertility regulation (Easterlin, 1987; Rosenzweig and Schultz, 1985).

³ Economists, like Fernandez and Fogli, have recently brought attention to the significant role of culture in immigrant socioeconomic outcomes, including fertility (Fernandez and Fogli, 2006, 2009, 2010; Moehling and O'Grada, 2006).

⁴ There is a large body of work documenting the presence of son preference in China (Arnold and Zhaoxiang, 1987; Hull, 1990; Tuljapurkar, Li, and Feldman, 1995), India (Das, 1987; Clark, 2000), and Korea (Arnold, 1985; Park and Cho, 1995).

native generations. Third, I discuss the impacts of changing child-sex composition preferences on the immigrant and native fertility gap in the U.S.

From a behavioral standpoint, child-sex composition preferences may manifest in two ways. First, mothers may continue to have children until the desired outcome is achieved. Second, pregnant women may engage in sex-selective procedures, resulting in skewed male to female sex ratios at birth.⁵ To determine preferences, I evaluate the probability of having an additional child, conditional on the sex of the previous birth(s), and explore male to female sex ratios at birth. I find that first-generation women from China, India, or South Korea are significantly more likely to have a third child if the first two are females. Additionally, the male to female sex ratio at birth for the third child among first-generation households is above normal levels if the previous two children are daughters.⁶ Interestingly, second-generation Chinese, Indian, or South Korean women do not exhibit a bias toward sons, and instead their fertility behavior, similar to that of native women, is indicative of a preference for mixed sibling-sex composition.

It is standard to regress number of children on an indicator for immigrant or native across generations to determine if fertility assimilation occurred. However, in the presence of child-sex composition preferences, the assimilation results will differ depending on whether or not the households achieved their ideal outcomes. If a son is achieved at earlier parities, then immigrant women will have less children than natives, yielding large immigrant and native fertility differentials. However, if immigrant women do not achieve a son quickly, then they will continue to have more children, which would result in higher fertility levels, closing the gap between them and natives. The standard method to evaluate fertility assimilation, would not reflect differences in household composition subsamples, which, all else equal, are reflections of child-sex composition preferences. Thus, to evaluate the third objective of the paper, I present the assimilation results disaggregated by household composition. I condition on whether or not households achieved the ideal child-sex composition in the first two births. For example, I compare first-generation immigrant households that achieved at least one son to native households with mixed-sex children.

⁵ Currently, parents in the U.S. can select the sex of their children through abortion, in vitro fertilization (IVF), or sperm sorting, which is often used in conjunction with IVF.

⁶ Chahnazarian (1988) finds a biologically normal range of 103-108 boys per 100 girls.

Without disaggregating households by composition, there is a small, but significant decline in the fertility gap across generations. However, households that achieve their preferred child-sex composition outcomes exhibit a substantial decline in the fertility differential across generations. Conversely, households that did not achieve their ideal child-sex composition outcome show insignificant assimilation results. The initial significant finding indicating that fertility assimilation occurred is driven by households that achieve their ideal outcomes. Among those households, however, the assimilation result is driven by the fact that first-generation women are relatively more likely to stop having children when they have a son. No such behavior is present for second-generation women because they have adopted the native preference for mixed-sex children.

The final portion of the paper aims to explain why the demand for sons declines across immigrant generations. I discuss the possible socioeconomic mechanisms using Bisin and Verdier's (2000) model of cultural trait transmission, supplementing their theoretical model with empirical evidence from the economics literature.