# DOES IMMIGRATION BOOST NATIVE FERTILITY?

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Scholars who examine the relation between immigration and childbearing disproportionately focus on the behaviors of *migrants,* asking whether the fertility of foreign-born women declines to more closely resemble those of their native-born counterparts (Bean et al. 2000; Carter 2000; Choi 2014; Hill and Johnson 2004; Kahn 1994). This convergence is considered a key indicator of assimilation, where immigrants are believed to eventually adopt the values and family size preferences that are pervasive in the U.S. (Landale and Oropesa 2007; Parrado and Morgan 2008). Contemporary demographic work does assess the fertility of natives, but discussions tend to surround nonmarital childbearing (Musick 2007; Upchurch et al. 2002), the motherhood penalty (Budig and Hodges 2010; Kahn et al. 2014), and desired/unwanted fertility (Rackin and Morgan 2018). And while cultural beliefs about childbearing undoubtedly vary among native-born women, there is very little attention to the possibility that race (e.g. whiteness) may uniquely influence fertility decisions.

A nascent body of gender scholarship explores the correlates and predictors of white fertility, often emphasizing cultural distinctions in attitudes and belief systems. Contemporary feminist work argues that nationalist politics in post-colonial contexts such as the United States (Berlant 1997), Australia (Baird 2007), and South Africa (Klausen 2010), are interwoven with anxiety about declining white fertility, increased immigration, and a perception of an increasingly fragile white, heteropatriarchal gender system. It is thus reasonable to assert that debates surrounding reproductive policies—including fertility, abortion, and anti-miscegenation laws—are tied to the maintenance of the white nation-state. This ideological formation is perhaps most explicit among radical white supremacist groups. Belew (2018), for instance, demonstrates the central importance of fertility to the organizational efforts of white nationalists in the United States, revealing how women within the movement are cast in the role of mothers of a future white nation. That white ethnic dominance is discursively linked to fertility decisions suggests that the concept of the nation is, for some whites at least, tied to population size/representation. Furthermore, the presence of white nationalist groups in a given area may not only signal

heightened racial anxiety, but the potential diffusion of an on-going narrative that constructs fertility as a defense against perceived threats.

This manuscript contributes to larger discussions surrounding immigration, fertility decisions, and the local context by asking the following:

1. Is the fertility of native-born women (whites and blacks) sensitive to changes in the local immigration population? Could there also be racial variation in how native women respond to increases in the immigrant population?

2. Is the association of interest moderated by the presence of local hate groups, political beliefs, or overall anti-immigrant sentiment?

To effectively answer these questions, we pool data from a variety of sources, including: the American Community Survey, the Southern Poverty Law Center, CQ Voting and Elections Collection, and Google Trends.

**Data and Measures**

We use the public-use microdata of the 2007, 2011, and 2015 American Community Survey (ACS), which is accessible through the IPUMS database (Ruggles et al. 2018). Each year of data collection represents a 1 in 100 random sample of the national U.S. population. These data are particularly well-suited for our purposes as we require detailed reports of births to native-born black and white women, key demographic information, as well as socioeconomic indicators. The ACS microdata also provides the geographic location of households in Public Use Microdata Areas (PUMAs) that contain more than 100,000 residents; these units correspond to a single county, county groups, or places. We are thus able to match households and respondents to their local context.

Given our interest in racial variation in fertility, we retain black and white women who are between the ages of 15-50 in our sample. Our focal outcome is expressed as a dichotomous variable: whether the respondent has given birth in the past year; the fertility of black and white women are separately examined. Here it must be stressed that this measure represents women's *recent* behavior/decision-making, as opposed to their entire fertility histories. We adjust for age, marital status, highest level of education, and number of children who co-reside with respondents at the time of survey.

The goal of this study is to assess whether the level—and corresponding change—in the immigrant population corresponds to shifting fertility rates among natives. As such, the main predictor is the percent of foreign-born persons at the PUMA-level. To account for the approximate 9 month gestational period, and to allow women sufficient time to respond to their environment, we draw on 2005, 2009, and 2013 ACS estimates of the foreign-boron population; these roughly correspond to a 2-year period prior to the most recent birth reported.

We are also interested in the mechanisms through which fertility decisions operate—namely through the presence and change in anti-immigrant sentiment. There are a variety of ways to define a hostile environment, but we choose to rely on 3 unique measures. First, we account for number of hate groups (as designated by the Southern Poverty Law Center) within PUMAs by specifying the total number of Ku Klux Klan, neo-Nazi, neo-Confederate, and skinhead groups in 2005, 2009, and 2013; Black nationalist organizations are assessed when we estimate the relation between black fertility and the presence of local immigrant populations.

Next, we use annualized search data (2005, 2009, and 2013) generated by Google Trends to create a composite measure representing anti-immigrant attitudes and sentiment. Google Trends provides users with information on the relative frequency of searches that occur within a specified geographical unit (see DiGrazia 2015 for additional details). We rely on data aggregated from Designed Market Areas—a unit of geography created by Nielsen Marketing company. Fortunately, we were able to obtain conversion files that allow us to aggregate search terms to the PUMA-level. Terms will include words/phrases, such as: "illegal immigrant", "illegal alien", "wetback", and "anchor baby". A benefit of Trend data is that it eliminates repeated searches from the same IP address, which helps ensure results are not solely driven by a small number of overly-active individuals (e.g. influencers). Finally, we include the percentage of republican votes that were cast during the 2004, 2008, and 2012 presidential election to approximate local political sentiment and ideology.

**Analytic Approach and Implications**

Our data allow us to assess variation across PUMAs and within PUMAs over time. We suspect that "initial" levels in the immigrant population—as well as any changes—will go on to influence the probability that a woman in a given PUMA has a recent birth. Differences in the number of immigrants across PUMAs could also influence fertility at any given period. And

while we observe characteristics of individual women over time, we are unable to obtain repeated observations from the same respondents. We thus plan to estimate a series of correlated random effects models, also known as the "between-within" method (Neuhaus and Kalbfleisch 1998; Wooldridge 2010). There are two advantages to this analytical approach: first, we obtain estimates for time-invariant measures at the PUMA-level, and we can easily test for endogeneity without separately estimating multiple specifications (e.g. Allison 2009). We procced with the following:

$$log\left(\frac{p_{ip}}{1 - p_{ip}}\right) = \theta_t + \beta_w\left(X_{pt} - \bar{X}_p\right) + \beta_B\bar{X}_p + z_p\zeta + k_{ip}\phi + u_p + e_{ip}$$

Where $\theta_t$ represents a series of year dummy variables that capture period shifts in birth probabilities, $\beta_w$ represents the effect of time-varying measures—including the foreign-born population, anti-immigrant sentiment, and covariates—within PUMAs over time, and $\beta_B$ reflects differences in average levels of the immigrant population and anti-immigrant sentiment, for example, across PUMAs. To test whether anti-sentiment moderates the key relation of interest, we will include interaction terms that corresponding to the within and between coefficients shown above $(\beta_w, \beta_B)$. Time-invariant PUMA characteristics are denoted as $z$, $k$ represents individual-level attributes that vary across PUMAS, $u_p$ represents the unobserved effect of being in PUMA p, and $e_{ip}$ are idiosyncratic effects similar over time. Because the "between-within" method may provide inconsistent results when used for nonlinear models (Brumback et al. 2010), we will re-estimate all specifications using linear probability models and compare the direction, magnitude, and significance of estimates.

If the fertility of native-born women is sensitive to changes in local population composition, it would suggest that racial/ethnic boundaries are becoming decidedly less flexible; the growing presence of immigrants may instead be reinforcing ethnic distinctions. Moreover, if anti-immigrant sentiment boosts the fertility of natives, it would indicate that local political activity and cultural dynamics play a significant role in individual fertility decisions. However, a relation between a growing immigrant presence and native fertility may be not apparent. In this case, we could assert that women's childbearing decisions operate independently of perceived racial/ethnic threats. As such, results from this study will be of interest to scholars, policymakers, and the general public.

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