Changes in the Socioeconomic Gradient in Nonmarital Childbearing Across Two U.S. Cohorts

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The dramatic growth in the prevalence of nonmarital fertility has generated considerable interest from scholars and policy makers. In turn, an extensive literature developed to examine the antecedents of women's nonmarital fertility, particularly with respect to socioeconomic characteristics, and found that women with low economic resources are more likely to have a nonmarital and/or early birth (e.g., Aassve 2003).

The bulk of this research was conducted on women who had births during the 1980s and concentrated mostly on teenage childbearing. Since then, the nature of nonmarital childbearing shifted. In particular, the prevalence of nonmarital childbearing has more than doubled since 1980 and teen births are a declining share of all nonmarital births, although the bulk of fertility before age 25 is nonmarital (Martin et al. 2013). These trends show that nonmarital fertility is an increasingly important part of childbearing behavior for women in their early 20s and that focusing on how economic incentives shapes teen childbearing misses a large part of the overall relationship between women's economic resources and nonmarital childbearing. By directly comparing the processes leading to a nonmarital first birth across cohorts, this study will shed light on the extent to which economic resources continue to influence fertility decisions among young women. Given that countless studies continue to reveal negative consequences of nonmarital childbearing for women and their children, it is important to have an updated examination of the socioeconomic determinants of nonmarital childbearing.

Background

Much of the thinking about how women's socioeconomic characteristics influence nonmarital fertility stems from Becker's seminal work on the rational-choice model of marital fertility and family formation. Under this model, men and women will marry and have children when the gains to marriage surpass the gains to remaining single (Becker 1960, Becker 1981). With respect to nonmarital fertility, when the gains to marriage are few, such as when fathers can provide relatively few economic benefits, or when opportunity costs are low, such as when longterm economic prospects are limited; in such circumstances nonmarital childbearing becomes a viable option. Indeed, women may choose nonmarital childbearing rather than forego marriage *and* children (Edin and Kefalas 2005, Willis 1999). Women with few socioeconomic resources tend to gain less from marriage (Oppenheimer 1997, Stevenson and Wolfers 2007), have lower expectations of marriage (Lichter, Batson and Brown 2004), and have lower earnings, thus they have fewer incentives to avoid a nonmarital birth. Accordingly, there should be a strong, negative relationship between women's socioeconomic resources and nonmarital childbearing.

Indeed, an extensive literature has documented the negative relationship between women's economic resources and childbearing outside of marriage (e.g., Aassve 2003, Duncan and Hoffman 1990, Lundberg and Plotnick 1995, Rosenzweig 1999, Wolfe, Wilson and Haveman 2001). However, changes in the normative climate around nonmarital childbearing, economic inequality, and women's economic opportunity may have altered the relationship between women's economic resources and her risk of a nonmarital birth in recent decades. As nonmarital childbearing becomes increasingly common, the stigma and social implications associated with it likely decrease. Further, much of the recent increase in the prevalence of nonmarital childbearing is due to fewer women marrying following a premarital conception (England, Wu and Shafer 2013). Accordingly, nonmarital births are today less selective, and the relationship between women's economic resources and nonmarital fertility may have weakened. Prior work emphasized that women with greater socioeconomic resources avoided nonmarital births due to the incompatibility of the roles of worker, student, and mother (Coverdill and Kraft 1996). As the age-pattern of nonmarital childbearing shifts upwards into the early 20s, some of this incompatibility may be reduced because many women have completed their intended level of schooling.

On the other hand, the spread of women's economic opportunity has occurred unevenly across social strata. Women who obtain high levels of education have access to high-quality jobs and continue to experience wage growth, whereas less-educated women face stagnating and even falling real wages and limited job opportunities. At the same time, ideals about marriage changed such that marriage became viewed as a "capstone" for young adulthood – a way to demonstrate financial success and a high-quality relationship (Cherlin 2009). College-educated women defer family formation to pursue new career opportunities, while less-educated women have little hope for attaining the economic conditions perceived as 'necessary' for marriage and also view children as an important source of adult identity and part of the young adult life course (Edin and Kefalas 2005). Accordingly, as women's economic fortunes diverge, the overall socioeconomic gradient of nonmarital childbearing may, in fact, become steeper.

Little empirical research has examined change in the determinants of nonmarital childbearing. South (1999) examined historical change the sociodemographic determinants of premarital childbearing using the PSID and found that although women's family income to needs ratio became increasingly tied to nonmarital childbearing, few other predictors changed. This study only included births through 1993. In the 20 years since these data were released, the social and economic conditions under which women marry and have children continued to change. Indeed, the prevalence of nonmarital births increased from 28% to 41% and the proportion of all nonmarital births to teenagers declined from 30% to 18% (Martin et al. 2013, Ventura and Bachrach 2000). Similarly, the economic fortunes of young women have increasingly diverged by socioeconomic status. As such, these estimates may be out of date. Furthermore, South (1999) incorporated few measures of women's own economic resources, thus it remains unclear how contemporary young women's own socioeconomic resources shape nonmarital childbearing.

In this study, I examine change in the socioeconomic determinants of women's nonmarital fertility by comparing two cohorts of U.S. women born in the 1960s and the 1980s. Using women's employment information, hourly wages, and education, I consider both women's pre-conception level of resources and her age-26 expected levels of resources. These two ways of measuring resources will allow me to consider how current role incompatibilities as well as longer-term opportunity costs shape the risk of a nonmarital birth. In doing so, I provide new information on how women's economic resources shape fertility decisions during young adulthood.

Data and Methods

In this study I use data from the National Longitudinal Survey of Youth 1979 (NLSY79) and 1997 (NLSY97) cohorts to examine how the relationship between women's socioeconomic resources and non-marital childbearing has changed across cohorts. The NLSY79 provides information on 6,283 women born 1957-1964 that have been interviewed annually since 1979

(ages 14-21) until 1994 and biennially thereafter. Members of this cohort represent the late babyboom cohort, and were primarily having first births during the 1980s and early 1990s. The NLSY97 began interviewing 4,385 women born 1980-1984 in 1997 (ages 12-17); interviews occur annually with data available through 2011 (ages 26-32). This cohort represents the early millennials, and respondents are currently in the prime childbearing years. These data are wellsuited for this study because they collect detailed information about young adults' employment, education, income and family behaviors as they transition to adulthood, hence the data capture the marital context of births as well as the socioeconomic determinants of childbearing in a prospective manner. Both surveys also used similar sampling procedures and questionnaire designs in order to ensure comparability across cohorts and facilitate cross-cohort research.

In this paper, I focus on a sub-set of respondents from the NLSY79, those born 1960-1964. I do this to limit left censoring and to make the NLSY79 and NLSY97 even more comparable by having similar age ranges and same number of birth years represented. The analysis examines non-marital fertility up to age 25. Limiting the age range ensures that I give both cohorts the same amount of time to be exposed to the risk of a non-marital birth. The majority of women who have a first birth outside of marriage do so by age 25, for example 79% of women who had a nonmarital birth in the 1960 cohort did so by age 25, thus even with this restriction I will be capturing most of first non-marital births in both cohorts.

I use discrete-time event history models to examine the socioeconomic determinants of having a first birth outside of marriage and how these relationships have changed across cohorts. Women are at risk of a non-marital birth beginning at age 15. Respondents are censored upon having a non-marital birth, getting married, dropping out of the survey, or reaching the end of the observation period without having had a birth. I rely on time-varying school enrollment, employment, hourly wages, and educational attainment to measure current socioeconomic characteristics; all variables are lagged in order to be measured around the time of conception/prior to the birth. I will follow widely-used procedures to calculate women's age 26 expected socioeconomic resources (e.g., Mincer 1974, Wolfe, Wilson and Haveman 2001). I also include a number of demographic and family background characteristics that are identical across the two surveys to allow for a direct comparison of the socioeconomic determinants. In order to assess change in the relationship between women's socioeconomic characteristics and nonmarital fertility I will run models separately by cohort and conduct a series of Chow tests.

Preliminary Results

Examination of the age-specific hazard of a nonmarital birth across cohorts confirms an upward shift in the age distribution and in the overall risk of nonmarital childbearing. The 1980 cohort has a lower risk of nonmarital births than the 1960 cohort until age 18, after which, the 1980 cohort has a higher risk of a nonmarital birth at all ages. The risk of a non-marital birth peaks at age 19 for those in the 1960 cohort, whereas the risk is highest for those age 20 in the 1980 cohort. Overall, the prevalence of non-marital childbearing by age 25 increased dramatically between the 1960 and 1980 cohorts: just under 17% of women in the 1960 cohort had a non-marital birth by age 25 compared to 31% for those in the 1980 cohort. Bivariate regressions show that hourly wage, employment, education, and school enrollment are all negatively related to non-marital childbearing in both cohorts. However, the linkages with wages, employment and education weaken significantly across cohorts. School enrollment becomes a more important predictor. These results suggest that the socioeconomic gradient in

nonmarital childbearing may have lessened, yet the role incompatibility between school and motherhood strengthened.

As I move forward in this research, I will include an analysis with expected age-26 socioeconomic status. By directly examining age-26 economic resources I can begin to differentiate between the importance of current roles and resources as opposed to how socioeconomic disadvantage may shape perceptions of potential resources and future choices. I will also explore variation by education and by race, net of potential confounders. These analyses will provide more information as whether the changes in the socioeconomic gradient is the same across multiple groups or only for particular sub-populations.

These preliminary findings suggest we made need to reconsider how women's own economic resources influence nonmarital fertility. Prior work has emphasized a rational-choice framework and women's opportunity costs. A weakening of the relationship between economic resources and nonmarital fertility suggests that this framework may no longer apply, at least for a subset of the population. To the extent that nonmarital childbearing continues to be linked with negative consequences for women, men, and children, a more complete understanding of how resources and economic incentives predict nonmarital childbearing is necessary to help either lessen the occurrence of nonmarital fertility or its consequences.

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