

Examining changing childbearing expectations in the U.S. during the post-recessionary period

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Abstract

Intentions for children in the U.S. have fallen since the Great Recession, but it is unclear how and why individual childbearing expectations have changed. To address this gap, we use fertility expectation data from the National Longitudinal Survey of Youth 1997 cohort that were measured in 2009 and 2015, when the mean age of participants was 27 and 33, respectively. Preliminary analyses show that between 2009 and 2015, around half of men and women reported the same number of total expected children; however, levels of total expected parity decreased among 30% of respondents and increased among 20%. Future analyses will use multinomial logistic regression models to identify both time-invariant and time-varying factors associated with these changes, including measures of partnership dynamics, labor market participation, and household resources. Analyses will also make a unique contribution to the literature by drawing on contextual measures of local-area unemployment, labor market polarization, and housing.

Introduction

The most recent data from the Centers for Disease Control continue to show a steady decline in fertility that started with the Great Recession (Martin et al. 2019). The absence of a fertility rebound in the post-recessionary period has triggered concern, since the negative economic effects associated with the recession, including high unemployment, have improved over the same period.

Although poor economic conditions likely drove the initial decline in fertility (Schneider 2011), it has been hypothesized that continued declines in fertility are mostly due to shifts in the timing of childbearing, which artificially depress period measures of fertility (e.g. tempo effects; Bongaarts and Feeney 1998; Gemmill and Hartnett 2019). However, a recent analysis shows that intentions for children have declined between 2006 and 2017 by 0.15 children (from 2.37 to 2.22; Hartnett and Gemmill 2019), suggesting that such declines may also reflect a growing number of structural impediments to childbearing, such as rising student debt (Nau et al. 2015), local housing crises (Clark 2012; Florida and Schneider 2018), and expensive child care.

Because fertility preferences are dynamic and adapt to changing circumstances, it is worthwhile to examine how individuals' childbearing plans have been shaped in the face of a changing economic and structural landscape. In this paper, we examine individual-level fertility expectation dynamics using data from the National Longitudinal Survey of Youth 1997 (NLSY97) cohort, whose members were born in the years 1980-1984 (i.e. the oldest millennials). Although fertility expectation data were not collected regularly throughout the survey as they were with the older NLSY 1979 cohort, fertility expectations for the younger cohort were

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collected in the 2009 and 2015 waves, when the average age of participants was 27 and 33, respectively. To our knowledge, this is the first study that uses longitudinal measures of fertility expectation data from this cohort and links these measures with contextual information that pertains to the geographic location of the respondent's residence, such as local-area unemployment. The latter contribution is particularly novel, as few studies have examined how macro-level economic conditions have shaped lifetime fertility expectations in the U.S.

Data and Methods

We use data from the National Longitudinal Survey of Youth 1997 cohort, a nationally representative panel survey of 8,984 males and females in the United States. Interviews were first conducted in 1997, when participants were aged 12–17, then annually until 2011 and biennially thereafter.

Unlike the detailed fertility expectation data available in the older NLSY79 cohort, data on fertility expectations for the younger NLSY97 cohort have not been routinely collected. However, in 2009 (round 13; mean age: 26.8) and 2015 (round 17; mean age: 33.0) all participants were asked the following question: “Altogether, how many (more) children do you expect to have?” We use this measure in conjunction with data on the number of biological children that participants report at the time of the survey to calculate total expected parity (i.e. total expected parity = number of biological children + number of [additional] children expected).

In preliminary analyses, we generate descriptive findings that summarize individual-level changes between the two waves using an approach similar to that of Iacovou and Tavares (2011). We first quantify the proportion of men and women in our sample whose numeric value of total expected parity between 2009 and 2015 remained the same, decreased, or increased. We also calculate the proportion of men and women whose values of total expected fertility changed by 2 or more children in either direction. In our second set of descriptive results, we present the distribution of total expected fertility at the second wave for each of the total expected parity categories observed in the first wave; values above 4 are collapsed into a category of 4 or more children. Analyses are conducted separately for men and women.

As described in more detail below, we plan to build on these descriptive findings by conducting multivariable analysis to examine both time-invariant and time-varying predictors of these dynamics, which will include both individual and local-area measures of economic uncertainty.

We limit our initial sample to participants who provided responses needed to calculate total expected fertility in both the 2009 and 2015 waves. Our preliminary sample size is 3,058 men and 3,260 women. All models include customized survey weights to account for complex sampling design and survey non-response.

Preliminary Results

In the 2009 wave, when the mean age of participants was 26.8, average total expected parity for the NLSY97 cohort was 2.30 for men and 2.42 for women (not shown). Six years later, when

fertility expectations were measured again (mean age: 33.0), average total expected fertility fell by about 0.10 children for both men and women (2.20 for men and 2.30 for women).

These overall declines in aggregate expected fertility mask substantial variation. Table 1 presents the proportion of men and women whose total expected fertility decreased, increased, or remained the same. Over the 6-year period, around half of men and women reported the same number of total expected children, although this was slightly higher among women (46.3% of men vs. 50.9% of women). For both men and women, decreases in total expected parity were more common than increases, with around 30% of respondents experiencing a decrease, and a little more than 20% experiencing an increase. Large changes (changing expectations by 2 or more children) were not uncommon (17% of men and 16% of women). Specifically, 7% of men and 6% of women saw increases in total expected parity by 2 or more children and 10% of men and women saw decreases by 2 or more children.

Table 2 presents a detailed picture of how these fertility expectations changed over time. The bold numbers along the diagonal show the proportion of men and women who maintained the same number of total expected fertility between 2009 and 2016. Interestingly, individuals who expected 2 children in 2006 were not more likely to maintain this preference than individuals who expected other parities, despite the fact that 2 is the normative family size in the U.S (Hagewen and Morgan 2005; Ray et al. 2018). The parity expectation that was most likely to be maintained over time was the expectation for zero children (71% of women who expected no children in 2006 reported the same preference in 2015, compared with 56% for men). The parity expectation least likely to be maintained over time was for 3 children (43.7% of men and 43.8% of women who expected 3 children in 2006 reported the same preference in 2015). As anticipated, small changes (both upward and downward) were more common than large changes.

Next steps

These initial results beg the question: what might be driving changes in childbearing plans during this period? We plan to answer this question by using multinomial logistic regression models to identify both time-invariant and time-varying factors associated with changes in total expected parity between 2009 and 2015. We also plan to identify potential drivers of more extreme changes to childbearing plans (i.e. increases or decreases in total expected fertility by 2 or more children in the 6-year period).

Our analysis will capitalize on the NLSY97's measurement of rich, longitudinal data pertaining to partnership, labor market participation, and household resources—all factors that have been linked to changes in childbearing preferences in prior research (Iacovou and Tavares 2011; Gray et al. 2013; Ray et al. 2018). While these factors have been shown to be important in prior studies, they have not been examined in relation to current U.S. cohorts of childbearing age, who have experienced young adulthood during the Great Recession and post-recessionary period. We also plan to use more contextual information to potentially reveal macro-level influences on these dynamics, including data on local-area unemployment (Schneider 2015), labor market polarization (Seltzer 2019), and housing prices (Clark 2012). While prior studies have examined the role of macro-level economic conditions on period fertility behavior, no research – to our

knowledge – has examined how these specific economic factors may have shaped lifetime fertility expectations in the U.S.

In sum, the goal of this study is to shed light on current fertility dynamics – including falling period fertility rates. To do so, we pair unique panel data with contextual data to better understand how and why individual childbearing expectations have changed during the post-recessionary period.

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Table 1. Percent of men and women changing or maintaining their value of total expected fertility between the first and second observations (i.e. 2009 to 2015).

	N	<u>Change in total expected fertility</u>			Total	Decreased by 2 or more	Increased by 2 or more
		Decreased	Maintained	Increased			
Men	3058	30.5	46.3	23.2	100	7.1	9.5
Women	3260	28.3	50.9	20.8	100	5.9	9.6

Table 2. Changes in percent of men and women expecting specified number of children between the first and second observations (i.e. 2009 to 2015).

	N	<u>Total expected fertility at second observation (2015)</u>					Total
		None	1	2	3	4+	
Total expected fertility at first observation (2009)							
Men							
None	189	56.4	23.8	15.6	2.7	1.5	100
1	381	15.3	44.5	32.0	4.1	4.1	100
2	1332	7.9	19.8	53.1	13.9	5.3	100
3	715	1.6	5.3	31.6	43.7	17.9	100
4+	441	1.3	4.9	18.3	23.6	52.0	100
Women							
None	154	71.0	12.0	13.4	2.3	1.3	100
1	413	16.3	47.9	27.8	5	3.1	100
2	1256	5.5	14.4	60.5	14.1	5.5	100
3	874	2.1	6.7	28.7	43.8	18.7	100
4+	563	1.0	2.1	15.4	24.6	56.9	100