

Fertility Behavior of Millennials Before and After the Great Recession

**Nan Astone
Steven Martin
H. Elizabeth Peters
Urban Institute**

September 2014

Introduction

From 2007 to 2012 the Total Fertility Rate (TFR) in the United States dropped from 2.1 to 1.9. The decline in teenage birth rates over the period has received a great deal of attention. Less noted, however, is the substantial decline in the birth rates to women in their twenties, an age group that accounts for about half of all births that take place in a given year. Therefore, declines in the birth rates to women of this age group have important implications for overall fertility in the United States. In 2012, the women who were 20 to 29 years of age were born between 1983 and 1992—the millennial generation. In this paper we examine the fertility behavior of millennials in the decade of life where most childbearing takes place and consider what have been the main demographic drivers of the decline in birth rates the millennial generation has exhibited between 2007 and 2012, years just prior to and after the Great Recession.

We find that three factors—declines in marriages, declines in marital fertility rates and declines in non-marital fertility rates—contributed to the overall decline. However, the relative contribution of these factors differs substantially by race and ethnicity. For non-Latino whites, the most important factor was a decline in marriage, whereas for non-Latino blacks and Latinos, declines in non-marital fertility rates made the largest contribution.

Methods

We calculated the decline of birth rates for women in their twenties between 2007 and 2012 and used Das Gupta's method (Das Gupta, 1978) to decompose this decline into its three components: 1) the change in the proportion of women who are married; 2) the change in birth rates to married women; and 3) the change in the birth rates to unmarried women. The birth rates of married women are much higher than those for unmarried women. For example, in 2007 the marital birth rates for women aged 20 to 24 was 217 births per 1000 married women, while the non-marital birth rate was 65 births per 1000 unmarried women. Even among groups such as African Americans and Native Americans, who have relatively high non-marital birth rates, marital birth rates are usually twice as high or almost so as non-marital birth rates. As a result, a decline in the proportion of a population that is married in an age group may lower the overall birth rates in that age group, even if the marital and non-marital birth rates stay the same or even rise. This is because a decline in the proportion married means that fewer women are exposed to the (relatively high) marital rates and more to the (relatively low) non-marital rates. This is of particular interest for the millennial cohort since, they are notable for having eschewed marriage in their twenties compared to their older counterparts (Martin, Astone and Peters 2014).

We begin with a calculation of how many children 1000 women would have if they passed through the ages 20 to 29 experiencing the birth rates that characterized the U.S. in 2007 and how many children 1000 women would have if they passed through the ages 20 to 29 experiencing the birth rates that characterized the U.S. in 2012.

We then examine three alternative scenarios to assess the reasons for the decline. In our first scenario we imagine that marital birth rates and non-marital birth rates to women aged 20 to 24 remained constant from 2007 to 2012, but the change in the

proportion married that actually occurred during this time happened just as it really did. In our second scenario, we imagined that the proportion married and the non-marital birth rates remained the same from 2007 to 2012, but the marital birth rates changed as they actually did. In our third scenario, we imagined that the proportion married and the marital birth rates stayed constant from 2007 to 2012, but the non-marital birth rates changed as they actually did. Our data come from the American Community Surveys.¹

Results

Table 1 summarizes our results. The second column of the table gives the number of children that would be born to 1000 women who experience the birth rates at ages 20 to 24 and 25 to 29 of the year 2007. Among all American women, the 2007 rates imply that 1000 women would bear 1046 children (i.e. approximately one child each). The analogous number for 2012, found in column 3 is 878, an overall decline of 168 births per 1000 women.

The premise of our first scenario is that birth rates to both married and unmarried women remain the same, but the proportion married declines as it actually did (e.g., from 17% to 13% among 20 to 24 year olds and from 44% to 38% among 25 to 29 year olds). The fourth column of Table 1 indicates that for all women in the U.S. this decline in the proportion married would, absent any other change, resulted in a decline of 70 births per 1000 women or approximately 41% (70/168) of the decline that we observe.

In our second scenario, we hold the proportion married constant, as well as non-marital fertility rates and assess what would have happened under these conditions. The answer, in the fifth column of Table 1 is that had the same proportion of women been married in 2012 as in 2007, and had non-marital birth rates remained the same, the decline in marital birth rates alone would have resulted in overall fertility going down by 23%, or by 38 births out of a total decline of 168.

The third scenario is what would have happened to overall fertility among women in their twenties had the proportion married and marital birth rates stayed the same, but non-marital birth rates declined as they actually did. Under this scenario, overall fertility declines by approximately 36%, which is a reduction of 60 births per 1000 women aged 20 to 29.

We imagined the same three scenarios for women of three racial/ethnic groups: non-Latino whites, non-Latino blacks and Latinos of all races. The results for these scenarios are shown in the subsequent rows of Table 1. Our findings differ substantially by race/ethnicity.

For non-Latino whites, about half the decline in the overall birth rate was due to a decline in the proportion married at ages 20 to 29; that is, the decline in marriage at these ages would, by itself have resulted in the number of births per 1000 women declining by 82 births per 1000 women. About a fifth of the decline was due to a decline in marital birth rates (32 births per 1000 women) and a little more than a third was due to a decline in non-marital birth rates.

¹ We have also done a sensitivity analysis using vital statistics to measure births, and using ACS to measure the fertility rate denominators and proportion married. The results are essentially the same.

For non-Latino blacks we find that three quarters of that decline are due to the decline in non-marital fertility rates, with approximately 16% due to the decline in marital birth rates and just under 10% due to the decline in the proportion married.

The pattern among Latinos (who exhibited the largest decline in overall fertility of 283 births per 1000 women) is also distinctive. A decline in the proportion married and a decline in the marital birth rates is responsible for a third each of the decline in fertility overall among Latinos, while approximately two fifths is due to a decline in non-marital birth rates.

In sum, all three major forces affecting overall fertility among women in their twenties between 2007 and 2012 acted to reduce it among all three of the racial ethnic groups we considered and for American millennials overall. This accounts for why the decline was relatively large--there were no countervailing factors. Millennial women in their 20s avoided marriage, and both married and unmarried millennial women reduced their propensity to give birth. The most important factor for non-Latino Whites was a reduction in the propensity to marry, while declines in non-marital fertility rates were more important for both non-Latino blacks and Latinos.

Extensions

Prior to the PAA we will undertake several extensions and sensitivity analysis:

1. Do our results differ when decomposing fertility rates for those ages 20-24 compared to ages 25-29?
2. Do our results differ by education (analysis limited to ages 25-29)?
3. Is the decline in fertility (and its decompositional factors) most likely due to the recession or is it the continuation of a longer run trend? To do this we will decompose changes in fertility rates between 2002 and 2007.
4. How sensitive are our results to using fertility rates measured by the ACS compared to using vital statistics?

Table 1. Numbers of Births to a Representative Group of 1000 women aged 20-29 under various scenarios.

	Number of Births under 2007 conditions	Number of Births under 2012 conditions	Reduction in Births due to <u>declining marriage rates</u>	Reduction in Births due to <u>declining marital birth rates</u>	Reduction in Births due to <u>declining nonmarital birth rates</u>	Total Reduction
All Ethnicities	1046	878	-70	-38	-60	-168
Non-Latino Whites	966	809	-82	-32	-44	-158
Non-Latino Blacks	1398	1174	-19	-36	-169	-224
Latinos	1346	1063	-79	-84	-120	-283
All Ethnicities			41.5%	22.7%	35.7%	100.0%
Non-Latino Whites			52.1%	20.1%	27.8%	100.0%
Non-Latino Blacks			8.6%	16.1%	75.3%	100.0%
Latinos			27.9%	29.7%	42.4%	100.0%

References

Das Gupta, Prithwis, (1978). "A General Method of Decomposing a Difference Between Two Rates into Several Components," *Demography*, 15(1): pp. 99-112.

Martin, Steve, Nan Astone, & H. Elizabeth Peters (2014) "Fewer Marriages, More Divergence: Marriage Projections for Millennials to Age 40," Urban Institute Research Brief, <http://www.urban.org/UploadedPDF/413110-Fewer-Marriages-More-Divergence.pdf>