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The Great Recession reduced fertility among unmarried and teen women

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# **The Great Recession reduced fertility among unmarried and teen women**

Daniel Schneider

## **Overview**

*The Great Recession has ruined the finances of millions of families and has had long-lasting impacts on employment. But less is known about its social consequences, about how it affected the intimate lives of the most disadvantaged – and in particular how it affected their fertility. Prior research has found that fertility decisions are often disconnected from economic concerns. In a new paper, I find the opposite: fertility falls in response to severe economic shocks among unmarried and teen women.<sup>1</sup> I show that during the Great Recession, unmarried women increased their use of contraceptives and made use of more effective contraceptive methods. My results suggest that the Great Recession decreased fertility with consequences for the society as a whole.*

## 1. Introduction

The effects of the Great Recession are well-documented in macroeconomic indicators. The unemployment rate skyrocketed, as did mortgage foreclosures and poverty rates. But less well-documented are the immediate and long-term social consequences of the Great Recession, in particular its effects on fertility rates. Recent research suggests that those effects may be large: high levels of unemployment and foreclosures could be associated with a reduction on the order of 5% to 10% in births in the United States.<sup>2</sup>

Social scientists have two traditional theories about how economic conditions affect fertility decisions: some believe that fertility is directly related to economic resources, and that severe economic conditions dramatically reduce the number of births;<sup>3</sup> others believe that fertility is disconnected from economic resources, as women find little reason to delay fertility if they have few prospects for economic success.<sup>4</sup>

The evidence for these hypotheses is mixed. Some studies (mostly ethnographic and qualitative) find no impact of economic hardship on fertility.<sup>5</sup> Others have found that economic hardship can delay the birth of the first child. Recently, one study suggested that economic hardship could reduce the number of births.<sup>6</sup>

In a recent paper, I show that the Great Recession has reduced birth rates among unmarried and teen women. This is partly due to the rise of contraceptive use, and to the use of more effective contraceptive methods.

## 2. The Great Recession has reduced fertility among teen and unmarried women

Among women, the Great Recession affected the fertility of unmarried and teen women the most. I have tracked their annual fertility rates using a panel of vital statistics at the state level, and compared those to state unemployment and foreclosure rates.<sup>7</sup>

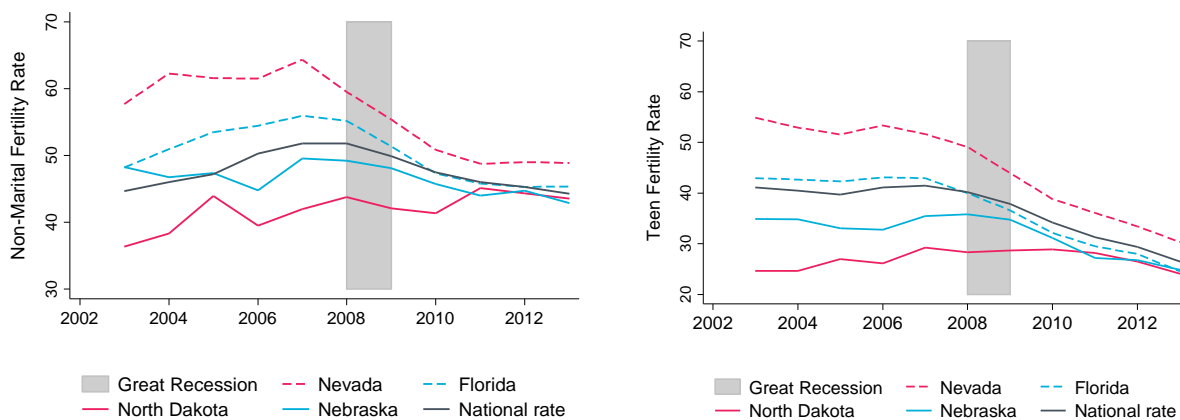
I find that non-marital and teen fertility declined significantly with rising unemployment and foreclosure rates during the years of the Great Recession.

Figure 1 shows that in states that were mildly hit by the Great Recession – such as North Dakota and Nebraska – the fertility rates among unmarried women were relatively stable from 2002 to 2012. However, in states more severely hit by the Great Recession – such as Nevada and Florida – the fertility rates of unmarried women fell between 2007 and 2013 and then leveled off. For example, in Nevada, the fertility rate among unmarried women was just above 60 births per 1,000 women aged 15-44 in 2007 and was below 50 births per 1,000 women in

2012. The same pattern is true for teen fertility, although the decline is less dramatic (see Figure 1).

I estimate that nationally, the fertility rate declined from approximately 49 per 1,000 when unemployment was 3% to 44 per 1,000 when unemployment was 11%. Let's take a step back to size these effects. From 1970 to 2008, the non-marital fertility rate increased steadily from 26 per 1,000 to 52 per 1,000, i.e. at a rate of an additional 0.67 births per 1,000 per year. The reduction in number of births I estimate over the Great Recession is equivalent to the number of births accounted for in 7.5 years of the historical increase in the non-marital fertility rate from 1970 to 2008.

**FIGURE 1** Annual Non-Marital and Teen Fertility Rates (per 1,000)



Source: Schneider (2017).

### 3. Teen and unmarried women changed their contraceptive use during the Great Recession

There are many potential channels through which the Great Recession could have reduced the number of non-marital and teen births. The Great Recession may have increased stress-induced miscarriages,<sup>8</sup> may have increased the number of women who terminate their pregnancy due to economic pressure,<sup>9</sup> or may have changed women's use of contraceptive methods.<sup>10</sup>

Stress-induced miscarriages alone cannot plausibly account for the large declines in fertility rates observed during the Great Recession. Rates of abortion have declined from 2002-2011, with a low in 2011 among young and unmarried women,<sup>11</sup> giving little support to the second explanation. For these reasons, I focus on the latter explanation. Using data from the National Survey of Family Growth, I measure the evolution in the probability of using any contraceptive method month after month, the consistency of contraceptive use, and the effectiveness of the

methods of contraception. The survey is nationally representative, with over-samples of African Americans, Hispanics and teenagers. It contains detailed information on the contraceptive use of 12,249 women across the US from June 2006 to June 2010.

Among unmarried women, I find that the Great Recession increased the probability of using any contraceptive method from 66% to 70%. I also find that higher monthly rates of foreclosure at the national level are associated with more consistent contraceptive use.<sup>12</sup> Worse economic conditions are also associated with the use of contraceptive methods that present a lower risk of unintended pregnancy.

The correlation between the Great Recession and contraceptive use varies by race, ethnicity, and nativity. I find that contraceptive use is highest among native-born White and Hispanic women and among foreign-born Hispanic women. However, I do not find any association between national foreclosure and unemployment rates on the contraceptive use of unmarried Black women. It should be noted that other recent research, including my own,<sup>13</sup> suggests that the Recession actually depressed the fertility of unmarried Black women, as a consequence of changes in sexual activity, miscarriage, or abortion.

Among teen women as a whole, I do not find any evidence that the Great Recession changed their contraceptive use. However, I am able to detect some modest relationship between national foreclosure and unemployment rates on contraceptive practices for White native-born teens. They are more likely to use any contraceptive method, to use it consistently, and to use more effective methods in times of economic hardship.

## 4. Conclusion

The effects of the Great Recession did not stop at lost jobs, depressed income and increased foreclosures. The Great Recession also shaped fundamental aspects of household life courses. I show that the Great Recession depressed fertility among unmarried and teenage women, in part through affecting contraceptive use.

This research adds to a growing body of evidence that economic hardship affects fertility. Whether the Great Recession had a lasting effect on fertility rates, in particular teen and non-marital fertility, will need more investigation. The slow recovery, continued economic hardship of low-income women, and the introduction of the Affordable Care Act may all contribute to a prolonged reduction in fertility rates. And those women who delayed fertility during the Recession may have lower lifetime fertility rates. The relationship between economic hardship and fertility is certainly more nuanced than previous scholarship has suggested.

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## Endnotes

- <sup>1</sup> Schneider, Daniel. 2017. “Non-Marital and Teen Fertility and Contraception during the Great Recession”, *The Russell Sage Foundation Journal of the Social Science*, 3(2).
- <sup>2</sup> Schneider, Daniel. 2015. “The Great Recession, Fertility, and Uncertainty: Evidence from the States.” *Journal of Marriage and Family*, 77(5): 1144-1156; Currie, Janet and Hillary Schwandt. 2014. “Short and Long-Term Effects of Unemployment on Fertility.” *Proceedings of the National Academy of Sciences*, 111(41): 14734-14739; Cherlin, Andrew, Elizabeth Cumberworth, Stephen Morgan, and Christopher Wimer. 2013. “The Effects of the Great Recession on Family Structure and Fertility.” *The Annals of the American Academy of Political and Social Science*, 650 (1): 214-231; Ananat, Elizabeth Oltmans, Anna Gassman Pines, and Cristina Gibson-Davis. 2013. “Community-Wide Job Loss and Teenage Fertility: Evidence from North Carolina.” *Demography* 50(6): 2151-2171.
- <sup>3</sup> Becker, Gary. 1960. “An Economic Analysis of Fertility.” in *Demographic and Economic Change in Developed Countries*, pp. 209-240. New York: Columbia University Press; Rindfuss, Ronald, Philip Morgan, and Gray Swicegood. 1988. *First Births in America: Changes in the Timing of Parenthood*, volume 2. Berkeley: University of California Press; Macunovich, Diane. 1996. “Relative Income and Price of Time: Exploring their Effects on US Fertility and Female Labor Force Participation.” *Population and Development Review*, 22(Supp.): 223-257; Schaller, Jessamyn. 2016. “Booms, Busts, and Fertility: Testing the Becker Model of Gender-Specific Labor Demand.” *Journal of Human Resources*, 51(1): 1-29; Currie, Janet and Hillary Schwandt (2014), *op. cit.*
- <sup>4</sup> Edin, Kathryn and Maria Kefalas. 2005. *Promises I Can Keep: Why Poor Women Put Motherhood Before Marriage*. University of California Press: Berkeley, CA.; Gibson-Davis, Cristina. 2009. “Money, Marriage, and Children: Testing the Financial Expectations and Family Formation Theory.” *Journal of Marriage and Family*, 71(1): 146-160.
- <sup>5</sup> Edin, Kathryn and Maria Kefalas. 2005. *op. cit.*
- <sup>6</sup> Currie, Janet and Hillary Schwandt. 2014. *op. cit.*
- <sup>7</sup> I consider unmarried women aged 15-44.
- <sup>8</sup> Nepomnaschy, Pablo, *et al.* 2006. “Cortisol Levels and Very Early Pregnancy Loss in Humans.” *Proceedings of the National Academy of Sciences*, 103(10): 3938-3942.
- <sup>9</sup> Ananat, Elizabeth Oltmans, Anna Gassman Pines, and Cristina Gibson-Davis. 2013. “Community-Wide Job Loss and Teenage Fertility: Evidence from North Carolina.” *Demography*, 50(6): 2151-2171.
- <sup>10</sup> Ananat, Elizabeth Oltmans *et al.* 2013. *op. cit.*; Finer, Lawrence, Jerman J, Kavanaugh ML. 2012. “Changes in use of long-acting contraceptive methods in the United States, 2007-2009.” *Fertility and Sterility*, 98(4): 893-897; Najari, B., P.N. Schlegel, and M. Goldstein. 2014. “National Vasectomy Rates and Family Planning Attitudes after the Great Recession.” *Fertility and Sterility*, 102(3); Gold, Rachel. 2009. *A Real-Time Look at the Impact of the Recession on Women’s Family Planning and Pregnancy Decisions*. Guttmacher Institute; Gregory, Sean. 2009. “What Sells in a Recession? Canned Goods and Condoms.” *Time Magazine* (March 11, 2009).
- <sup>11</sup> Pazol, Karen, Adreea Creanga, Kim Burley, and Denise Jamieson. 2014. “Abortion Surveillance – United States, 2011.” *Surveillance Summaries* 63(SS11): 1-41.
- <sup>12</sup> I define a “consistent” use of contraception as the use of some kind of contraception in the reporting month and in both of the two months prior.
- <sup>13</sup> Schneider, Daniel and Orestes Hastings. 2015. “Socio-Economic Variation in the Demographic Response to Economic Shocks: Evidence from the Great Recession.” *Demography*, 52(6): 1893-1915; Ananat, Elizabeth Oltmans *et al.* 2013, *op. cit.*