



The Effect of the Recent Great Recession on Pregnancy and Birth Outcomes

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The Great Recession of 2009-10 was deeper and more extensive than any economic downturn since the Great Depression of the 1930s. In the United States, an estimated one out of every ten individuals in the labor force was out of work by the end of 2009. The Recession was not only an unemployment crisis. It was also a global financial crisis – marked by the threatened collapse of large financial institutions, bank bailouts, and restricted credit – plus a housing market crisis – marked by an epidemic of mortgage delinquencies, foreclosures, and “underwater” mortgages.

Beyond sheer economic damage, many have raised questions about the impact of the Recession on Americans’ mental and physical health. My research contributes to this important area of work by focusing specifically on consequences for pregnancies and births.

Recessions and Health

Since the late 1800s, researchers have attempted to understand how large-scale economic fluctuations affect people’s health and mental well-being. Research consistently shows that rates of suicide increase during economic downturns; and individuals often suffer declines in mental and physical health following layoffs from their jobs. But there could be opposing effects, too, because – surprisingly – many studies show that overall rates of mortality decline when the economy gets worse. Does this mean that in some respects economic downturns are good for health? Some analysts speculate that during economic downturns individuals who are not working may have more time for healthy activities and preventative care. Or possibly people spend less on alcohol, tobacco, and unhealthy food during recessions, and may be less exposed to hazardous working conditions and job related stresses. Reduced road traffic could also mean fewer deaths in car accidents.

As debates continue, recent research has suggested that the declines in mortality seen during previous recessions may not have continued during and after the recent Great Recession – due perhaps to its severity or to the changing nature of work and employment in modern society.

Furthermore, despite scores of studies on the impact of the economy on adult health, very little research examines whether and how economic downturns influence pregnancy health and subsequent birth outcomes, such as low birth weight and preterm birth. These adverse birth outcomes are the strongest predictors of which infants will die in the first year of life, and being born too small or too soon is linked with increased risk of health problems throughout childhood and even into adulthood. It is thus important to understand whether and how large-scale economic conditions influence these outcomes.

A New Look at the Relationship between the Economy and Birth Outcomes

Any study of recessions and pregnancies must take care to avoid misattributions. During recessions, some women – especially those who are young or socioeconomically disadvantaged – postpone pregnancy until better economic times. Thus, it may appear that birth outcomes such as low birth weight and preterm birth improve, because the women who postpone pregnancy are otherwise more likely to experience these poor outcomes compared to older, more socioeconomically advantaged mothers. At the same time, it has also been shown that economic downturns increase the likelihood of miscarriage, particularly among less healthy pregnancies, which may also account for some of the decrease in instances of low birth weight and preterm birth. Accounting for these changes in who becomes pregnant and which pregnancies result in a live birth complicates research designs seeking to understand how economic downturns influence pregnancy health and birth outcomes among women who do give birth to a live infant.

In a recent study, my colleagues and I examined the relationships between birth outcomes and fluctuations in the state unemployment rate – a well-known economic indicator – during the first and second trimester of pregnancy. We used data on all births in the United States from 1990 to 2013, excluding multiples births, and deployed multiple methods to arrive at key findings:

- We found that, for each one percent increase in the state unemployment rate in the first trimester of pregnancy, the odds of preterm birth increased by five percent. Moreover, during the Great Recession, this relationship was amplified. Most states experienced increases in unemployment rates of two to eight percentage points during the Recession, suggesting a substantial effect of state-level unemployment on preterm births in this period.
- In a different finding that needs to be further probed, we found that increases in the state unemployment rate in the second trimester of pregnancy reduced the odds of preterm birth by three percent overall and six percent during the Recession. This inverse relationship may mean that increased unemployment led to improved maternal health behaviors; or it could mean that more miscarriages led to the appearance of improved birth outcomes.

In further work, we tracked siblings born to the same mother, allowing us to compare birth outcomes during higher and lower unemployment periods. This analysis confirmed our previous finding that an increase in the unemployment rate during the first trimester of pregnancies is associated with higher odds for preterm births.

Where Does Research Go from Here?

To better inform public policy and clinical practice, future work should seek to identify specific pathways by which the economy influences birth outcomes. Prior research shows that economic anxiety may play an important role in health during pregnancy. And we also know that unemployment benefits are positively correlated with better mental health and self-rated general health. More clearly needs to be learned about the impact of safety net policies on health during pregnancy. Meanwhile, our findings are relevant for policymakers because they indicate that large-scale economic shifts that seem far removed from pregnancy and birth may have important effects on the health of the next generation of Americans.

Read more in Claire Margerison-Zilko, Yu Li, and Zhehui Luo, “Economic Conditions during Pregnancy and Adverse Birth Outcomes among Singleton Live Births in the U.S., 1990-2013.” *American Journal of Epidemiology* (forthcoming).