

Recession Depression: Physical and Mental Health Effects of the Stock Market Crash

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In December 2007, the U.S. entered into the Great Recession, the most significant economic downturn since the 1930s. Since then, the nation has experienced record high levels of unemployment and foreclosures and a widespread crisis in financial markets. During a single week in October 2008, the closing values of major equity indexes fell by as much as 20%, significantly reducing the retirement portfolios and stock wealth of many Americans. We examine the immediate effects of such sudden financial losses on mental well-being, self-reported health, physical symptoms, and health behaviors by analyzing nationally representative survey data from respondents interviewed on randomly-selected dates before and after the stock market crash of 2008.

This first study will contribute new knowledge about the link between economic, physical, and mental well-being. No prior study has examined the health consequences of the 2008 stock market crash, and little is known in general about the effects of sudden large wealth losses on individual health and well-being. Although hundreds of studies suggest that persons in better economic circumstances live longer healthier lives, for various reasons prior studies do not offer guidance about the health effects of large financial losses. Our study makes an important contribution by studying the causal effect of wealth losses on health. A small number of careful studies have examined the effect of wealth on health, but to the best of our knowledge all of these studies examine wealth increases (e.g., Meer et al. 2003; Smith 2004; Michaud and van Soest 2008; Apouey and Clarke 2010; Kim and Ruhm 2011). If there are important asymmetries

in the effect of wealth on health, then the results from prior studies may not guide predictions about the health consequences of sudden financial losses.

We use survey data from the Health and Retirement Study (HRS), a nationally representative longitudinal survey of more than 22,000 Americans over the age of 50 will allow us to examine the consequences of adverse economic conditions on two important population groups, working age adults nearing retirement and retired adults. Respondents are surveyed every two years, and the HRS contains detailed information about respondent physical and mental health, health behaviors, insurance coverage, and healthcare utilization. We focus on the 15,060 respondents who complete survey interviews in both 2006 and 2008.

To identify the impact of changes in wealth on health, we use a similar strategy to Hudomiet et al. (2011), which posits that the October 2008 stock market crash acted as an exogenous shock to the wealth of a large fraction of Americans with 401(k) retirement accounts and other holdings in equity markets. We use variation in the dates that respondents were interviewed in the 2008 waves of two large longitudinal household surveys to identify the effect of wealth changes on health. Households interviewed in the period after the crash saw a large reduction in non-housing wealth that was completely exogenous to prior health status or health behaviors. We regress measures of health status including self-rated health; CESD depression score; symptoms of physical pain in the past two weeks; and recent emotional, nervous or psychiatric problems on indicators for interview timing and respondent socio-economic characteristics.

Respondents with stock market wealth interviewed right after the crash report significantly worse self-rated health than respondents interviewed pre-crash, report an additional 0.20 CESD depression symptoms ($p < 0.05$), and are 4 percentage points less likely to report

feeling happy in the past two weeks ($p < 0.05$). Additional analyses will incorporate longitudinal data to assess the duration of adverse health effects observed immediately after the stock market crash and assess the relationship between large and small wealth losses and physical symptoms.