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RETIREMENT SECURITY AND THE STOCK MARKET CRASH: WHAT ARE THE POSSIBLE OUTCOMES?

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The sharp decline in the stock market in 2008 placed the retirement security of many Americans at risk. Although the market has rebounded sharply since its trough in March 2009, as of mid-October 2009 the Standard and Poor's 500 Index (S&P 500) remained 29.8 percent below its peak level two years earlier.

This paper uses projections from the Urban Institute's Dynamic Simulation of Income Model (DYNASIM3) to assess the impact of the 2008 financial crisis on retirement savings for current and future retirees under alternative scenarios that vary assumptions about recent past and future stock market returns. We compare alternative recovery scenarios with a "no crash" scenario that assumes the stock market had not collapsed in 2008 but instead had increased at its long-term historical rate from the 2007 level. We simulate three possible recovery scenarios: (1) a "no recovery" scenario in which the stock market does not rebound but instead resumes its long-term historical rate after 2008; (2) a "repeat 70s" scenario in which real stock prices continue to decline for a number of years after the 2008 crash, as they did between 1974 and 1982; and (3) a "full recovery" scenario in which the stock market fully rebounds after 10 years to the projected no-crash level in 2017.

For each of the stock market performance scenarios, we vary some assumptions about individuals' behavior. The baseline behavioral simulations use the assumptions in Butrica, Smith, and Toder (2009) that individuals continue to retire at the same age and rebalance their portfolios annually. We also compare projected retirement income under the no-crash, repeat-70s, no-recovery, and full-recovery scenarios assuming that individuals with lower retirement income due to the stock market crash delay retirement and that individuals do not rebalance their portfolios.

We examine retirement resources at age 67 before and after the stock market collapse and compare these outcomes by sex, marital status, race/ethnicity, education, and retirement income quintile. We report results separately for those born from 1941 to 1945 (pre-boomers), from 1951 to 1955 (middle boomers), and from 1961 to 1965 (late boomers). When the stock market crashed in 2008, the pre-boomers were between ages 63 and 67, the middle boomers were between ages 53 and 57, and the late boomers were between ages 43 and 47.

Consistent with our previous study (Butrica, Smith, and Toder 2009), the current study finds that those farthest from retirement fare better than their older counterparts because they had less wealth to lose when the market crashed and more years to restore their lost wealth from both new stock purchases and future appreciation before retirement. In the full-recovery scenario, middle and late-boomers, but no pre-boomers will see their incomes at age 67 increase. As in the previous study, high socioeconomic groups will experience both the largest gains and losses from the stock market collapse and subsequent stock price changes under the different scenarios because they are more likely than low socioeconomic groups to have retirement accounts and financial assets and to be invested in the stock market. Finally, the current study finds that the long-term effects of the 2008 stock market crash on retirement incomes will depend on the stock market performance going forward.

Our key new findings include the following:

If stocks remain depressed for a long time instead of growing on their long-term path or rebounding to their long-term trend line prior to the market crash, there would be no winners but many losers.

- Under the repeat-70s scenario, 47 percent of pre-boomers, 60 percent of middle boomers, and 54 percent of late boomers will see their income at age 67 drop 2 percent or more. However, many people will lose much more. Twenty percent of pre-boomers, 28 percent of middle boomers, and 22 percent of late boomers are expected to lose at least 10 percent of their no-crash income at age 67 if the stock market experiences little to no growth as it did in the 1970s.

- In comparison, under the no-recovery scenario, 43 percent of pre-boomers, 51 percent of middle boomers, and 42 percent of late boomers will see their income at age 67 drop 2 percent or more and 14 percent of pre-boomers, 15 percent of middle boomers, and 11 percent of late boomers are expected to lose at least 10 percent of their no-crash income.

Delaying retirement reduces the number of losers and size of the losses among losers. Delayed retirement would reduce income losses from the market crash the most for late boomers, less for middle boomers, and the least for pre-boomers. Late boomers have the most opportunities to delay their retirement since they were still relatively young when the market crashed. In contrast, many pre-boomers were already retired when the market crashed in 2008.

- Under the repeat-70s scenario, delaying retirement one year reduces the share of late boomers who lose income by 21 percentage points (from 54 to 33 percent), and the share of late boomers who lose 10 percent or more income by 8 percentage points (from 22 to 14 percent). However, delaying retirement reduces the share of pre-boomers who lose income by only 2 percentage points because many of them are already retired.

- Under the no-recovery scenario, working another year more than offsets late boomers' income losses so that instead of losing 6 percent in income, they gain 1 percent (it takes less than an additional year of work to recoup their losses). In comparison, working another year reduces pre-boomers' income losses by much less—from 8 to 7 percent. Under the repeat-70s scenario, working another year reduces income losses from 10 to 1 percent for late boomers, but only from 11 to 10 percent for pre-boomers.

- Although lower-income people are less likely than higher-income people to lose income at 67 from the stock market crash, working longer has a bigger impact on lower-income people than higher-income people because income from assets has a relatively smaller effect on their retirement income. Under the repeat-70s scenario, delaying retirement by one year reduces income losses for middle boomers in the top income quintile from 20 to 17 percent (a 15 percent decline), but reduces income losses for middle boomers in the second income quintile from 5 to 1 percent (an 80 percent decline).

- Working more than one additional year could reduce the number of losers even more.

With the stock market collapse, people could buy stocks at bargain prices. While this may have been the optimal response to the crash (buy low, sell high), it is not necessarily how people actually behaved. If investors passively allowed the equity shares in their portfolio to fall as stock prices declined instead of rebalancing their investment portfolios by purchasing more stocks, people would gain less from a subsequent price recovery. If stock prices continue to fall, however, as in the repeat-70s scenario, rebalancing would make them worse off.

- Rebalancing generally increases investment returns compared with not rebalancing over a long time period, but due to differences in investment timing and year to year changes in stock market gains and losses, a passive no-rebalance strategy will benefit some and hurt others compared with rebalancing annually.

- The magnitudes of average gains and losses in all three scenarios are close to those when annual rebalancing is assumed. The shares of winners and losers are also similar. While there are some changes in both winners and losers from changing assumptions about rebalancing, these changes are small and do not increase for later cohorts.

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