

How do stock market experiences shape wealth inequality?

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This page in:

- [English](#)



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Tensions between generations have existed since the last Ice Age. Perhaps Orwell (1945) said it best ... "Each generation imagines itself to be more intelligent than the one that went before it, and wiser than the one that comes after it." Recently, however, this tension has risen above its normal level. An example is the "ok boomer" meme and the resentment that inspired it. The source of this resentment is clear. For the first time since records have been kept, most of the younger generation is in danger of being poorer than their parents (Chetty, Grusky, Hell, Hendren, Manduca, and Narang (2017)).

Image

Figure 1: Median Wealth Ratio of Old vs. Young

Figure 1 plots Survey of Consumer Finances data on the ratio of median net worth for those over age 65 to those under age 35. Not surprisingly, the old have always been wealthier than the young. In 1989 the net worth of the old was 9.0 times greater on average. However, over the course of the next 27 years this ratio more than doubled, to over 20. Standard inequality models cannot explain the data in figure 1, because they generate stationary age/wealth distributions. Of course, one could always inject an external shock, and then attribute the trend in figure 1 to transition dynamics. However,

this is a rather unappealing strategy, since the trend in the figure 1 is the mirror image of a declining trend that took place during the 40 years following the Great Depression.

What explains the reversal? This paper contributes to the literature by proposing a novel channel, namely, generational belief differences. [I study an economy where individuals weight their own personal experiences more heavily when forming their beliefs about stock market disasters](#). When the model is calibrated to US data, it not only accounts for a significant share of the recent increase in the relative wealth of the old generation, but also explains why the ratio decreased following the Great Depression. The model also illustrates how general equilibrium feedback operating in financial markets contributes to these changes.

[I argue that different generations have different degrees of optimism/pessimism about market returns due to their own limited experiences](#) (Malmendier and Nagel (2011)).

This influences their risk-taking behavior, which then influences the growth rate of their wealth. For instance, an individual who was age 65 in the 1980s would have been born in the 1920s and experienced the Great Depression. In contrast, an individual who was age 65 in 2016 would have been a lucky baby boomer, who skipped the Great Depression and had more positive experiences in the stock market.

Due to the rare nature of disasters, it was not likely that the “depression babies” would experience another Great Depression. But its salience within their own experience caused it to cast a long shadow throughout the remainder of their lives. In other words, they were scarred. Therefore, [it is natural that investors in different cohorts “agree to disagree” about the likelihood of stock market disasters](#). Malmendier and Nagel (2011) provide strong empirical support that macroeconomic experience in the stock market has a prolonged impact on how much households invest in risky assets later in their lives. They find that the “depression babies” were much less likely to participate in the stock market later in their lives. And if they did, they tended to invest a lower fraction of wealth in risky assets compared with other generations.

By building an overlapping generations model and studying the interaction of different generations (who presumably have different life-time experiences in the financial market), I find such “belief scarring” effect on generational wealth differences is amplified through changes in asset prices. Specifically, after a stock market crashes, the scarred investors become more pessimistic, which then triggers them to hold more safe assets instead of risky securities. This then pushes down the yields of the safe assets, and increases the equity premium. Ironically, this implies that the best time to invest in risky securities is right after a disaster, but it is also the same time when investors are mostly scarred and fearful about investment. This makes the scarred generation to lose even more wealth to those other generations.