

CAPITAL IDEAS

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The Aging Population: Implications for Equity Returns

OVERVIEW

The aging of our population will likely have dramatic effects on our nation. Specifically, the aging of the baby-boom generation will have major implications for Social Security, Medicare and Medicaid, and secondary implications for government spending and taxes. (For those interested in reading more about this topic, we recommend, *The Coming Generational Storm*.)

Of particular interest to investors is the issue of whether demographics can tell us something about future stock returns. This article discusses two topics: 1) the lifecycle theory of investing, which states that “households invest different amounts of money at different life stages,”¹ and 2) whether an increase in the older adult population will adversely affect future returns.

The study cited in this article indicates that it might be an overstatement to argue that future returns will be harmed by decreased inflows into the market (representing a decrease in the number of investors putting money into the market) and increased outflows (by retirees consuming more of their portfolios and saving/investing considerably less).

Defining the Lifecycle Theory

We begin with a discussion of the impact of demographics on stock returns by looking at the life-cycle theory of investing. The lifecycle theory is based on the belief that consumers seek to smooth consumption over their lifetimes. Thus, investors tend to have very low savings rates early in their lives when average incomes are relatively low. Savings rates are highest in middle age when incomes are usually highest and investors address the need to accumulate assets for retirement. (The coming of age of the baby-boom generation has often been cited as one of the contributors to the stock market boom of the 1990s.) The presumption is that retired investors consume the wealth in their portfolios and their savings rates fall dramatically, even turning negative.

The lifecycle theory implies that the aging of the population has a direct correlation with savings rates: When the proportion of the middle-aged population rises, net savings will increase with positive implications for equity returns in the short term. The opposite would occur when there is a decrease in the middle-aged population. Based on the lifecycle theory and the known aging of the population, some have forecasted difficult days ahead for the stock market once the baby-boom generation peaks, which will happen by the end of this decade. Should investors be concerned?

Finding a Link Between Population and Equity Returns

A 2004 study, “Demographics, Stock Market Flows, and Stock Returns,” published in the *Journal of Financial and Quantitative Analysis* examined the link among the population age structure, net outflow from the stock market and stock returns. The study concluded that outflows from the equity markets have a positive correlation with the fraction of the population over age 65 and a negative correlation with the fraction of the population between the ages of 45–64. This means that when older adults represent a larger fraction of the population, outflows increase. The study also concluded that changes in the population structure do in fact add to the predictive power of equity premium forecasting models and found that “an increase in the middle-aged population leads to an increase in demand, driving up the prices and returns in the short term.”

However, we would observe that this process lowers future expected returns². Lower future expected returns could lead to lower demand for equities, reversing the process. An increase in the older-adult population would have the reverse impact, driving down prices and returns in the short term, while raising future expected returns. The increase in future expected returns could lead to increased demand for equities.

The study also predicted that, as the baby boomers enter retirement over the next decade, there will be increased demands on the stock market to provide the source of funds to maintain consumption. The outflows will continue to increase during the next 20 years and remain at high levels for a decade. However, the study noted that the high levels of anticipated outflows are not unprecedented. The late 1980s saw a similar level of outflows. In seeming contradiction to those who have made negative predictions using the lifecycle theory, the S&P 500 Index returned more than 20 percent per annum from 1985–1989, the last period of high outflows. The study concluded that net flows over the next five decades will be *almost the same as* they have been over the past seven decades.³

Conclusion

The study concluded, “The popular perception that the retirement of the baby boomers would result in huge outflows as the retirees start to withdraw money from their investments seems a bit overstated.”⁴ While we are unaware of additional peer-reviewed studies that are currently focused on this particular topic, we would agree with its assessment based on the body of additional academic research that explains how efficient markets can be expected to function.⁵ Perhaps the concern over the implications for the stock market caused by the aging population

— specifically the argument that future expected returns are likely to be harmed by decreased inflows — is indeed overstated.

¹ Amit Goyal, **Demographics, Stock Market Flows, and Stock Returns**. *Journal of Financial and Quantitative Analysis*, March 2004.

² When market prices drop lower than usual, reversion to the mean can be expected, resulting in higher future expected returns. When market prices are higher than usual, reversion to the mean can be expected (although nobody can predict precisely when), resulting in lower future expected returns.

³ Goyal.

⁴ Ibid.

⁵ Efficient markets function in a state in which trading systems fail to produce returns in excess of the market's overall rate of return because everything currently knowable about a company is already incorporated into the stock price. The next piece of available information will be random as to whether it will be better or worse than the market expects.

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