The Impact of Market Fluctuations on the Level of Directly-held Risky Assets of Different Racial and Ethnic Groups

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Background

The demographic composition of the U.S. population is expected to become increasingly diverse over the next 40 years (U.S. Census Bureau, 2008). There is concern, however, that current wealth disparities between White, non-Hispanic households and all other households may be exacerbated by ever-increasing concentrations of wealth-generating assets among White non-Hispanic households. Historically, stock ownership has been the most effective way to increase wealth (Poterba, 2000). Using the Survey of Consumer Finance, Hanna and Lindamood (2008) and Huang (2007) have shown that White households hold stocks at a much higher rate than all other race and ethnic groups. For these reasons, higher stock ownership among Nonwhite households is often recommended to attenuate future wealth disparities.

Objective

Minorities may have lowered their stock ownership between 2001 and 2004 (Hanna & Lindamood, 2008), a period of significant market volatility. This reduction may be the result of any number of factors, including one's tolerance for risk. It is unclear, however, whether this reduction was the result of individual consumers' decisions about direct stock ownership or the result of indirect stock ownership losses due to the loss of employment or other indirect means of acquiring stock. To better understand the apparent reduction in stock ownership among minorities between 2001 and 2004, this research will investigate the direct stock holdings during that period to answer the following research question: Did minority stock ownership decline between 2001 and 2004 due to active consumer decisions (e.g. selling one's directly-held stock) or due to passive losses in employment-based stock ownership mechanisms (e.g. defined-contribution pensions, stock-options, and other similar investment vehicles)?

Data

This study examined the 1995 to 2007 Surveys of Consumer Finance (SCF) to assess changes in direct stock ownership. The SCF is a triennial survey that provides detailed financial information on U.S. households. For this study, particular attention is given to the years 2001 and 2004 because of the stock market fluctuation that occurred during this period. Additional years of SCF data are used to understand how direct stock ownership changed during less volatile periods. The trend estimation highlights general ownership patterns that occurred during periods when significant stock market fluctuations were not present.

Univariate Results

The analysis began with simple descriptive statistics of respondent and household characteristics, and select finance questions. There were discrepancies in the direct stock ownership by race and ethnicity in 2007. When compared to non-Hispanic Whites, Black and Hispanic households had much lower direct stock ownership, which is consistent with the overall stock holdings estimates of Wolff (2007), Huang (2007), and Hanna and Lindamood (2008). Black and Hispanic households had much lower mean household income and a higher percentage of households that were not willing to take any financial risk. On average, Black and Hispanic households had lower levels of education than White and Other/Asian households. Black and Hispanic households had a greater percentage of respondents with less than high school degree and a much lower percentage of respondents with a college degree. Analysis of mean values for select financial behaviors showed that Black and Hispanic households had lower certificate of deposit ownership levels than White and Other/Asian households. Further, Black and Hispanic households were less likely to hold saving bonds and checking accounts. Last, when compared to White and Other/Asian households, Black and Hispanic households did not save regularly and were more likely to report

that spending exceeded income. Of course, these simple descriptive statistics provide only a glimpse into the challenges faced by minority households that desire to increase stock ownership.

Mulitivariate Results

The results of unweighted analysis of variance of direct stock ownership of different race and ethnic groups show that between 1995 and 2007 there were no statistically significant differences in changes of direct stock ownership between most racial and ethnic groups. In 1995 direct stock ownership for White households was the only statistically different results. Other changes were not found to be statistically different at a 95% confidence level. This analysis did not use RII method, nor did it account for complex survey design, both of which typically increase the standard error.

Discussion

Analysis of variance for various race and ethnic groups did not find statistically significant differences between 2001 and 2004 levels of direct stock ownership. There are at least two potential explanations for this. First, the effect of stock market fluctuation on direct stock ownership was smaller than expected and differences found by other researchers were due to decline in indirect stock ownership resulting perhaps from passive losses in employment-based stock ownership mechanisms. Second, SCF data did not capture the changes that occurred during that period. The size of SCF samples is small for minority households owning stocks directly. For example, 2007 un-weighted implicate 1 sample size for minorities was: 27 for Black, 19 for Hispanic, and 61 for Other/Asian households, as compared to 1,279 for White households. Further studies should select data that have greater number of minorities.

Higher stock ownership among Nonwhite households is often recommended to attenuate future wealth disparities. In this preliminary work, changes in direct stock ownership between 1998 and 2007 remain statistically insignificant, suggesting that the wealth gap will not decrease without extraordinary changes in this area. Financial educators should consider all possible remedies for the wealth disparities. For example, univariate results show that relative to Whites, Nonwhite or Hispanic households do not allocate their money in other saving/investment assets, do not save as regularly, and generally report less sophisticated financial decision making. Perhaps progress in these areas could improve their financial situations well enough that direct stock ownership seems a viable option.

References

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