

## **Racial/Ethnic Differences in the Risk Aversion Measure of the 2004 Health and Retirement Study**

Mei-Chi Fang, Ohio State University<sup>1</sup>  
Sherman D. Hanna, Professor, Ohio State University<sup>2</sup>

The Health and Retirement Study includes hypothetical income gamble (Job Risk) questions designed to estimate respondent risk aversion. This study uses a series of Job Risk questions to analyze differences in risk aversion/risk tolerance for racial/ethnic groups, using new participants in the 2004 Wave. Most of the respondents were within 10 to 15 years of retirement. The questions allow for assigning respondents to six categories of risk aversion (ra), from extremely low (less than 0.31) to extremely high (more than 7.53.) To be consistent with previous risk tolerance research, we refer to the responses in terms of risk tolerance, with extremely low risk aversion labeled as extremely high risk tolerance and high risk aversion labeled as low risk tolerance.

Preliminary analyses and previous empirical research suggested that a mapping of the responses to a continuous risk tolerance measure is not appropriate, so the responses are analyzed in terms of four cumulative levels: No risk tolerance ( $ra \geq 7.53$ ), Some risk tolerance ( $ra < 7.53$ ), High risk tolerance ( $ra < 3.77$ ), and Substantial risk tolerance ( $ra < 2.01$ .) The mean age of the 2,996 respondents was 51.5, and 75% were non-Hispanic Whites, 11% Blacks, 10% Hispanics, and 4% other. Roughly 10% were immigrants.

Means tests (GLM) show that White respondents were more likely than Black and Hispanic respondents to have Some and High risk tolerance, but there were no significant differences between Blacks and Whites and Hispanics and Whites at the Substantial level. The GLM analysis also shows that those born in the U.S. were more likely to have Some risk tolerance and High risk tolerance than immigrants.

Cumulative logistic regressions controlling for income, education level, age, gender, marital status, health status, current job status, home ownership, and immigration status, show that Black respondents have a lower predicted probability of having Some risk tolerance than White respondents; while there are no differences between White and Black respondents at High or Substantial risk tolerance. There are no differences between Hispanic respondents and White respondents at any level of risk tolerance. Immigrants have a lower predicted probability of having Some risk tolerance than those born in the U.S. The results also suggest that previous risk tolerance differences found between those identifying themselves as Hispanic and those identifying themselves as White (in the Survey of Consumer Finances) might be based on immigrant status rather than ethnic identity.

These results have important implications for financial advice and education, and design of optimal default retirement portfolio allocations for employer-based defined contribution retirement plans.

---

<sup>1</sup> Ph.D. candidate, Consumer Sciences Department, Ohio State University, 1787 Neil Avenue, Columbus, OH 43210, [fang.70@osu.edu](mailto:fang.70@osu.edu).

<sup>2</sup> Professor, Consumer Sciences Department, Ohio State University, 1787 Neil Avenue, Columbus, OH 43210, 614-292-4584, [hanna.1@osu.edu](mailto:hanna.1@osu.edu).

This publication was made possible by a generous grant from the FINRA Investor Education Foundation, formerly known as the NASD Investor Education Foundation.