

## Risk Tolerance and Portfolio Allocation

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Risk tolerance is critical in household investment decision-making. Being consistent in risk tolerance and actual portfolio risk is especially important because a mismatch between the two will likely lead to investment mistakes and increase the probability of loss. This study explores the relationship between risk tolerance and portfolio risk in households' portfolio of risky financial assets. This study analyzed data from 2016 Survey of Consumer Finances (SCF) and found that a higher level of risk tolerance was associated with a higher probability of investing all risky financial assets in stocks. Results also show that 15% of households who were unwilling to take any risks allocated 100% of their risky assets in stocks. This indicates a possible misunderstanding of risk tolerance or the portfolio risk on the part of the investor, which may lead to financial mistakes down the road and make it difficult for investors to achieve financial goals. Risk tolerance varies when assessed in different situations and certain emotions, therefore individuals may have different perceptions of financial risks and risk tolerance (Pan & Statman, 2012; Yao, Sharpe, & Wang, 2011). Implications to investors and financial advisors are provided.

### References

- Pan, C. H. & Statman, M. (2012). Questionnaires of Risk Tolerance, Regret, Overconfidence, and Other Investor Propensities. SCU Leavey School of Business Research Paper No. 10-05. Available at SSRN: <http://dx.doi.org/10.2139/ssrn.1549912>
- Yao, R., Sharpe, D. L., & Wang, F. (2011). Decomposing the age effect on risk tolerance. *The Journal of Socio-Economics*, 40(6), 879-887. doi: 10.1016/j.socec.2011.08.023

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