Gender, risk tolerance, and false consensus in asset allocation recommendations

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A B S T R A C T

We study the impact of gender on asset allocation recommendations. Graduate business students and professional wealth managers are randomly assigned a male or female client. Participants recommend an allocation and choose an allocation for themselves. Male students choose a riskier allocation than female students, consistent with existing evidence of a gender difference in risk tolerance, and recommend a riskier allocation. In contrast, male and female wealth managers choose and recommend the same allocation, indicating that male and female finance professionals feature similar risk preferences. In both samples, a subject's allocation choice is the strongest predictor of the recommendation provided.

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1. Introduction

Over the past few decades the structure of retirement plans has evolved: the number of U.S. workers with access to a defined contribution plan is now double the number with access to a defined benefit plan.[2] As this phenomenon continues, ever more individual investors will bear responsibility for deciding how much to save and for constructing their retirement portfolios, difficult tasks for which many are ill-equipped. Benartzi and Thaler (2007) show that investors appear to use heuristics when planning for retirement, often delaying participation, rebalancing infrequently, and allocating across available assets naively. Many investors are uncomfortable making financial decisions. In a 2013 survey, 78% of respondents agreed with a statement that they could benefit from some advice and answers to everyday financial questions from a professional.[3] Consequently, the Bureau of Labor Statistics predicts

32% growth rate in financial advisory employment over the next decade.[4] A natural question to ask is the extent to which adviser recommendations help investors construct an appropriate retirement portfolio and achieve satisfaction with their investment choices.[5]

We study the impact of gender on the recommendations provided by advisers to their clients planning for retirement. Gender may be important since prior research has documented in a wide variety of contexts, including financial decision making, that on average men are more risk tolerant than women.[6] Our empirical analysis is based on results from an experiment in which subjects take on the role of a financial adviser and recommend an allocation across a risk-free and a risky asset to a hypothetical client, for whom gender is randomly assigned. We also ask subjects to choose an allocation for themselves. We examine the allocation between safe and risky assets, as opposed to the choice among the myriad mutual funds, ETFs, and individual securities available in typical retirement plans, to clearly focus attention on risk preferences. There are other reasons for doing so. John Bogle, noted champion of index investing, states in Bogle on Mutual Funds that "the most fundamental decision of investing is the allocation of your assets."

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[2] Bureau of Labor Statistics, National Compensation Survey, March 2013.

[3] 2013 Consumer Financial Literacy Survey, prepared for the National Foundation for Credit Counseling by Harris International Public Relations Research.

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[4] Forbes, 8/8/12, "One of the Fastest Growing Careers is in Desperate Need of Young Talent."

[5] See Merkle et al. (2015) for a study of the determinants of investor happiness among brokerage clients of a large UK bank.

[6] See Byrnes et al. (1999) for a meta-analysis of 150 studies grouped into 16 types of behavior.

This view is consistent with the lack of evidence supporting persistence in abnormal returns in actively managed mutual funds (Carhart, 1997). Furthermore, as shown by Markowitz (1952) and Tobin (1958), in classical mean-variance analysis, the investor's portfolio problem collapses into an allocation choice across the market portfolio and a risk-free asset, known as two-fund separation. The choice is driven by expectations of risk and return as well as investor risk preferences; the optimal allocation to the risky asset is inversely proportional to an investor's level of risk aversion.

We use two groups of subjects: a sample of graduate business students and a sample of professional wealth managers at a regional financial services firm.[7] Sapienza et al. (2009) find that in a sample of MBA students the probability of entering the finance industry is inversely related to risk aversion. We might therefore expect our sample of finance professionals to have higher risk tolerance than our sample of students. In addition, the professional wealth managers, through specialized training and experience, gain financial expertise which may lead to a heightened willingness to accept risk. As shown by Van Rooij et al. (2011), for example, financial literacy increases the rate of stock market participation. Differences between our two samples may have implications for how advisers and clients should be matched in order to facilitate effective decision making.

In our experiment, the salient characteristics of the investments are provided to the subjects, hence according to standard finance theory only the perceived level of investor risk aversion should affect the allocation recommended to the client. Given average gender differences in risk tolerance, one might expect that recommended allocations may be affected by the randomly assigned gender of the hypothetical client. However, existing research shows that advisers allow their own preferences to affect their recommendations. A recent study of Canadian financial advisers by Foerster et al. (2017) finds that the strongest determinant of an allocation recommendation to a client is the adviser's own allocation choice. Similarly, Roth and Voskort (2014) show in an experiment that advisers, when asked to assess the risk tolerance of a hypothetical client, provide estimates that are highly correlated with their own risk preferences. These results can be interpreted as evidence of a false consensus effect, in which the adviser overestimates the similarity between their own preferences and those of their client.

Given the robust finding that men are more risk tolerant than women, and the recent evidence that advisers project their own preferences on their clients, we pose four main research questions designed to provide insights useful for matching advisers and clients, as well as incorporating financial advice in the retirement planning process.

First, do asset allocation recommendations provided by advisers differ by client gender? The empirical evidence that men are on average more risk tolerant than women is clear. Standard finance theory indicates that advisers should then recommend on average a higher allocation to risky assets in accounts owned by men in order to maximize the utility of both genders. However, this advice would result in higher average realized returns and wealth levels in accounts owned by men than for women. In the context of a societal goal of gender equality, a gender difference in the financial performance of an adviser's clients could raise concerns, even if it can be explained by a difference in risk-taking.

Second, do female advisers vary their recommendations by client gender more than male advisers? As discussed later in the paper, existing research argues that women are more empathetic than men. If so, then female advisers may provide less risky recommendations to their female clients than their male clients given the well-established gender difference in risk tolerance.

Third, do average asset allocation recommendations differ by adviser gender? If recommendations provided by advisers are correlated with their preferences, as documented by Roth and Voskort (2014), then female advisers may provide less risky recommendations in general than male advisers, given a gender difference in risk tolerance. Consequently, risk tolerant investors seeking a riskier allocation recommendation might be more likely to obtain one from a male adviser than a female adviser and vice versa. Put another way, forming same-gender dyads would result in a tighter alignment between the risk preferences of the investor and the adviser than if the assignment were random.

Fourth, do the professional wealth managers in our sample recommend riskier allocations than the graduate students? As mentioned previously, Sapienza et al. (2009) find a positive correlation between risk tolerance and the likelihood of entry into the finance industry. A false consensus effect would therefore result in riskier recommendations from a sample of finance professionals than from a general population.

We find that male students choose a higher allocation to the risky asset for themselves than female students, consistent with a gender difference in risk tolerance. The male students also recommend to their clients a higher risky share than the female students, consistent with a false consensus effect. Neither the male nor the female students provide recommendations that differ by client gender, despite the well-accepted gender difference in risk tolerance. These results suggest that same-gender dyads would likely result in a closer match between client and adviser risk preferences than if the match were random.

In contrast, there is no difference between the allocations selected by male and female wealth managers. Male managers provide on average a slightly higher recommendation to the risky asset than do female managers, but the difference is statistically insignificant. Furthermore, the managers both select and recommend riskier portfolios than the students. If professional advisers tend to feature greater risk tolerance than clients, then it is likely that many investors may be advised to accept an allocation that weights risky assets more heavily than they would otherwise choose for themselves.

For both sets of subjects, neither the gender of the adviser nor the gender of the client has a systematic impact on recommendations when we control for the adviser's own allocation, indicating that male and female advisers project their own preferences to the same degree.

Our results contribute to the recent literature on financial advisers (Foerster et al., 2017; Roth and Voskort, 2014) in two ways. First, we examine determinants of risk tolerance and allocation recommendations of two distinct samples, graduate students and professional wealth managers. The wealth managers feature substantially higher average risk tolerance than the students. Among the students, a finance concentration is associated with higher financial knowledge, confidence, and risk tolerance. These results are consistent with existing evidence in Sapienza et al. (2009) that those selecting a finance career tend to be more risk tolerant than others, as well as evidence in Van Rooij et al. (2011) that financial literacy increases the rate of stock market participation. Second, we study differences between male and female advisers. Male students are more risk tolerant than female students, consistent with existing evidence of a gender difference in the population at large. The gender difference narrows when examining finance concentrators. In the sample of wealth managers, the gender difference disappears entirely. For both students and wealth managers, the subject's own risk preference subsumes all other effects.

Taken together, our results indicate that focusing on gender per se will not improve the efficacy of the client-adviser

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[7] Hereafter we use "adviser" to refer to both subject groups and either "students" or "managers" to refer to one of the groups.