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Investor profiles: Meaningful differences in women's use of investment advice?

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Abstract

Women in the United States face numerous financial challenges: They typically earn less than men do; they have greater probabilities of living in poverty; and they need substantial retirement funds, given their average longevity. Consequently, a comprehensive understanding of how women use investment advice to remedy these challenges is vital. However, the literature is largely mute on this issue. This study helps to fill this gap in the literature by evaluating two profiles of female investors through cluster analysis and logistic regression conducted on a large, nationally representative database collected recently. Predictors of seeking investment advice vary considerably across profiles.

JEL classification: J16, Economics of Gender

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1. Introduction

In the United States, women outnumber men as a function of increasing age to the extent that the ratio of women-to-men is 2-to-1 by the age of 85 (United States Census Bureau, 2010). Consequently, a general absence of retirement planning among women (Lusardi & Mitchell, 2008) seems particularly problematic. Aside from such age-related challenges, women are more likely to experience several other life difficulties associated with financial complications: About 10 million single women are raising at least one child, which repre-

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sents a 52% increase since 1970 (United States Census Bureau, 2011). Additionally, more women than men live in poverty (United States Census Bureau, 2012). Overall, women earn about 81 cents for each dollar that men earn (United States Department of Labor, 2013b).

Overcoming such financial adversities may be particularly challenging for women to do alone because their financial literacy is generally lower than that of men (Lusardi & Mitchell, 2011). These factors combined suggest that women may stand to benefit considerably from high quality investment advice. Such advice may help to offset shortcomings in women's financial knowledge and the financial hardships that tend to be more specific to their gender.

Ideally, the associated research literature would be quite advanced and ready to facilitate investment advisors and policymakers in accommodating women's specific needs for investment advice services. However, relatively little is known about patterns of utilizing financial services independent of gender, much less about women's specific usage patterns (Collins, 2012; Robb, Babiarz, & Woodyard, 2012). The upshot is that there is a gap in the literature in terms of assimilating a comprehensive picture of how women's investor characteristics and other demographic traits combine to help predict the conditions under which women are the most likely to reach out for outside investment advice.

The purpose of this study, then, is to help advance the extant literature by attempting to integrate these characteristics into more comprehensive profiles of female investors. The end-goal of such analysis is to identify more comprehensive patterns associated with how and why women use (or do not use) investment advice. These goals are attained through cluster analysis and logistic regression analysis of data derived from a nationally representative database, the 2012 National Financial Capability Study (NFCS).

2. Perspectives

A common perspective on why women may have a need for professional investment advice is that, on average, they have lower financial literacy than men do. Although there are differences across countries, this phenomenon is not unique to the United States (Lusardi & Mitchell, 2011). Rather, it is documented both in undeveloped and developed countries alike including Germany, Netherlands, and Japan, independent of demographic characteristics such as age. In fact, this gap between male and female financial literacy appears to exist at relatively high levels of educational attainment.

For example, Chen and Volpe (2002) detect strong evidence of this gap among a sample of 924 undergraduate and graduate students who represented diverse majors and who were drawn from multiple institutions of higher education. On Chen and Volpe's 36-question assessment, women outscored men on only one question, and underperformed men on 22 other questions—with the differential being more than 10% on 10 of those questions. The female students also did not rank personal finances to be as important as male students did, nor were the female students as confident about their financial knowledge. At even higher education levels, this gender gap may disappear, as suggested by Chalmers and Reuter's (2010) analysis of the utilization of investment advice services provided through the Oregon University System's retirement fund. Their analysis detected little evidence of a gender gap in financial knowledge. Similarly, Dolan and Stevens (2013) report that having a college

education seems to eliminate gender gaps that favor men in terms of the rationality financial decision-making.

From another perspective, gender-based differences in financial literacy and associated measures seem unlikely to be a sufficient explanation for why women use outside investment advice. Robb et al.'s analysis (2012) showed that women's gender was a significant predictor of the use of investment advice after controlling not only for financial literacy, but also for self-perceived financial knowledge (or financial confidence), financial satisfaction, risk aversion, and a variety of other demographic variables including age and educational attainment. In fact, after controlling for these factors, their logistic regression analysis indicated that women have 34% higher odds of seeking investment advice than men do. Collins (2012) reported a similar finding.

Gender was a tangent rather than a focal point of these important studies; therefore, these researchers had no particular reason to expound upon this finding. Haslem's discussion (Haslem, 2008) of why some investors pay investment advisors to purchase mutual funds when no-load options are readily available may provide some insight: Women may be seeking validation of their investment choices, attempting to resolve marital disputes over investment decisions, or benefiting from ancillary financial services such as an evaluation of their overall financial positions.

Investment advice may benefit women in several additional ways such as better asset allocation strategies. Such strategies are particular important—given that women seem to have higher relative risk aversion (Bajtelsmit, Bernasek, & Jianakoplos, 1999), even though they also seem to invest more in retirement funds *all else equal* relative to male investors (Deaves, Veit, Bhandari, & Cheney, 2007). Furthermore, women are likely to benefit from advice that promotes proactive financial behaviors such as disciplined spending habits, paying bills on a timely basis, and being financially prepared (Schmeiser & Hogarth 2013). The remainder of this study attempts to contribute to the existing literature by evaluating whether different profiles of female investors exist and whether these profiles (if any) exhibit different patterns of utilizing investment services.

3. Method

3.1. Participants and data

Participants in this study are the 13,117 female participants in the state-by-state 2012 NFCS. This portion of the NFCS is a nationally representative database derived from online surveys conducted from July to October 2012. Participants were selected based on a nonprobability quota sample from over a million, paid participants in preexisting online surveys. Participants' identities and self-reported demographics were verified.

The FINRA Investor Education Foundation funded the NFCS. It developed the NFCS in conjunction with organizations such as The U.S. Department of the Treasury and President Obama's Advisory Council on Financial Capability. The main objectives of these organizations were (1) to collect key benchmarks for assessing financial capability in the United

States and (2) to examine variability in these benchmarks. This current study relies on data from the public-use version of the database.

3.2. Measures

3.2.1. Use of investment advice and evidence of investing/saving

Use of investment advice is an indicator variable that provides self-reported data about whether participants asked for advice about investing or savings during the last five years. Having an emergency, "rainy day" fund to cover at least three months of expenses in the event of illness, unemployment, or economic downturns serves as evidence of actual investing or saving behaviors. In many respects, this measure is ideal because other measures may have less malleable origins. For example, having sufficient retirement savings is, at least partially, a function of whether participants' employers offer retirement plans and of the nature of these plans (i.e., defined benefit or defined contribution).

3.2.2. Investor characteristics

Each participant's financial literacy score is the number of correct responses to five questions about investing, borrowing, and personal financial management included the NFCS. This and similar measures have been well accepted in the literature (e.g., Collins, 2012; Lusardi, Mitchell, & Curto, 2010; Lusardi & Mitchell, 2011). Self-perceived overall financial knowledge varies from 1 = *very low* to 7 = *very high*. Additionally, participants compare their financial knowledge to that of other household members as follows: 1 = *the participant knows the most*, 2 = *someone else knows the most*, 3 = *the participant and someone else in the household are about equally knowledgeable*, 4 = *the participant does not know*, 5 = *the participant prefers not to say*, and 6 = *there is no other person with whom to compare the participant's knowledge in the household*. Participants' self-reported willingness to take risks when making financial investments ranges from 1 to 10, where 1 indicates the lowest level of self-perceived risk-taking and 10 indicates the highest level of such behavior. Current financial satisfaction is measured from 0 = *not at all satisfied* to 10 = *extremely satisfied*. Approximate annual household incomes range from 1 = *less than $15,000* to 8 = *$150,000* or more. Employment status consists of being self-employed, employed full-time, or employed part-time; or being a homemaker, a full-time student, disabled, unemployed, or retired. Partners' employment status has the same response categories, except that an additional category accounts for participants who have no "significant others."

3.2.3. Demographic variables

Demographic variables include number of financially dependent children, marital status, educational attainment, age, and race. Number of financially dependent children is measured as 1 = *1* to 4 = *4 or more*. Marital status includes being married, single, separated, divorced, or widowed. Educational attainment ranges from 1 = *did not complete high school* to 5 = *completed graduate education*. Participants' ages vary from 1 = *18–24* to 6 = *over 65*. Information about race is restricted to whether or not participants are White in the public-use database.

3.3. Data analysis

First, this study uses descriptive statistics to evaluate basic information about the data. Next, it relies on cluster analysis (Jain, Murty, & Flynn, 1999; Norušis, 2011) to access the existence of female investor "profiles" based on the investor characteristics defined in the prior section. More specifically, the goal of cluster analysis is to determine the number of profiles of female investors (if any) and to assess individual group membership. This study relies on two-step cluster analysis, a method appropriate when theory does not suggest the number of clusters and when sample sizes are large. Two-step clustering derives the number of clusters through iterative log likelihood estimation based on a goodness of fit measure (i.e., the Bayesian Information Criterion [BIC]). Next, profiles are identified via (1) the importance statistics for each investor characteristic, (2) the rank of each characteristic within each cluster, and (3) distributional characteristics of each measure (i.e., frequencies and means) within each cluster. The importance statistic for investor characteristics assesses a variable's role in assigning participants to a particular cluster. It ranges from 1 (i.e., highly important in distinguishing clusters) to 0 (i.e., not important in distinguishing clusters). Demographic variables are entered as evaluation fields, so that these variables do not play a role in classifying investor profiles. Hence, the importance statistic for each evaluation field permits an assessment of the connection between each demographic variable and each cluster. Finally, logistic regression is used to study the explanatory power of variables related to women's decisions to seek investment advice.

4. Results

4.1. Descriptive data analysis

Only about 27%[1] (n = 3,565) of female participants report having used investment advice in the last five years; about 70% (n = 9,227) report that they did not use such services, with a small fraction (2%, n = 325) reporting that either they do not know whether they have used such services or that they prefer not to say whether they have done so (Table 1). Over a third (37% or n = 4,829) have a rainy day fund that would cover at least three months of expenses; 59% (n = 7,708) do not have such a fund, and 4% (n = 580) either do not know or prefer not to say whether they have a rainy day fund. On average, participants answered fewer than three questions correctly on the financial literacy assessment for an average percentage score of 52%. At the same time, participants' mean self-perceived financial knowledge is 5 on a 7-point Likert-type scale, and 27% believe that their knowledge is equivalent to someone else's in the household. Participants' mean level of financial satisfaction is about 5 on a 10-point Likert-type scale, and their mean level of self-perceived risk-taking is about 4 out of 10 possible levels. Table 2 provides additional demographic statistics about the sample.

4.2. Cluster analysis

Two-step cluster analysis indicates the presence of two distinct profiles of female investors (Table 3). Profile 1 (n = 7,658) can be characterized as females who typically are not

Table 1 Investor characteristics for female participants ($N = 13{,}117$) in the 2012 National Financial Capability Study

Measure	Mean (M) and SD or %	n or N
Use of financial advice about investing/savings		
Yes	27.2%	3,565
No	70.3%	9,227
Do not know	1.4%	189
Prefer not to say	1.0%	136
Rainy day fund		
Yes	36.8%	4,829
No	58.8%	7,708
Do not know	2.8%	370
Prefer not to say	1.6%	210
Financial literacy score (0 to 5 correct)	$M = 2.6$ $SD = 1.4$	13,117
Self-perceived risk-taking (1 low to 10 high)	$M = 4.3$ $SD = 2.5$	13,117
Perception of financial knowledge (1 low to 7 high)	$M = 5.0$ $SD = 1.3$	12,633
Comparison of financial knowledge		
Participant knows the most in household	24.1	3,160
Someone else knows the most	9.0	1,179
Equally knowledgeable	26.7	3,507
Does not know	2.5	332
Prefers not to say	.6	84
No comparison	37	4,855
Financial satisfaction (0 low to 10 high)	$M = 4.8$ $SD = 2.9$	13,117

prepared for financial emergencies (i.e., 89% did not have a rainy day fund), are not satisfied financially ($M = 3$ on a 10-point scale), and have limited household incomes ($M =$ $25,000 per year to under $35,000 per year). These women are also unlikely to seek out investment advice (i.e., 11% have sought out such advice during the last five years). Furthermore, their self-perceived financial knowledge ($M = 5$ on a 7-point scale) tends to exceed their financial literacy scores ($M = 2$ or 40% of questions answered correctly).

Profile 2 ($n = 4{,}975$) is more likely to ask for investment advice ($M = 53\%$), is more likely to have a rainy day fund ($M = 78\%$), and tends to be fairly financially satisfied ($M =$ 7 on a 10-point scale) with a mean annual household income of $75,000 to under $100,000. Additionally, participants' self-perceived financial knowledge ($M = 6$ on a 7-point scale) also appears to exceed their financial literacy scores ($M = 3$ or 60% of questions answered correctly). Their mean financial literacy score exceeds the mean score for the full sample ($p > 0.001$).

Although working full-time is the most frequent work status for both profiles, 23% of women[2] in Profile 1 work full-time compared with 37% of women in Profile 2. Self-perceived investment risk-taking is the most important factor in distinguishing between clusters. However, it is also among the lowest factors in distinguishing between participants within each cluster (i.e., eighth out of nine categories). About 75% of participants in Profile 1 rank their self-perceived level of risk-taking as being 5 or lower, whereas self-perceived

Table 2 Descriptive statistics for female participants (N = 13,117) in the 2012 National Financial Capability Study

Measure	Mean (M) and SD or %	n or N
Number of financially dependent children (1 to 4 or more)	M = 0.82 SD = 1.1	13,117
Marital status		
Married	54.1%	7,098
Single	25.6%	3,361
Separated	2.0%	265
Divorced	12.7%	1,663
Widowed	5.6%	730
Educational attainment		
Did not complete high school	9.8%	1,285
Completed high school only	32.02%	4,200
Some college	34.02%	4,484
Undergraduate degree	15.5%	2,035
Graduate education	8.66%	1,113
Age		
18–24	12.3%	1,616
25–34	17.0%	2,233
35–44	16.5%	2,167
45–54	18.8%	2,468
55–64	19.9%	2,487
65+	15.5%	2,146
Race		
White	64.2%	8,425
Non-White	35.8%	4,692

risk-taking is distributed relatively evenly throughout the 10-response categories for participants in Profile 2. The only investor characteristic that has an importance statistic of less than 1 is how participants rank their financial knowledge compared with that of another member of the household (importance statistic = 0.75). This characteristic also ranks last within each cluster. Participants in Profile 1 typically do not have a partner with whom to compare their financial knowledge (frequency = 47%), whereas participants in Profile 2 are more likely to rank their knowledge as being equal to someone else's in the household (frequency = 37%).

In terms of evaluation fields for the demographic variables (Table 4), 16% of participants in Profile 1 have completed either their undergraduate or graduate degrees; by comparison, 38% of participants in Profile 2 have completed at least one of these degrees. The importance statistic is 1 for this evaluation field. Marital status has an importance statistic of 0.77. Frequency analysis indicates that 43% of participants in Profile 1 are married compared with 71% of participants in Profile 2—with "married" being the most frequent marital status for each profile. Profile 1 also tends to be younger (i.e., the mean age range for Profile 1 is 35–44 compared with 45–54 for Profile 2, with age having an importance statistic of 0.71). The importance statistics for the remaining evaluation fields—number of the children and race—are 0.11 and 0.07, respectively. Over 50% of participants in each profile report having no financially dependent children, and over 60% of participants in each profile are White.

Table 3 Results of cluster analysis reported in the order of importance statistics for distinguishing between clusters

Measure	Profile 1 n = 7,658	Profile 2 n = 4,975
Self-perceived investment risk		
Importance statistics	1	1
Within cluster rank	8	8
Mean	4 out of 10	5 out of 10
Asked for investment advice in the last five years		
Importance statistic	1	1
Within cluster rank	4	1
Mean	.11	.53
Rainy day fund		
Importance statistic	1	1
Within cluster rank	1	2
Mean	.11	.78
Overall financial satisfaction		
Importance statistic	1	1
Within cluster rank	2	3
Mean	3 out of 10	7 out of 10
Perception of financial knowledge		
Importance statistic	1	1
Within cluster rank	5	4
Mean	5 out of 7	6 out of 7
Financial literacy score		
Importance statistic	1	1
Within cluster rank	6	6
Mean	2 out of 5	3 out of 5
Household income		
Importance statistic	1	1
Within cluster rank	3	5
Mean	$25,000 to under $35,000	$75,000 to under $100,000
Current work status		
Importance statistic	1	1
Within cluster rank	7	7
Mode	Full-time (23%)	Full-time (37%)
Comparison of financial knowledge		
Importance statistic	.75	.75
Within cluster rank	9	9
Mode	No partner (47%)	Equal (37%)

Note: Modes are provided as the best descriptor of central tendency for nominal variables with more than two categories.

4.3. Logistic regression

The results of logistic regressions in Table 5 provide the odds that women in each profile will seek investment advice for each relevant investor characteristic and demographic variable. To enhance the reader's interpretations, I summarize results that differ across profiles first, and follow that discussion with a description of the relationships that are more similar across profiles. For Profile 1, how the participant ranks her financial knowledge in comparison to someone else's in the household does not predict the odds of seeking investment advice (Panel A). However, for Profile 2, as long as the participant assesses the

Table 4 Evaluation field for cluster analysis

Measure	Profile 1 n = 7,658	Profile 2 n = 4,975
Education		
Importance	1	1
Mean	High school	Some college
Marital status		
Importance	.77	.77
Mode	Married (43%)	Married (71%)
Age		
Importance	0.71	.71
Mode	35–44	45–54
Children		
Importance	.11	.11
Mean	.90	.69
Race		
Importance	.07	.07
Mean	.61	.69

Note: Modes are provided as the best descriptor of central tendency for nominal variables with more than two categories.

differential in knowledge, the odds of seeking investment advice are consistently higher compared with the reference category (i.e., the participant believes that someone else knows more than she does). More specifically, when the participant believes that she knows more than someone else in the household, the odds are 28% higher that the participant sought investment advice; if the participant believes that she is equally as knowledgeable as someone else in the household, the odds are 41% higher; and, if there is no one else in the household with whom to compare her knowledge, then odds of seeking investment advice are 81% higher. For Profile 2, a one-unit increase in perceptions of financial knowledge is associated with 10% reduced odds of seeking investment advice (Panel B). This predictor is not significant for Profile 1. For Profile 1, a one-unit increase in the participant's financial literacy score is associated with a 13% increase in the odds of seeking advice, whereas this predictor is not significant for Profile 2.

For Profile 1, earning more than $15,000 per year is associated with 49% to 84% greater odds of seeking financial advice up to the point that participants earn under $75,000 (Panel C). In contrast, for Profile 2, three household income ranges are associated with from 46% to 60% reduced odds of seeking investment advice compared with annual household income of less than $15,000 per year: earning $15,000 to less than $25,000; earning $25,000 to less than $35,000; and earning $75,000 to less than $100,000.

For Profile 1, being a full-time student is associated with 41% greater odds of seeking investment advice compared with working full-time, whereas being retired is associated with 41% lower odds of seeking investment advice compared with working full-time (Panel D). For Profile 2, being a homemaker, unemployed, and retired are associated with 36%, 120%, and 42% higher odds, respectively, of seeking investment advice compared with working full-time. For Profile 1, having one additional child is associated with 9% higher odds of seeking advice (Panel E), and being single compared with being married is associated with 34% greater odds of seeking advice (Panel F). Neither the number of children nor any aspect

Table 5 Logistic regression: Predictors of financial advice

	Cluster 1 odds ratio	Cluster 2 odds ratio
Panel A: Comparison of financial knowledge		
Participant knows the most	1.024	1.284*
Someone else knows the most	—	—
Equally knowledgeable	1.225	1.411**
Does not know	.655	.642
Prefers not to say	.666	1.016
No comparison	1.006	1.814**
Panel B: Risk, satisfaction, knowledge, and financial literacy		
Self-perceived risk-taking	1.081***	1.144***
Overall financial satisfaction	.967*	.949**
Perception of financial knowledge	.962	.899**
Financial literacy score	1.126***	1.039
Panel C: Annual household income		
Less than $15,000	—	—
$15,000 to less than $25,000	1.523**	.426**
$25,000 to less than $35,000	1.840***	.402**
$35,000 to less than $50,000	1.488**	.633
$50,000 to less than $75,000	1.753***	.660
$75,000 to less than $100,000	1.141	.539**
$100,000 to less than $150,000	1.007	.635
$150,000 or more	.639	.811
Panel D: Employment status		
Self-employed	.975	1.274
Employed full-time	—	—
Employed part-time	1.326*	1.499***
Homemaker	.771	1.361**
Full-time student	1.414*	.763
Disabled	.851	1.445
Unemployed	1.001	2.201***
Retired	.590**	1.416**
Panel E: Children		
Number of financially dependent children	1.093*	1.045
Panel F: Marital status		
Married	—	—
Single	1.337*	1.131
Separated	1.293	.635
Divorced	1.038	1.001
Widowed	1.476	1.013
Panel G: Age		
18 to 24	—	—
25 to 34	.681**	.672*
35 to 44	.517***	.497***
45 to 54	.691*	.718*
55 to 64	.894	1.100
65+	1.155	1.274
Panel H: Race		
White	.828*	1.255**
Non-White	—	—
Panel I: Educational attainment		
Did not complete high school	.380***	.527**
High school	.529***	.602***
Some college	.111	.085
	.796*	.768**
Undergraduate degree	—	—
Graduate degree	.983	1.142
Constant	.166***	1.398

Note: Results for spouses' work status were not significant and have been omitted to reduce table length.
*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$.

of marital status is a significant predictor for Profile 2. For Profile 1, being White is associated with 17% reduced odds of seeking advice, but for Profile 2, being White is associated with 26% increased odds of seeking advice (Panel H).

A one unit-increase in self-perceived risk-taking is associated with 8% and 14% higher odds of seeking investment advice for Profiles 1 and 2, respectively (Panel B). A one-unit increase in being financially satisfied decreases the odds of seeking investment advice by 3% and 5% for Profiles 1 and 2, respectively (Panel B). Being employed part-time compared with working full-time is associated with 33% and 50% greater odds of seeking investment advice for Profiles 1 and 2, respectively (Panel D). For both groups being older than 18 to 24 is associated with 28% to 50% reduced odds of seeking financial advice until participants surpass the age range of 45–54 (Panel G). Not having obtained an undergraduate degree is associated with from 20% to 62% reduced odds of seeking advice for both profiles, depending on participants' final levels of educational attainment (Panel I). Finally, partner's work status is not a significant predictor of seeking investment advice for either profile.

5. Discussion and conclusions

Despite women's risk of having insufficient retirement assets and of living at or below poverty (Lusardi & Mitchell, 2008; United States Census Bureau, 2012), only 27% of the women in this nationally representative study have sought investment advice during the last five years. Additionally, only a little more than a third have a rainy day fund sufficient to cover at least three months of living expenses. This statistic is particularly disconcerting, given that the U.S. Department of Labor (2013a) reports that the duration of unemployment is 15 weeks or more for 53% of those who have been unemployed recently.

However, these statistics also appear to conceal an important part of the picture. More specifically, the findings suggest that not only are there two groups, or profiles, of female investors, but also that the factors associated with the odds of seeking investment advice often vary across these profiles. Put most simply, one profile of female investors might be labeled as "*struggling*" and the other profile might be identified as "*thriving*." The chief factor that distinguishes these two profiles is that the "strugglers" tend to have higher self-assessed risk aversion.

Other discriminating factors yield the following more detailed profiles: Only about 90% of the "strugglers" have a rainy day fund or have sought investment advice in the last five years. They also have more limited household incomes, averaging from $25,000 to under $35,000. Over three-quarters of the "thrivers" have a rainy fund and over half have sought financial advice during the last five years. "Thrivers" have higher household incomes, averaging from $75,000 to under $100,000 per year. The "thrivers" are more likely to have earned a graduate or undergraduate college degree, but more than 60% of them have not done so. The most common marital status for each group is being married, but 71% of "thrivers" are married compared with 43% of "strugglers." Despite conventional wisdom, race and number of financially dependent children do not particularly characterize these profiles.

Several different patterns in the factors associated with seeking investment advice emerge for these profiles. The "thrivers" appear to seek investment advice based on their *perceived*

financial knowledge, whereas the odds that strugglers will seek advice may be more connected to their *actual* financial knowledge. More specifically, when "thrivers" believe that there is someone else in the household who knows more than they do about finances, they are less likely to reach out for investment advice. At the same time, being more *confident* about own their financial knowledge is also associated with reduced odds that "thrivers" will seek outside help. On the other hand, it is more likely that "strugglers" will reach out for investment advice when their objectively measured financial knowledge is higher.

Additionally, some of the evidence suggests that "strugglers" are more likely to reach out for advice when they earn more (i.e., up to $75,000), so that the price of the advice may be a factor in their decision-making. On the other hand, "thrivers" are more likely to seek advice when they are living below poverty compared with when their earnings fall into one of several higher income brackets. Some evidence also aligns with the theory that when "strugglers" work status is probably transitory—such as being a full-time student and working part-time—they are more likely to reach out for investment advice. By contrast, if their work status might be more permanent, such as being retired, they have reduced odds of seeking such advice. On the other hand, some of the evidence suggests that "thrivers" may react self-protectively by seeking investment advice when they work less than full-time, regardless of whether or not this work status is usually considered to be permanent. More specifically, they reach out for advice when they work part-time, are homemakers, are unemployed, or are retired.

These findings require further corroboration, particularly in terms of validating the existence of these profiles in other datasets. However, these findings do suggest that—although it may often seem practical and suitable to talk about female investors as a single group—such a classification strategy can obscure the existence of meaningful differences in investor profiles within gender. Not accounting for these differences may result in failures to launch investment advice strategies successfully. Encouraging one group (i.e., the "strugglers") to seek investment advice *may* be more about improving financial education, overcoming concerns about the costs of investment advice, and, potentially, mitigating fixed-mindsets (Dweck, 2007). Encouraging the other group (i.e., "the thrivers") to seek investment advice *may* be more about educating investors about the extent of financial advisors' knowledge compared with their own and about capitalizing on what may be more of "growth" mindsets (Dweck, 2007). Both groups, though, are certainly urged to seek out financial advice—given women's overall potentially more precarious financial situations—and to assess the quality of their financial advisors through checking references, determining the veracity of advertised certifications, evaluating whether conflicts of interest might exist, reading financial information in detail, and considering getting second opinions.

Findings in this study also expound on the extant literature. For example, Haslem's (2008) suggestion that women may be seeking validation of their investment choices when they seek investment advice appears to be on target, but only for women with characteristics similar to the "thrivers." His suggestion that seeking advice may be an attempt to resolve a marital dispute over an investment decision appears less likely. "Thrivers" are likely to seek investment advice even when they do not have a partner within whom to compare their

knowledge. They seem willing to accept another member of the household's authority, if they perceive that that person has more knowledge about finances than they do.

Additionally, this study suggests a nuance in how financial literacy predicts women's odds of seeking financial services. Nongender focused research suggests that both objective and subjective financial literacy are associated with the odds of using investment advice (Collins, 2012; Robb et al., 2012). Findings in this study suggest that only objectively measured financial literacy is relevant for the profile that uses less financial advice. The subjective measures of financial literacy appear to be relevant for the profile that uses more of these services. However, this second group does tend to have higher financial literacy.

Further research is needed to overcome the limitations of this study. For example, this research is correlational, rather than causal. Hence, for example, we cannot be sure that investment advice leads to greater household incomes and greater financial satisfaction. Instead, such advice-seeking behavior may merely co-occur with household income without making a causal contribution. Although causal connections are always difficult to establish, longitudinal data may be useful in studying these connections. Additionally, the "price" of having a large, nationally representative dataset is usually limited access to details about the nuances of each variable. Having additional data about the availability, type, source, price, frequency, and specific outcomes associated with investment advice may illuminate the investor profiles developed in this study further. In the future, either smaller scale studies or other large datasets collected primarily to study patterns in investment advice may provide additional useful insights.

Notes

1 Supplemental analysis indicates that 30% of male participants had used these services, which is significantly higher than women's usage via a one-tailed t test ($p < .001$).
2 Including partner's work status in the analysis produces clusters that are not cohesive or distinct. Hence, partner's work status is excluded from the final analysis.

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