INDIVIDUAL INVESTORS' NEEDS AND THE INVESTMENT PROFESSIONAL

Lessons from Marketing

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Introduction

For me, investing is playing with stock markets . . . It gives me a kick.

The statement above is a general remark from one of the respondents to our investment survey. Apart from its value as a piece of anecdotal evidence about investor behavior, it also illustrates that investing constitutes more than simply weighting the risk and returns of various investment assets. Or, as in the words of Fisher and Statman (1997, 48):

Some—perhaps most—investors have preferences that go beyond expected returns and risk. A preference for stocks of socially responsible companies is one example.

These insights are supported by the recent literature in behavioral finance, in which marketing and consumer-behavior theories and concepts are applied to distinguish between utilitarian and expressive characteristics of investing. Investing in stocks of specific companies can offer utilitarian benefits such as low risk and high returns but it also can have expressive benefits. For example, investments can help investors to demonstrate feelings of patriotism, social responsibility, and fairness, or convey a position of high status to other investors (Statman 1999; 2004). Stock trading may even offer an investor so-called "flow experiences" (Csikszentmihalyi 1997; Statman 2002, 17). This feeling is like the "kick" reported by the survey participant above or the camaraderie that day traders feel in trading rooms, which is the same feeling that players get in a casino (Statman 2002).

Investments, however, are private matters, not like wearing an exclusive watch or driving an expensive sports car, and outsiders generally are ignorant about the size and composition of one's investment portfolio. In other words, investments have low visibility and therefore have a limited signaling function toward outsiders. Statman (2004), however, argued that the self-signaling benefits (see e.g., Quattrone and Tversky 1984) of making, for example, socially responsible investments help to explain some investors' preference for these stocks. By signaling to themselves that they are socially responsible, these investors achieve expressive benefits. The value of self-signaling notwithstanding, I argue that investors-like consumers-sometimes may deliberately want to signal to outsiders by discussing investments in social networks. This may be to attain or maintain status; i.e., investments as a form of conspicuous consumption (Janssen & Jager 2003; Veblen 1899). Or this may be to satisfy other, more social needs, such as the need to participate in investmentrelated conversations or to affiliate with other investors. Investors simultaneously might satisfy multiple needs. For example, an investment process started to save for retirement may turn out to be a nice free-time activity that offers interesting learning opportunities. In this way, financial needs may be satisfied at the same time as social and intellectual needs. Although these possibilities are absent in the original needs hierarchy of Maslow (1954), simultaneities, complementarities, and trade-offs among different needs are introduced in more recent research on human needs (Jackson, Jager, and Stagl 2004; Max-Neef 1992).

Investment professionals must be aware that clients may have multiple needs so they can discover and cater to these needs. After all, successful financial products, like all successful products, meet customers' needs (Statman 1999, 25). This implies that investment professionals now explicitly have to deal with questions that formerly were considered to belong to the domain of marketing. Yet, it may well prove to be a challenging task to reinforce this link between marketing and investment (Statman 2004, 160):

Money managers, securities designers, and all other investment professionals practice marketing as they seek to understand investor needs, utilitarian and expressive, and satisfy them. Yet investment professionals are reluctant to discuss marketing, and few articles link marketing to the investment profession. I hope that in the future the link between investment and marketing would become stronger and more explicit.

Explicitly linking investment and marketing could imply, for example, that investments are consumption-rather than nonconsumption-goods bought by specific types of consumers. Fama and French (2005), two fierce proponents of standard finance (i.e., that only risk and expected returns matter), questioned the assumption that investment assets are nonconsumption goods. Consistent with the view of Fisher and Statman (1997), Fama and French (2005, 2) accepted that investors might be concerned with more than risk and expected returns, and they stated that loyalty or desire to belong also may impact investors' decision making. Examples of investments inspired by the latter considerations are holding the stocks of one's employer in greater quantities than justified by payoff characteristics (Cohen 2004), buying stocks of one's favorite football club, or avoiding so-called "sin stocks," i.e., stocks of companies active in businesses related to alcohol, tobacco, gambling, and weapons or defense (Waxler 2004).

In light of the many considerations and needs beyond risk and return that influence investors' behavior, it is surprising that finance journals are confined mostly to the utilitarian benefits of low risk and high expected returns (Statman 2004, 154). Just as surprising is that the literature offers no reports of empirical investigations about the multiple needs that investors may try to satisfy by investing, and whether there are significant differences in these needs between female and male investors, younger and older investors, or investors with lower versus higher levels of investment-related knowledge and experience. Investment professionals need a clear understanding of these differences because they are relevant for the design of new securities, obtaining new clients, retaining existing clients, and increasing the customer satisfaction of existing clients.

This paper presents a fine-grained empirical investigation about the multiple needs of individual investors using theories and research techniques originating in marketing and consumer-behavior research.

Method Participants and Design

o find out about the different needs of investors, an online questionnaire was developed and L administered in 2005–2006. Several consumerbehavior and investment experts were consulted for suggestions on the structure of the questionnaire and to assess its content and face validity (Mitchell 1996). The questionnaire was pilot tested among seventy-eight undergraduate and masters-level graduate students at the University of Groningen in the Netherlands. The purpose of the pilot test was to ensure that the respondents had no problems answering the questions and to ensure that the data were recorded properly. Moreover, the pilot test ensured the constructive validity of the questionnaire. After the pilot test, some minor layout and grammatical adjustments were made to the questionnaire. The various items and constructs, however, remained the same.

The final questionnaire was distributed online. The study sample required participants to be investors with direct investments in the stock market. Dutch privacy regulations, however, prohibited banks, investment companies, and other such financial institutions from distributing clients' contact information to external parties, so a sampling frame was developed that takes these privacy requirements into account. Subsequently, visitors to four well-known Dutch investment-related Web sites were asked to complete the questionnaire. These Web sites offer a wide range of investment-related information, e.g., analysts' reports on overall market developments or individual stocks, financial news items, etc. Moreover, these Web sites feature online discussion groups and provide access to online trading. These characteristics made visitors to these Web sites an appropriate respondent group.

As an incentive, participants were offered a chance to win an Apple iPod MP3 player that was raffled after the study. Each participant was clearly notified that this was a noncommercial, academic study and that under no circumstances would individual data be made available to any third party. It was, moreover, possible for respondents to complete the questionnaire anonymously. (In that case, however, they could not win the MP3 player because the researchers did not have their contact details.)

Some of the more sensitive questions (e.g., portfolio size, age) were optional. In these instances, missing answers did not lead to deletion of the questionnaire. In all other cases, incomplete questionnaires were deleted. In the end, 486 questionnaires remained for analysis.

Respondent Characteristics

The mean age of the respondents was fifty-three years and the median age was fifty-five. The youngest participant was sixteen years old and the oldest was eighty-five. The sample consisted of fifty-five female investors and 431 male investors. Mean portfolio size was approximately €226,000, with a median of €70,000, and a mode of €50,000 (in the period of the availability of the questionnaire, these figures were approximately comparable to US\$294,000, US\$91,000, and US\$65,000, respectively). The mean number of transactions that respondents executed annually was eighty-nine, with a median of thirty. On average, respondents had sixteen years of investing experience, with a median of thirteen years. These descriptive respondent characteristics are presented in table 1.

The relatively small sample size introduces the possibility that the sample and its respondents' characteristics are biased compared with the general population of investors who have direct investments in the Dutch stock market.

I therefore compared the respondents' age, gender, and portfolio-size distributions with data from the 2002 TNS-NIPO (Nederlands Instituut voor de Publieke Opinie en het Marktonderzoek) Investment Survey (results from this study are presented in, e.g., VEB [Vereniging van Effectenbezitters or Dutch Investors' Association] 2002). This comparison showed that our respondents were on average older (fifty-three years compared to forty-eight years) and more likely to be male (89 percent compared to 71 percent). The modal portfolio size of our respondents, however, equaled that found in the general population, i.e., €50,000 (approximately US\$65,000). Unfortunately, the NIPO 2002 Investment Survey did not offer information about the average number of annual transactions and years of investment experience.

The fact that our respondents visit investment-related Web sites, however, introduces the possibility of a morespecific type of sample bias: Considering that they are willing to invest free time viewing such Web sites makes it likely that they have a greater interest in investment research and knowledge than the general population.

The sample characteristics indeed may influence some of the respondents' scores in our survey. For example, these respondents may have a greater propensity than the general population of individual investors with direct investments in the Dutch stock market to consider investing a desirable free-time activity. Overall, however, our sample is not too far out of line with the population of individual investors who have direct investments in the Dutch stock market.

Measures

- The relevant questions in the questionnaire were classified into the following three groups:
- 1. Descriptive characteristics. The questionnaire asked about age, gender, portfolio size, number of years investing, and number of annual transactions.
- 2. Needs and their importance. The questionnaire asked six questions to determine the importance of

different needs that investors might strive to satisfy. In general they were of the following design: "I invest because . . ." Participants rated their agreement with statements describing different reasons for investing using a five-point Likert scale where 1 = completely disagree, 2 = disagree, 3 = neither disagree nor agree, 4 = agree, and 5 = completely agree. The statements were developed based on Max-Neef's (1992) matrix of needs and satisfiers.

 Investment-related knowledge and experience. A five-point Likert scale was used to measure investment-related knowledge and experience, where 1 = I have very little knowledge/experience, 2 = I have little knowledge/experience, 3 = I have an average amount of knowledge/experience, 4 = I have much knowledge/experience, and 5 = I have very much knowledge/experience.

The specific questions for each group, the number of respondents per question (N), the mean and median

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score, as well as the standard deviation (SD), are shown in table 1.

Results Investors' Multiple Needs

Figure 1 illustrates the importance of the different needs that respondents strive to satisfy by investing. Figure 1 shows that respondents rated the potential for financial gain as the most important reason for investing. It also shows, however, that a significant portion of them view investing as a "nice free-time activity," as well as an activity that satisfies social needs and the need to master new skills. The minimum rating of a need is a score of 1, indicating that the respondent completely disagreed with its importance; the need rated as least important by our respondents got an average score of 2.50.

The results of a one-way analysis of variance between groups (ANOVA) proved the differences in importance between all the different needs to be statistically significant F(5, 2887) = 139.13, p = 0.00.

QUESTION NO.	QUESTION / ITEM	Ν	MEAN	MEDIAN	SD
GROUP 1	DESCRIPTIVE CHARACTERISTICS				
1	Total	486	n/a	n/a	n/a
	Male	431	n/a	n/a	n/a
	Female	55	n/a	n/a	n/a
2	Age	485	53	55	12.39
3	Portfolio size in euros	256	226,000	70,000	794,132
4	Number of years investing	484	16	13	10.60
5	Number of transactions per year	478	89	30	273.24
GROUP 2	NFFDS ("LINVEST BECAUSE"): SCORES FROM 1–5				
6	of the potential for financial gain.	482	4.11	4	0.81
7	I like to analyze problems, look for new				
	constructions, and learn.	483	3.40	4	1.03
8	it is a nice free-time activity.	483	3.56	4	1.05
9	I want to safeguard my retirement.	483	3.05	3	1.12
10	I like to participate in investment-related				
	conversations with others.	479	2.86	3	1.16
11	I like to affiliate with other investors.	483	2.50	2	1.16
GROUP 3	INVESTMENT-RELATED KNOWLEDGE AND EXPERIENCE: SCO	DRES FROM 1	-5		
12	Self-reported amount of investment-related knowledge	483	3.34	3	0.73
13	Self-reported amount of experience in investing	482	3.34	3	0.74

BEHAVIORAL FINANCE



FIGURE 2



Average Scores and T-statistics for Female versus Male Investors									
	I INVEST BECAUSE OF THE POTENTIAL FOR FINANCIAL GAIN.	I INVEST BECAUSE I LIKE TO ANALYZE PROBLEMS, LOOK FOR NEW CONSTRUCTIONS, AND LEARN.	I INVEST BECAUSE IT IS A NICE FREE-TIME ACTIVITY.	I INVEST BECAUSE I WANT TO SAFEGUARD MY RETIREMENT.	I INVEST BECAUSE I LIKE TO PARTICIPATE IN INVESTMENT-RELATED CONVERSATIONS WITH OTHERS.	I INVEST BECAUSE I LIKE TO AFFILIATE WITH OTHER INVESTORS.	PORTFOLIO SIZE IN U.S. DOLLARS	TRANSACTIONS PER YEAR	INVESTMENT EXPERIENCE IN YEARS
Average Score Female Investors	4.15	3.53	3.40	3.25	2.74	2.44	80,720	58.52	13.64
Average Score Male Investors	4.11	3.38	3.58	3.02	2.88	2.50	241,772	93.15	16.17
Mean Difference Female/Male	0.04	0.15	-0.18	0.23	-0.13	-0.07	-161,052	-34.63	-2.53
Degrees of Freedom	480	481	481	481	477	481	249	194	85
T-statistic	0.33	0.99	-1.23	1.47	-0.80	-0.41	-2.73	-1.79	-2.19
P-value	0.74	0.32	0.22	0.14	0.42	0.68	0.01	0.07	0.03
Significant Difference at 10%	No	No	No	No	No	No	Yes	Yes	Yes

Female versus Male Investors

F igure 2 shows the differences in importance of the various needs of investors between female and male investors. Table 2 presents the average scores for the different needs and descriptive characteristics of these two groups, as well as the results of an independent samples t-test that shows which differences are statistically significant.

Figure 2 and table 2 show that female and male respondents both rated the potential for financial gain as the most important reason for investing. Female investors, however, scored slightly higher. Females also rated the need for understanding and mastering new skills as more important than investing as a nice free-time activity. For male investors, the relative importance of these two needs was the opposite.

The relative importance for the remaining needs show the same pattern for female and male investors, although the scores differ. Female investors were more concerned with retirement than male investors, while male investors rated the need for investment-related conversations higher than female investors, and they also rated the need for investing to affiliate with other investors as more important than female investors.

However, probably due to the small proportion of women in our sample, none of these differences between female and male investors' needs is statistically significant. Larger samples and samples with a more even distribution between men and women would be expected to show different, i.e., significant, results.

The right side of table 2 shows some descriptive differences between female and male investors. The female respondents to our survey had significantly smaller portfolios than the males. On average, the portfolio size of the female investors was about one-third of the males'. Furthermore, female investors had significantly less investment experience than male investors. On average, female investors had two and one-half years less investment experience than male investors. Moreover, female investors made significantly fewer transactions than male investors. On average, female investors made about thirty-five fewer transactions per year than male investors.

Males' larger number of transactions may be a result of overconfidence, i.e., male investors thinking they easily can beat the market. They also may be a consequence of males placing more importance on investing as a nice free-time activity.

Younger versus Older Investors

Figure 3 shows a comparison of younger respondents (those up to and including age fifty-five) with older respondents (those more than age fifty-five) regarding their answers about the importance of different needs satisfied by investing. Table 3 presents the average scores for the different needs and a number of descriptive characteristics of these two groups, as well as the results of an independent samples t-test that shows which differences are statistically significant. The results show that younger investors rated both potential financial gain and safeguarding retirement as more important than older investors did, even though older investors are closer to retirement. This likely is explained by the fact that younger investors actively are safeguarding retirements but older investors probably have secured retirements. These differences, however, were not statistically significant.

Figure 3 and table 3 also indicate that younger investors rated the need for understanding and mastering new skills as significantly more important than older investors. Older investors, however, rated the social need to affiliate with other investors as more important than younger investors did, though this difference is not statistically significant. Younger investors rated investing as a nice free-time activity as significantly more important than the older investors did. Younger investors also rated the need to participate in investment-related conversations with other investors as more important than older investors did, although this difference is not statistically significant.

The right side of table 3 shows descriptive differences between younger and older investors. Younger investors had significantly less investment experience, on average about seven years less, than older investors. Younger investors also had significantly smaller portfolios than older counterparts. The average younger inves-



Average Scores and T-statistics for Younger versus Older Investors									
	I INVEST BECAUSE OF THE POTENTIAL FOR FINANCIAL GAIN.	I INVEST BECAUSE I LIKE TO ANALYZE PROBLEMS, LOOK FOR NEW CONSTRUCTIONS, AND LEARN.	I INVEST BECAUSE IT IS A NICE FREE-TIME ACTIVITY.	I INVEST BECAUSE I WANT TO SAFEGUARD MY RETIREMENT.	I INVEST BECAUSE I LIKE TO PARTICIPATE IN INVESTMENT-RELATED CONVERSATIONS WITH OTHERS.	I INVEST BECAUSE I LIKE TO AFFILIATE WITH OTHER INVESTORS.	PORTFOLIO SIZE IN U.S. DOLLARS	TRANSACTIONS PER YEAR	INVESTMENT EXPERIENCE IN YEARS
Average Score Younger Investors	4.14	3.53	3.65	3.11	2.87	2.45	88,475.00	83.89	12.36
Average Score Older Investors	4.09	3.27	3.48	2.99	2.84	2.54	362,669.70	95.40	19.55
Mean Difference Younger/Older	0.05	0.26	0.17	0.12	0.03	-0.11	-274,194.70	-11.51	-7.19
Degrees of Freedom	479	480	480	480	476	480	131	347	368
T-statistic	0.77	2.78	1.81	1.11	0.27	-0.94	-2.82	-0.45	-7.80
P-value	0.44	0.01	0.07	0.27	0.78	0.35	0.01	0.65	0.00
Significant Difference at 10%	No	Yes	Yes	No	No	No	Yes	No	Yes

TABLE 3

tor's portfolio was about one-fourth the size of the older investor's. Both differences are unsurprising. In general, older investors have worked longer than younger investors, have accumulated more wealth, and have gained more investment experience. Nevertheless, the younger investors' relatively small portfolio size helps us to understand why they rate the potential for financial gain and safeguarding retirement more importantly; they need financial gains to safeguard retirement.

More surprising is that younger investors made fewer transactions than older investors but gave greater importance to investing as a nice free-time activity, which in fact could justify a more active approach to portfolio management and a larger number of transactions. Perhaps older investors simply have more time to manage their portfolios or the larger sizes of their portfolios account for the larger number of transactions. This difference in the number of transactions, however, was not statistically significant.

Differences in Investment-related Knowledge and Experience

 F_{a} lower level of investment-related knowledge and experience and investors with a higher level of investment-related knowledge and experience. Table 4 presents the average scores for the different needs and a number of descriptive characteristics of these two groups, as well as the results of an independent samples t-test that shows which differences are statistically significant.

Figure 4 and table 4 show that investors with a lower level of knowledge and experience rated all needs as less important than investors with a higher level of knowledge and experience. With regard to the need to safeguard one's retirement, the difference is relatively small and statistically insignificant, but for all other needs the differences between these two groups are both larger and statistically significant.



The right side of table 4 shows some descriptive differences between these two groups. Investors with less investment-related knowledge and experience made significantly fewer transactions per year than investors with a higher level of investment-related knowledge and experience. Not surprisingly, the less-knowledgeable and experienced investors also had been investing for a significantly fewer number of years than their moreknowledgeable and experienced counterparts. Investors with a lower level of investment-related knowledge and experience also had smaller portfolios than the investors with a higher level of investment-related knowledge and experience, although this last difference was not statistically significant.

Implications for Investment Professionals

Results indicate that our respondents care about much more than risk and expected returns when making investment decisions as already suggested by the literature on utilitarian versus expressive benefits of investing. Overall, these results suggest that financial needs should constitute an important part of all communications that investment consultants have with clients, either directly (face-to-face) or indirectly (brochures or other written material).

This study didn't find statistically significant differences between female and male investors, but investment professionals still should be aware of possible gender differences. Future studies with larger samples and/or samples with a more even distribution between female and male investors likely will show significant gender differences. Therefore, I do consider it worthwhile to outline some ways that investment consultants could adapt sales pitches and marketing communications to accommodate the potential gender differences suggested by this study.

 When dealing with a female client, an investment consultant might consider paying additional attention to the client's need to understand and master new skills. When dealing with a male client, an investment consultant might focus on the client's

Average Scores and T-statistics for Investors with Lower versus Higher Levels of Knowledge and Experience									
	I INVEST BECAUSE OF THE POTENTIAL FOR FINANCIAL GAIN.	I INVEST BECAUSE I LIKE TO ANALYZE PROBLEMS, LOOK FOR NEW CONSTRUCTIONS, AND LEARN.	I INVEST BECAUSE IT IS A NICE FREE-TIME ACTIVITY.	I INVEST BECAUSE I WANT TO SAFEGUARD MY RETIREMENT.	I INVEST BECAUSE I LIKE TO PARTICIPATE IN INVESTMENT-RELATED CONVERSATIONS WITH OTHERS.	I INVEST BECAUSE I LIKE TO AFFILIATE WITH OTHER INVESTORS.	PORTFOLIO SIZE IN U.S. DOLLARS	TRANSACTIONS PER YEAR	INVESTMENT EXPERIENCE IN YEARS
Average Score Investors with lower Level of Knowledge and Experience	4.04	3.18	3.39	3.02	2.72	2.41	218,868.84	61.26	12.70
Average Score Investors with higher Level of Knowledge and Experience	4.20	3.67	3.79	3.09	3.04	2.61	242,135.83	124.50	19.62
Mean Difference Lower/Higher Level of Knowledge and Experience	-0.16	-0.51	-0.40	-0.07	-0.32	-0.20	-23,266.98	-63.24	-6.92
Degrees of Freedom	474	475	475	475	471	475	240	250	406
T-statistic	-2.18	-5.38	-4.23	-0.66	-3.01	-1.87	-0.24	-2.34	-7.36
P-value	0.03	0.00	0.00	0.51	0.00	0.06	0.82	0.02	0.00
Significant Difference	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes

need for investing to fill more social needs such as a nice free-time activity, participating in investmentrelated conversations, and affiliating with others. For example, a consultant might develop different advertisements for magazines with a majority female readership (e.g., *Marie Claire, Redbook*, or *Elle*), for magazines with a majority male readership (e.g., *Esquire, Maxim*, or *Road and Track*), and magazines with an evenly mixed-gender readership (e.g., *Business Week, Forbes*, or *Time*). Further research on the significance of the differences between female and male investors will clarify these approaches.

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2. The significant differences between female and male investors with regard to portfolio size, number of transactions per year, and investment experience in years may shed light on the respective profitability of these two groups. It is tempting to consider male clients more lucrative than female clients for investment consultants, based on males' larger portfolio sizes and transaction volumes. Male investors, however, have more investment experience, which makes it more likely that they are self-supporting clients who are more likely to use online brokerages instead of the more costly and personal services of an investment consultant. Female investors, on the other hand, have less investment experience and therefore might be more apt to hire an investment consultant.

3. Investment professionals also should be aware of age differences in order to improve their service. When dealing with a younger client, an investment consultant might focus on the client's need for understanding and mastering new skills as well as the need for investing as a nice free-time activity. Younger investors score significantly higher on these needs than older investors and therefore may be expected to be either more willing to invest in or be less price-sensitive to securities that match this profile.

- 4. Based on portfolio-size data, it also is tempting to view an older investor as a more-lucrative client. But a younger investor, with a smaller portfolio and fewer years of experience, likely is more in need of investment advice to safeguard retirement. Designing the right investment plan for this younger investor today offers the prospect of a long-term relationship and accompanying profits tomorrow and well into the future.
- 5. The practical implications of differences between those with more investment knowledge and experience and those with less also are two-sided.

On the one hand, these two groups ranked their needs for investing in the same order of importance and differed only in the magnitude of those importances (the less knowledgeable and experienced investors gave the needs less importance, while the more knowledgeable and experienced group gave them more). This suggests that investment professionals don't need to differentiate overall marketing plans and securities design between investors with lower levels of investment-related knowledge and experience and investors with higher levels of investment-related knowledge and experience.

On the other hand, this magnitude difference is a clear piece of marketing information: It means that investment professionals could expect these two groups to differ in sensitivity and response to the amount and type of marketing communications and differences in securities design. Beatty and Smith (1987) found that consumers with more knowledge and experience performed less external searching (e.g., reading specialized magazines and consumer reports) and more internal searching (e.g., recapitulating one's own experiences). Moreover, consumers who are experts with regard to the decision at hand perform more select and bottom-up searches, including comparing details, while novices are more sensitive to external cues such as brand image and price and are more top-down. Furthermore, while novices are sensitive to, for example, the sheer number of technical details provided in marketing communications, experts are more likely to judge the significance of these technical details (Solomon 2006).

Conclusion

The behavioral finance literature argues that investors may care about more than risk and returns. Investing may offer expressive benefits such as status and feelings of social responsibility as well as utilitarian benefits such as low risk in combination with high returns. Different investors like stocks for different reasons as they try to satisfy different needs with investments. This empirical study examined the different needs that investors aim to satisfy by investing. The investment survey resulted in a fine-grained distinction between these different needs and showed important differences between female and male investors, between younger and older investors, and between less knowledgeable and experienced investors.

In this paper, I've made a direct link between marketing and investments by using marketing and consumer behavior theories to discuss the survey's implications in marketing terms.

Investment professionals, including investment consultants, are advised to consider investors' differing needs, then adapt marketing plans, communication with existing and potential clients, and new securities designs accordingly.

This study, however, carries a number of important limitations to note before generalizing the results beyond the investors who participated in this study.

First, the greatest portion of the general population with direct investments in the Dutch stock market is made up of older males. The participants of this study, however, were slightly older and even more likely to be male than the investors in the general population.

Second, the participants were interested in spending free time on investment-related Web sites and seemed to be relatively active investors who like to transact. These two characteristics may have led to higher scores for investing as a nice free-time activity.

Third, although the modal portfolio size of the study participants was equal to that of the general population, it is important to realize that these investors on average had a reasonable amount of wealth in their portfolios.

Fourth, the respondents of our survey were Dutch investors. Dutch society, like that of the United States, Great Britain, and Australia, has a high level of individuality (Hofstede 1983). Similar results therefore would be expected to be found in the United States, Great Britain, and Australia. Additional studies, however, will have to show characteristics of investors in more collectivistic countries such as those in Central America, Asia, or Scandinavia.

Future studies with both larger and more international samples will need to be conducted to demonstrate the universality of this study's results.

Acknowledgment

I am grateful to Meir Statman for his insightful comments on previous versions of this paper and the time and effort he invested in our discussions.

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