Essays on the social dimensions of investor behavior
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2. Individual Investors’ Needs and the Investment Professional: Lessons from Marketing

2.1 Introduction

“...for me, investing is playing with stock markets...it gives me a kick.”

Above-mentioned statement was entered as a general remark by one of the respondents of our investment survey. Apart from its value as a piece of anecdotic evidence on investor behavior, it also serves to illustrate that for many investors, 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 the stocks of specific companies can offer utilitarian benefits like low risk and high returns, but also expressive benefits. For example, investments can help investors to demonstrate their feelings of patriotism, social responsibility and fairness or convey a position of high status to other investors (Statman, 1999;


2 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.
Essays on The Social Dimensions of Investor Behavior

2004). Stock trading may even offer an investor so-called ‘flow experiences’ (Csikszentmihalyi, 1997; Statman, 2002: 17). This feeling comes close to that of ‘getting a kick’ as uttered by the investor quoted above and is related to the feeling of camaraderie day traders may experience when they come together in trading rooms like players in a casino (Statman, 2002).

Investments, however, are private matters and contrarily to wearing exclusive watches or driving expensive sports cars, outsiders will in general be relatively ignorant with respect to the size and composition of one’s investment portfolio. Investments have a low visibility, and therefore can be considered to have a limited signaling function towards outsiders. Statman (2004), however, argued that the self-signaling benefits (see e.g., Quattrone and Tversky (1984)) of making e.g., socially responsible investments help to explain the preference of some investors for these stocks. By signaling to themselves that they are socially responsible members of society, these investors achieve expressive benefits. Notwithstanding the value of self-signaling, we argue that investors - like consumers - may sometimes also deliberately want to signal to outsiders, by displaying and discussing about their investments with other investors in their social networks. This may be in order 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 socially oriented needs, like the need to participate in investment related conversations or to affiliate with other investors. Investors might even simultaneously satisfy multiple needs. For example, an investment process initially started to save for retirement may turn out to be a nice free time activity as well as offering interesting learning opportunities. In this way, financially oriented needs may be satisfied at the same time as socially and intellectually oriented needs. Although these possibilities are absent in the original needs hierarchy of Maslow (1954), simultaneities, complementarities, and trade-offs between different needs are introduced in more recent research on human needs (Jackson et al., 2004; Max-Neef, 1992).

For investment professionals, it is important to be aware that their clients may have multiple needs, and to discover and cater to these needs. After all, successful financial products, like all successful products, are those that meet the needs of customers (Statman, 1999: 25). This implies, that investment professionals now explicitly have to deal with questions that were formerly 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 for example imply that investments are viewed as a specific type of consumption good bought by a
specific type of consumer instead as non-consumption goods. Fama and French (2005), two most fierce proponents of standard finance that assumes that only risk and expected returns matter, have recently questioned the common assumption in finance that investment assets are not also consumption goods. Consistent with the view of the previously cited behavioral finance scholars, Fama and French (2005: 2) accepted that investors might be concerned with more than risk and expected returns and stated that loyalty or the desire to belong to others may also 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’. Sin-stocks are stocks of companies active in businesses related to e.g., alcohol, tobacco, gambling, and weapons or defense (Waxler, 2004).

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

We contribute by performing a fine-grained empirical investigation on the multiple needs of individual investors using theories and research techniques originating from marketing and consumer behavior research.

The remainder of this chapter is organized as follows. Section 2.2 describes the methodology. Section 2.3 presents the results of the study. Section 2.4 states the possible implications for investment professionals like investment consultants and offers practical advice on how to deal with the results of this study. The final section 2.5 concludes, discusses the limitations of the study, and indicates directions for future research.

2.2 Method

2.2.1 Participants and Design

To find out the different needs of investors, an online questionnaire was developed and administered in 2005-2006. To allow for suggestions on the structure of the questionnaire as well as to assess the content and face validity of the questionnaire (Mitchell, 1996), several consumer behavior and investment experts were
consulted. Moreover, before using the questionnaire to collect final data, it was pilot tested amongst 78 Bachelor and Master Students at the author’s university. The purpose of the pilot test was to ensure that the respondents had no problems in answering the questions and to make sure that the recording of the data was properly executed. Moreover, the pilot test ensured the constructive validity of the questionnaire. After the pilot test, some minor lay-out and grammatical adjustments were made to the questionnaire. The various items and constructs, however, remained the same.

The final questionnaire was distributed online. Individual investors with direct investments in the stock market were needed for the study sample. However, due to the Dutch privacy regulations, it is prohibited for e.g., banks and investment companies to distribute contact information about their clients to external parties. Therefore, a sampling frame was developed which takes the above-mentioned considerations into account. Subsequently, visitors of 4 well-known Dutch investment-related websites were asked to complete the questionnaire. These websites offer a wide range of investment-related information, as e.g., analysts reports on overall market developments or individual stocks, and financial news items. Moreover, they feature online discussion groups and provide access to online trading systems. These characteristics made visitors of these websites an appropriate respondent group.

As an incentive, participants could win an Apple iPod MP3 player that was raffled after the study. Before completing the questionnaire, it was made clear to all participants that this was a non-commercial academic study and that under no circumstances their individual data would 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, as the researchers did not have their contact details.

For some more sensitive questions, for example with regard to the respondent’s portfolio size and their age, it was indicated that these questions did not need to be answered. In these instances, missing answers did not lead to deletion of the questionnaire. In all other cases, incomplete questionnaires were deleted, after which 486 questionnaires remained for further analysis. The questionnaire can be found in appendix 2.1 at the end of this chapter.

2.2.2 Respondent Characteristics

The mean age of the respondents was 53 years, while the median age was 55 years. The youngest participant was 16 years old, while the oldest participant was 85 years old. The sample consisted of 431 male investors and 55 female investors. Mean portfolio size was approximately 226,000 Euro, with a median of 70,000 Euro, and a mode of 50,000 Euro (in the period of the availability of the questionnaire this is comparable to approximately 294,000, 91,000, and 65,000 US Dollar, respectively). The mean number of transactions that respondents executed on a yearly basis was 89, with a median of 30. On average, the
respondents had 16 years of investing experience, with a median of 13 years. These descriptive respondent characteristics are presented in table 2.1.

The relatively small sample size of this investment survey introduces the possibility of a general bias in the sample with respect to these respondent characteristics in comparison to the general population of investors with direct investments in the Dutch stock market.

Therefore, we compared the respondents’ age and gender distribution as well as their portfolio size with data from the 2002 NIPO Investment Survey (results from this study are presented in e.g., VEB (2002)). This comparison showed that our respondents were on average older (53 years as compared to 48 years) and more likely to be male (89% as compared to 71%). The modal portfolio size of our respondents, however, was equal to the size that could be found in the general population, i.e. 50,000 Euro (in the period of the availability of the questionnaire this is comparable to approximately 65,000 US Dollar). Unfortunately, the NIPO Investment Survey (2002) did not offer information on the average number of transactions and years of investment experience. It was therefore not possible to check whether our sample is biased in that respect. Yet, based on the previously presented information, it is plausible that our respondents are relatively active investors.

The fact that the respondents of our investment survey are visitors of investment-related websites introduces the possibility of a more specific type of sample bias. That is, considering that the respondents are willing to invest their free time in accessing investment-related websites on their computers makes it likely that they have a greater interest in investment research and knowledge than the general population.

It is important to be aware of the possibility that the previous characteristics may have an influence on some of the respondents’ scores on the questions of our investment survey. For example, it could be possible, that our respondents have a greater propensity to consider investing to be a nice free time activity. Yet, the comparison of our sample on the general respondent characteristics proved our sample not to be far out of line with the more general population of individual investors with direct investments in the Dutch stock market.

2.2.3 Measures

The relevant questions in the questionnaire were classified into three groups.

First, we asked descriptive characteristics of the respondents as discussed above.

Second, a number of questions were asked to determine the importance of the different needs that investors might strive to satisfy. Participants reported the importance of the various needs by rating their agreement with statements that described 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 development of the statements was based on Max-
Neef’s (1992) Matrix of Needs and Satisfiers by translating his statements to an investment setting. In general they were of the following design: “I invest because…”. For each need, a statement was developed, resulting in six questions in total that were used to measure the importance of the different needs.

Third, the respondents were requested to self-report on their investment-related knowledge and experience. In this respect, it is important to note that recent research on individual investors has shown that the self-perception of investors as revealed by their survey responses is fairly accurate (Dorn & Huberman, 2005: 440). That is, the self-reported knowledge of investors is strongly positively related to the actual knowledge of these investors. A five-point Likert scale was subsequently used to measure the level of 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 score, as well as the standard deviation (SD) are all available in table 2.1 below.
Table 2.1. Questions and Descriptives

<table>
<thead>
<tr>
<th>Question no.</th>
<th>Question / Item</th>
<th>N</th>
<th>Mean</th>
<th>Median</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>Descriptive characteristics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Gender</td>
<td>486</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>431</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>55</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>2</td>
<td>Age</td>
<td>485</td>
<td>53</td>
<td>55</td>
<td>12.39</td>
</tr>
<tr>
<td>3</td>
<td>Portfolio size in Euro</td>
<td>256</td>
<td>226.000</td>
<td>70.000</td>
<td>794.132</td>
</tr>
<tr>
<td>4</td>
<td># of years investing</td>
<td>484</td>
<td>16</td>
<td>13</td>
<td>10.60</td>
</tr>
<tr>
<td>5</td>
<td># of transactions per year</td>
<td>478</td>
<td>89</td>
<td>30</td>
<td>273.24</td>
</tr>
<tr>
<td>Group 2</td>
<td>Needs (&quot;I invest because...&quot;) : scores from 1-5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>...of the potential for financial gain</td>
<td>482</td>
<td>4.11</td>
<td>4</td>
<td>0.81</td>
</tr>
<tr>
<td>7</td>
<td>...I like to analyze problems, look for new constructions and learn</td>
<td>483</td>
<td>3.40</td>
<td>4</td>
<td>1.03</td>
</tr>
<tr>
<td>8</td>
<td>...it is a nice free time activity</td>
<td>483</td>
<td>3.56</td>
<td>4</td>
<td>1.05</td>
</tr>
<tr>
<td>9</td>
<td>...I want to safeguard my retirement</td>
<td>483</td>
<td>3.05</td>
<td>3</td>
<td>1.12</td>
</tr>
<tr>
<td>10</td>
<td>...I like to participate in investment related conversations with others</td>
<td>479</td>
<td>2.86</td>
<td>3</td>
<td>1.16</td>
</tr>
<tr>
<td>11</td>
<td>...I like to affiliate with other investors</td>
<td>483</td>
<td>2.50</td>
<td>2</td>
<td>1.16</td>
</tr>
<tr>
<td>Group 3</td>
<td>Investment-related knowledge and experience : scores from 1-5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Self-reported amount of investment-related knowledge</td>
<td>483</td>
<td>3.34</td>
<td>3</td>
<td>0.73</td>
</tr>
<tr>
<td>13</td>
<td>Self-reported amount of experience in investing</td>
<td>482</td>
<td>3.34</td>
<td>3</td>
<td>0.74</td>
</tr>
</tbody>
</table>
2.3 Results

2.3.1 Investors’ Multiple Needs

As a general result, in figure 2.1 below, the importance of the different needs investors strive to satisfy by investing are plotted in a bar chart.

![Bar Chart](image)

**Fig. 2.1.** Importance of Investors’ Needs.

Figure 2.1 shows, that although the respondents rate the potential for financial gain as the most important reason for investing, investing as a nice free time activity, more socially oriented needs - *participating in investment related conversations with others* -

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3 We have also performed a number of non-parametric tests, like the Mann-Whitney U-test, which led to very similar results.
conversations, and affiliation with other investors - and needs more focused at understanding and mastering new skills - investing as an opportunity to analyze problems, look for new constructions and learn - are also rated as important needs. Although the minimum rating of a need is a score of 1 - indicating that the respondents completely disagreed with its importance - even the need that is rated as the least important by our respondents has an average score of 2.50.

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

2.3.2 Male versus Female Investors

Figure 2.2 displays the differences in importance of the different needs of investors between female and male investors. Table 2.2 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.

![Fig. 2.2. Differences between the Importance of Investors’ Needs due to Gender.](image)

From the bar chart in figure 2.2 and the data of table 2.2, we can see that both male and female respondents rate the potential for financial gain as the most important reason for investing. In comparison to male investors, female investors, however, have a score that is slightly higher. It is furthermore interesting to see, that females rate the need for understanding and mastering new skills - investing
as an opportunity to analyze problems, look for new constructions and learn - as more important than investing as a nice free time activity. For male investors, the relative importance of these two needs is the other way around. Male investors rate the need for investing as a nice free time activity as more important than the need for understanding and mastering new skills. The relative importance for the remaining needs show the same pattern for male and female investors, although the scores differ. Female investors are more concerned with their retirement than male investors, while male investors rate the need for investment related conversations higher than female investors, and also rate the need for investing to affiliate with other investors as more important than female investors do. It should be noted, however, that - probably due to the relatively small proportion of women in our sample - none of the differences between male and female investors with regard to the importance of the different needs is statistically significant. It can be expected, that larger samples and samples with a more even distribution between men and women show different - i.e. significant - results.
Table 2.2. Average Scores and T-statistics for Female versus Male Investors.

<table>
<thead>
<tr>
<th>Investment Experience in Years</th>
<th>1.45</th>
<th>3.50</th>
<th>4.11</th>
<th>0.04</th>
<th>0.23</th>
<th>0.53</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transactions per Year</td>
<td>4.98</td>
<td>5.10</td>
<td>5.32</td>
<td>5.94</td>
<td>0.15</td>
<td>0.22</td>
<td>No</td>
</tr>
<tr>
<td>Portfolio Size in US Dollar</td>
<td>3.24</td>
<td>2.31</td>
<td>2.70</td>
<td>3.02</td>
<td>0.48</td>
<td>0.27</td>
<td>No</td>
</tr>
</tbody>
</table>

...I invest because I want to participate in investment related conversations with others...

...I invest because I want to safeguard my retirement...

...I invest because it is a nice free time activity...

...I invest because I like to analyze problems, look for new constructions and learn...

...I invest because of the potential for financial gain...
On the right-hand side of table 2.2, we also present some general descriptive differences between male and female investors. From this table we can see that the female investors in our investment survey had significantly smaller portfolio sizes than their male counterparts. On average, the portfolio size of the male investors was about three times the size of those of the female investors. The male investors in our sample were also on average about 2 years older than the female investors, which might have enabled them to accumulate more wealth than the female investors. Yet, the differences in portfolio size seem too large to be explained by age differences only. Nevertheless, it is a common finding in the literature that female investors hold smaller portfolio’s of stocks than male investors (see e.g., Barber and Odean (2001: 275)).

Furthermore, female investors had significantly less investment experience than male investors. On average, male investors had 2.5 years more investment experience than the female investors.

Moreover, female investors performed significantly less transactions than male investors. On average, male investors performed about 35 transactions per year more than female investors did. In percentage terms, this means that the male investors traded almost 60% more than the female investors. This large number of transactions may be a consequence of the before-mentioned importance for male investors of investing as a nice free time activity and the accompanying active portfolio management. Yet, the large number of transactions of male investors might also be a result of overconfidence; male investors may think that they can easily beat the market and as a result they perform many transactions. This explanation is supported by recent behavioral finance research which has shown that overconfident investors trade more than investors who do not suffer from overconfidence (Odean, 1998). Moreover, male investors have a predisposition for overconfidence as shown by a recent study of Barber and Odean (2001). Using a very large sample from a discount brokerage firm, the latter study documented that due to overconfidence, men in this sample traded 45% more than women.

### 2.3.3 Younger versus Older Investors

In figure 2.3 below, based on the median age of our respondents, we have made a distinction between younger (up to 55 years) and older (from 55 years) investors. For these two groups, a bar chart is shown comparing their scores on the importance of the different needs. Table 2.3 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.
Fig. 2.3. Differences between the Importance of Investors’ Needs due to Age.
Table 2.3. Average Scores and T-statistics for Younger versus Older Investors.

<table>
<thead>
<tr>
<th>Investment Experience in Years</th>
<th>Transactions per Year</th>
<th>Portfolio Size in US Dollar</th>
</tr>
</thead>
<tbody>
<tr>
<td>...I invest because I like to affiliate with other investors...</td>
<td>...I invest because I like to participate in investment related conversations with others...</td>
<td>...I invest because I want to safeguard my retirement...</td>
</tr>
<tr>
<td>...I invest because it is a nice free time activity...</td>
<td>...I invest because I like to analyze problems, look for new constructions and learn...</td>
<td>...I invest because of the potential for financial gain...</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Average Score Younger Investors</th>
<th>Average Score Older Investors</th>
<th>t-value</th>
<th>Degrees of Freedom</th>
<th>p-value</th>
<th>Significant Difference at</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.14</td>
<td>3.51</td>
<td>-1.11</td>
<td>199</td>
<td>0.03</td>
<td>No</td>
</tr>
<tr>
<td>4.71</td>
<td>3.79</td>
<td>0.97</td>
<td>199</td>
<td>0.33</td>
<td>No</td>
</tr>
<tr>
<td>5.66</td>
<td>4.48</td>
<td>1.19</td>
<td>199</td>
<td>0.00</td>
<td>No</td>
</tr>
<tr>
<td>4.09</td>
<td>3.27</td>
<td>-0.81</td>
<td>199</td>
<td>0.88</td>
<td>No</td>
</tr>
<tr>
<td>4.00</td>
<td>2.81</td>
<td>1.19</td>
<td>199</td>
<td>0.00</td>
<td>No</td>
</tr>
<tr>
<td>4.14</td>
<td>3.51</td>
<td>-1.11</td>
<td>199</td>
<td>0.03</td>
<td>No</td>
</tr>
<tr>
<td>4.71</td>
<td>3.79</td>
<td>0.97</td>
<td>199</td>
<td>0.33</td>
<td>No</td>
</tr>
<tr>
<td>5.66</td>
<td>4.48</td>
<td>1.19</td>
<td>199</td>
<td>0.00</td>
<td>No</td>
</tr>
</tbody>
</table>

36
From the bar chart in figure 2.3 and the data of table 2.3, it is interesting to note that younger investors rate both the need for the potential for financial gain as well as the need for safeguarding their retirement as more important than older investors do. Although for older investors, retirement is closer by than for younger investors, it are exactly the younger investors who rate this need as a more important reason for investing. This can be explained in the following way. Just because retirement is closer by for older investors, this does not automatically make it a more important issue for them. Rather, the chances are higher that they have already taken care of it, which might lower its importance for this group of investors. Younger investors, however, have to think now about what to do in order to safeguard their future retirement. These differences, however, were not statistically significant.

Moreover, figure 2.3 and table 2.3 indicate that younger investors rate the need for understanding and mastering new skills - investing as an opportunity to analyze problems, look for new constructions and learn - as significantly more important than older investors. These older investors, on the contrary, rate the more social need to affiliate with other investors as more important than younger investors do, although this difference is not statistically significant. The younger investors rate investing as a nice free time activity as significantly more important than the older investors do. Moreover, younger investors rate the need to participate in investment related conversations with other investors as more important than older investors do, although this difference is not statistically significant.

On the right-hand side of table 2.3, we also present some general descriptive differences between younger and older investors. From this table, we can see that older investors have significantly more investment experience than younger investors. On average, older investors have about 7 years more of investment experience than younger investors. Moreover, older investors have a significantly larger portfolio size than their younger counterparts. The portfolio of older investors is on average about four times the size of those of the younger investors. Both differences are unsurprising. In general, older investors have worked for more years than younger investors, which enabled them to accumulate more wealth and gain more investment experience. Nevertheless, the relatively small portfolio size of younger investors helps to understand why they rate the potential for financial gain and safeguarding one’s retirement as more important than the older investors; these young investors simply need to achieve sufficient financial gains to safeguard their retirement as their current portfolio size is not yet sufficient to live from when they are retired.

More surprising is that the older investors perform more transactions than the younger investors, while the younger investors give greater importance to the need of investing as a nice free time activity, which in fact could justify a more active portfolio management and a larger number of transactions. Perhaps the older investors simply have more time available for managing their portfolio’s or the larger portfolio size of the older investors accounts for the larger number of transactions. This last difference, however, was not statistically significant.
2.3.4 Differences in Investment-related Knowledge and Experience

In figure 2.4 below, using the median level of investment-related knowledge and experience of our respondents, we have made a distinction between investors with a high level of investment-related knowledge and experience and investors with a low level of investment-related knowledge and experience. Table 2.4 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.

From the bar chart in figure 2.4 and the data of table 2.4, we can see that investors with a lower level of knowledge and experience rate all needs as less important than investors with a higher level of knowledge and experience. With regard to the need that deals with safeguarding one’s retirement, the difference in importance between investors with a lower level of knowledge and experience and investors with a higher level of knowledge and experience is relatively small and statistically insignificant, while the differences between these two groups are both statistically significant and more substantial for all the other needs.

On the right-hand side of table 2.4, we also present some general descriptive differences between these two groups. It was found that investors with more investment-related knowledge and experience performed significantly more transactions per year than investors with a lower level of investment-related knowledge and experience. Not surprisingly, those investors that had a higher level of investment-related knowledge and experience, were also significantly more experienced in the number of years they already invested in comparison to
the investors that reported lower levels of investment-related knowledge and experience. Moreover, investors with a higher level of investment-related knowledge and experience had a larger portfolio size than the investors with a lower level of investment-related knowledge and experience, although this last difference was not statistically significant.
Table 2.4. Average Scores and T-statistics for Investors with lower versus higher Levels of Knowledge and Experience.

| Investment Experience in Years | 12.71 | 130.46 |
| Transactions per Year | 61.26 | 19.46 |
| Portfolio Size in US Dollar | 21,842.24 | 124.30 |

...I invest because I like to affiliate with other investors...

| 2.41 | -6.92 |

...I invest because I like to participate in investment related conversations with others...

| 2.72 | -6.25 |

...I invest because I want to safeguard my retirement...

| 3.62 | -2.34 |

...I invest because it is a nice free time activity...

| 3.59 | -2.78 |

...I invest because I like to analyze problems, look for new constructions and learn...

| 3.69 | -2.34 |

...I invest because of the potential for financial gain...

| 3.84 | -2.78 |

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<th>Average Score Investors with higher Level of Knowledge and Experience</th>
<th>Average Score Investors with lower Level of Knowledge and Experience</th>
<th>Difference (Level of Knowledge and Experience)</th>
<th>Degrees of Freedom</th>
<th>T-statistic</th>
<th>F-test</th>
<th>Significant Difference</th>
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2.4 Implications for Investment Professionals

The results of our investment survey indicated that our respondents care about much more than risk and expected returns when making their investment decisions as was already suggested by the literature on utilitarian versus expressive benefits of investing. Using a fine-grained distinction between six different needs, we now have an insight into the importance of these different needs for real-life investors.

Investment professionals like investment consultants should be aware of this insight and use this knowledge in their day-to-day contact with clients, their more long-term marketing plans, as well as in the design of new security products. In the next few paragraphs, we will more extensively deal with the implications of our study for investment professionals.

First, although in this study the differences between male and female investors with regard to the importance of the different needs were found to be statistically insignificant, it is important for investment professionals like investment consultants to be aware of possible gender differences. Future studies with larger samples and/or samples with a more even distribution between male and female investors might show significant differences between male and female investors. Therefore, we do consider it worthwhile to sketch a perspective on the ways investment consultants could adapt their sales pitches and marketing communications to deal with the gender differences as found in our study given that they would be found to be significant in future studies.

In general, our results suggest that financially oriented needs should constitute an important part of all communications investment consultants have with their clients, either more directly through face-to-face contacts, or more indirectly through e.g., brochures on investing.

However, investment consultants might also consider it worthwhile to pay additional attention to needs focused more at understanding and mastering new skills when dealing with female clients. When dealing with male clients, investment consultants might focus on investing as a nice free time activity, and more social needs like participating in investment-related conversations with other investors, and affiliating with others. A practical example of this would be to develop differentiated advertisements for magazines of which the majority of the readership is female (e.g., Marie Claire, Redbook, or Elle), magazines of which the majority of the readership is male (e.g., Esquire, Maxim, or Road and Track), and magazines with a more mixed readership (e.g., Business Week, Forbes, or Time Magazine).

However, before implementing these suggestions, further research on the significance of the differences between male and female investors has to be awaited.

We did, however, find significant differences between male and female investors with regard to their portfolio size, number of transactions per year, and their investment experience in years. Dependent on how these relationships are in the overall investor population, investment professionals might like to take these
more general differences between male and female investors into account as they can give indications of the respective profitability of these two groups.

Based on the potential for high revenues in terms of brokerage and transaction fees that can be associated with male investors’ large portfolio sizes and substantial number of transactions, it is tempting to consider this group to contain the most lucrative clients. However, male investors have more investment experience which makes it more likely that this are relatively self-supporting clients that are more likely to use online brokerage services - which are known for their relatively low margins - instead of the more costly and more personal services of an investment consultant. Female investors, on the other hand, have less years of investment experience, and therefore might be more willing to consider high-margin services like the additional - personal - counseling and education from an investment consultant.

Second, it is important for investment professionals and investment consultants to be aware of age differences. Investment professionals and consultants who fine-tune their communications, marketing efforts, and design of new securities to accommodate these differences are expected to have better chances of improving their company’s performance than investment professionals who do not take these differences between investors into account. When dealing with younger clients, investment consultants might focus on the need for understanding and mastering new skills - investing as an opportunity to analyze problems, look for new constructions and learn - and investing as a nice free time activity. Younger investors score significantly higher on these needs than older investors and can therefore be expected to be either more willing to invest in or be less price-sensitive to securities that match this profile.

Although based on the significantly larger portfolio size of older investors compared to younger investors, the former group seems more lucrative than the latter group in terms of e.g., brokerage and transaction fees, younger investors might also constitute a rewarding target, especially for investment consultants. Younger investors - with their significantly smaller portfolio sizes and less years of investment experience than older investors - are probably more in need of specific investment advice to for example financially safeguard their retirement, than older investors, who are already close to retirement. Designing the right investment plan for these younger investors today offers the perspective of a long-term relationship with these clients and the accompanying profits tomorrow and the days after tomorrow.

Third, investment professionals like investment consultants should be aware of the possible differences of their clientele with regard to their investment-related knowledge and experience and the impact of these differences on the importance of the different needs of investors.

The practical implications of these differences are two-sided. On the one hand, the difference between the two groups of investors is only a difference in magnitude of the importance of the different needs. There are no specific needs for which the investors with a higher level of investment-related knowledge and
experience score higher and other needs for which the investors with a lower level of investment-related knowledge and experience score higher. Overall, investors with a higher level of investment-related knowledge and experience score higher than those with a lower level of investment-related knowledge and experience. This suggests that investment professionals do not need to differentiate in their 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 per se. On the other hand, investors with lower levels of investment-related knowledge and experience had an overall lower rating of the different needs than investors with higher levels of investment-related knowledge and experience. This is a clear piece of marketing information in the sense that investment professionals could expect these two groups to differ in their sensitivity and response towards the amount and type of marketing communications and differences in securities design. In general, consumers with more knowledge and experience have been found to perform less external search (e.g., reading specialized magazines and consumer reports) and more internal search (e.g., recapitulating from one’s own experiences) (Beatty & Smith, 1987). Moreover, consumers that can be considered to be experts with regard to the specific decision at hand perform more selected and bottom-up search, starting comparing details, while novices are sensitive for external cues like brand image and price and are more top-down oriented. Furthermore, while novices are sensitive for e.g., the sheer number of technical details provided in marketing communications, experts are more likely to judge the significance of these technical details (Solomon, 2007).

2.5 Conclusion and Discussion

The behavioral finance literature argued that investors may care about more than risk and returns. Investing may offer expressive benefits like status and feelings of social responsibility besides utilitarian benefits like low risk in combination with high returns. Tastes differ and different investors like stocks for different reasons as they try to satisfy different needs with their investments. We have performed an empirical study on the different needs investors aim to satisfy by investing. Our investment survey made a fine-grained distinction between these different needs and showed important differences for male and female, old and young investors, and investors with a high level of investment-related knowledge and experience and investors with a low level of investment-related knowledge and experience.

Investment professionals like investment consultants are advised to consider the different needs of investors and the differences between the importance of the different needs for the different groups of investors and adapt their marketing plans, communication with existing and potential clients, and their new securities design accordingly.

Moreover, this chapter made a more direct link between marketing and investments. This was done both by using marketing and consumer behavior
concepts and theories and by discussing the implications of our investment survey in marketing terms.

The nature of our investment survey, however, brings along a number of possible limitations to the generalizability of the results. It is important to consider these limitations before generalizing the results beyond the specific class of investors that participated in this study.

First, the greater part of the general population of investors with direct investments in the Dutch stock market are older males. Yet, the participants of this study were slightly older and even more likely to be male than the investors in the general population.

Second, the participants of this study were interested in spending their free time on the computer accessing investment-related websites and seemed to be relatively active investors who like to transact. This could possibly affect their scoring on a number of questions of our investment survey. In particular, these two characteristics could lead to higher scores for investing as a nice free time activity.

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

Fourth, the respondents of our survey were Dutch investors. Dutch society - like the society of the United States, Great Britain, and Australia - has been found to have a very high level of individuality (Hofstede, 1983). Similar results can therefore be expected to be found in the United States, but future studies have to show what effects can be found in more collectivistic countries, like for example those in Central America, Asia, or even Scandinavia.

Therefore, future studies with both a larger and more international sample have to demonstrate the universality of this study’s results.
Appendix 2.1: Questionnaire

Group 1: Descriptive Characteristics

Please answer the following general questions.

1. What is your gender?
   - [ ] Female
   - [ ] Male

2. In what year were you born? (Please give the complete date, e.g., 1955)
   <no text>

3. What is your estimated portfolio size in Euro?
   <no text>

4. In what year did you first start to invest? (Please give the complete date, e.g., 1995)
   <no text>

5. What is the average number of investment transactions that you perform on a yearly basis?
   <no text>

Group 2: Needs

Please indicate to which degree you agree or disagree with the following statements:
6. I invest because of the potential for financial gain.

☐ Completely disagree
☐ Disagree
☐ Neither disagree, nor agree
☐ Agree
☐ Completely agree

7. I invest because I like to analyze problems, look for new constructions and learn.

☐ Completely disagree
☐ Disagree
☐ Neither disagree, nor agree
☐ Agree
☐ Completely agree

8. I invest because it is a nice free time activity.

☐ Completely disagree
☐ Disagree
☐ Neither disagree, nor agree
☐ Agree
☐ Completely agree

9. I invest because I want to safeguard my retirement.

☐ Completely disagree
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10. I invest because I like to participate in investment related conversations with others.
   - Completely disagree
   - Disagree
   - Neither disagree, nor agree
   - Agree
   - Completely agree

11. I invest because I like to affiliate with other investors.
   - Completely disagree
   - Disagree
   - Neither disagree, nor agree
   - Agree
   - Completely agree

Group 3: Investment-Related Knowledge and Experience

Please answer the following questions with regard to your amount of investment-related knowledge and experience.

12. How would you characterize your amount of investment-related knowledge?
13. How would you characterize your amount of experience in investing?

☐ I have very little experience
☐ I have little experience
☐ I have an average amount of experience
☐ I have much experience
☐ I have very much experience